Université de Montréal

Obesity Prevention Policies: The Art and Science of Ending an Epidemic

par Jacqueline Wassef

Département de gestion, d'évaluation et de politique de santé
École de santé publique

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Résumé

Introduction*:* La recherche sur le processus politique en relation avec la prévention de l'obésité s'appuie rarement sur des fondements théoriques. La plupart des études présentées dans la littérature ne parviennent pas à expliquer les décisions politiques. Les réponses aux questions sur le *comment* et le *pourquoi* de l'élaboration des politiques demeurent méconnues. En raison de l'attention politique accrue au phénomène de la « globésité », de nombreux gouvernements ont tenté d'intervenir pour arrêter ou inverser le cours de l'épidémie de l'obésité. Un écart est évident entre les recommandations et le contexte politique qui prévaut en raison de la « cacophonie politique » qui caractérise celle de l'obésité.

Méthodologie : Nous avons mené une étude de cas pour expliquer l'élaboration et l'adoption du plan d'action gouvernemental (PAG) sur la prévention des problèmes reliés au poids et la promotion de saines habitudes de vie, adopté en 2006 sur une durée de six ans au Québec, Canada. Nous avons élaboré un cadre conceptuel innovant combinant le cadre des coalitions plaidantes avec un modèle d'analyse politique basé sur la théorie de l'acteur stratégique. Nous avons mené des entrevues semi-dirigées et ouvertes avec des informateurs clés de divers ministères et institutions gouvernementales et non gouvernementales impliqués dans le plaidoyer et l'élaboration du PAG. Les documents relatifs à la politique ont complété nos sources de données.

Résultats : Nos résultats ont montré que l'adoption de la politique était le résultat de facteurs politiques et contextuels interdépendants et d'événements majeurs, associés à des politiques et stratégies axées sur les objectifs qui ont contribué à un accord négocié entre les coalitions. L'ensemble du processus a été influencé par l'utilisation systématique des connaissances par les coalitions et l'apprentissage au sein de forums délibératifs démocratiques qui a contribué à surmonter la « cacophonie politique ». Le plaidoyer d'un groupe de réflexion a fait avancer le processus en modifiant le discours dominant sur la politique et en sensibilisant les parties prenantes.

Conclusion : Les théories du processus politique sont des outils puissants pour étudier la complexité de la prise de décision, expliquer le changement de politique ainsi que l'inaction face aux problèmes complexes. Il est nécessaire de mieux outiller les acteurs des politiques de santé publique pour qu'ils comprennent mieux le processus d'élaboration des politiques. Cette

étude de cas informera les décideurs, les bureaucrates, les professionnels de la santé publique et autres professionnels intéressés à faire progresser les politiques de prévention de l'obésité. Les recherches futures devraient viser à promouvoir une analyse prospective de l'élaboration des politiques pour mieux en influencer le plaidoyer et, ainsi, faire progresser le processus politique. La comparaison de politiques similaires entre les provinces et de politiques différentes, mais interdépendantes au sein d'une même province est une autre avenue prometteuse pour la future recherche sur les processus politiques.

Mots-clés : politique de l'obésité, plaidoyer, mise à l'agenda, prise de décision, formulation de politiques de santé, adoption de politiques, utilisation des connaissances, théorie des politiques, nutrition en santé publique

Abstract

Background: Theory grounded research on the policy process related to obesity prevention is limited. Most of the existing research fails to explain policy decisions. The *how* and *why* of policy making remain unanswered. Owing to the increased political attention to "globesity", many governments have attempted to intervene to halt or reverse the obesity epidemic. There is a gap between policy recommendations and the prevailing policy environment owing to the "policy cacophony" that characterises obesity policy.

Methods: We used a case study research design to explain the development and the adoption of a six-year Governmental Action Plan (GAP) on the prevention of weight-related problems and the promotion of healthy lifestyles in Quebec, Canada. We developed an innovative conceptual framework combining the Advocacy Coalition Framework with a political analysis model based on the theory of the strategic actor. We conducted semi-structured open-ended interviews with key informants from various governmental and non-governmental departments and institutions involved in GAP advocacy and development. Policy related documents completed our data sources.

Results: Our findings showed that policy adoption was the result of interrelated political and contextual factors and focusing events, intertwined with policy and goal-oriented strategies that contributed to a negotiated agreement between advocacy coalitions. The whole process was influenced by systematic knowledge utilization by coalitions and learning within democratic deliberative forums that helped overcome "policy cacophony". The advocacy of a think tank advanced the process through changing the dominant policy narrative and altering policy stakeholders' awareness.

Conclusion: Policy process theories are powerful tools to study the complexity of decision-making, explain policy change as well as inaction on complex policy issues. There is a need to better equip public health policy stakeholders with an improved understanding of the policy making process. This case study will inform policy makers, bureaucrats, public health professionals and other professionals interested in advancing obesity prevention policies. Future research should aim to promote prospective analysis of policy making to further inform policy advocacy and advance the policy process. Comparing similar policies across jurisdictions, and

different yet interrelated policies within the same jurisdiction is another avenue for future policy process research.

Keywords : obesity policy, advocacy, agenda-setting, policy decisions, health policy formulation, policy adoption, knowledge utilization, policy theory, public health nutrition

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A&T:	Alive & Thrive
ACF :	Advocacy Coalition Framework
ACPHHS :	Advisory Committee on Population Health and Health Security
ADM:	Assistant deputy minister
AFAC :	Agri-Food Advocacy Coalition
ASPQ :	Association pour la santé publique du Québec
ASSNAT :	Assemblée Nationale du Québec
BMI:	Body Mass Index
CAPA :	Commission de l'agriculture, des pêcheries et de l'alimentation
CSSS :	Commission de la santé et des services sociaux
CCNPPS :	Centre de collaboration nationale sur les politiques publiques et la santé
CDAC :	Community Development Advocacy Coalition
CDC:	Centers for Disease Control and Prevention
CIHI:	Canadian Institute for Health Information
CIHR:	Canadian Institutes of Health Research
CQPP :	Coalition québécoise sur la problématique du poids
DGSP :	Direction générale de santé publique
DPAS:	The Global Strategy on Diet, Physical Activity and Health
EEAC:	Enabling Environments Advocacy Coalition
EHA:	Event History Analysis
EU:	European Union
F/P/T:	Federal/Provincial/Territorial
FAO:	Food and Agriculture Organization
FLAC :	Fondation Lucie et André Chagnon
GAP :	Governmental action plan
GBD:	Global Burden of Disease
GTAS :	Groupe de travail sur l'alimentation et la santé
GTPPP :	Groupe de travail provincial sur la problématique du poids

HLPAC:	Healthy Lifestyles Promoting Advocacy Coalition
HLS:	Healthy lifestyles
HLTG :	Healthy Living Task Group
IHLN :	Intersectoral Healthy Living Network
INSPQ :	Institut national de santé publique du Québec
ISQ :	Institut de la statistique du Québec
MAMR :	Ministère des Affaires municipales et des Régions
MAPAQ :	Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
MECSL :	Ministère de l'emploi, de la cohésion sociale et du logement
MELS :	Ministère de l'Education, du Loisir et du Sport
MESS :	Ministère de l'Emploi et de la Solidarité sociale
MM :	Million
MSA:	Multiple Streams Approach
MSS :	Ministère de la santé et des solidarités
MSSS :	Ministère de la Santé et des Services sociaux
MST :	Multiple Streams Theory
MTQ :	Ministère des Transports du Québec
NCCHPP:	National Collaborating Centre for Healthy Public Policy
NCD:	Noncommunicable Diseases
NFPO:	Not For Profit Organization
NGO :	Non-Governmental Organization
NIH :	National Institutes of Health
NPF:	Narrative Policy Framework
NPHD :	National Public Health Director
NSERC:	Natural Sciences and Engineering Research Council of Canada
ODPHP :	Office of Disease Prevention and Health Promotion
OECD :	Organization for Economic Cooperation and Development
OPC :	Office de la protection du consommateur
OSG :	Office of the Surgeon General
PA:	Physical activity
PET:	Punctuated Equilibrium Theory

PH:	Public health
PHAC :	Public Health Agency of Canada
PI:	Principal investigator
PNSP :	Programme national de santé publique
PQMN :	Politique québécoise en matière de nutrition
PSBE :	Politique de la santé et du bien-être
PSMA :	Produits, services et moyens amaigrissants
QeF:	Québec en Forme
SDG:	Sustainable Development Goals
SSHRC:	Social Sciences and Humanities Research Council of Canada
WHO :	World Health Organization

Dedication

À ma mère, en ta mémoire…

Toi, pour qui l'éducation était LA Source d'accomplissement. Toi, qui a veillé à ce que la langue de Molière anime sans cesse l'esprit des générations futures en commençant par tes enfants. Je me souviendrai des Fables de la Fontaine, Le Médecin malgré lui de Molière et de tant d'autres. C'est avec ma thèse que je te rends hommage…

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« Un film, c'est comme un voyage. On plonge, on s'imbibe et l'on finit par s'apercevoir que certaines choses sont plus fortes que d'autres. » -Denis Villeneuve

Foreword

Cette thèse est teintée par mon parcours professionnel et académique. J'ai œuvré dans plusieurs secteurs d'activité de la santé, en passant du travail clinique en tant que diététiste, à la gestion hospitalière et à la pratique de la santé publique par la suite. Ceci m'a permis d'établir des liens entre ces secteurs et de mieux comprendre leur interaction. Après une carrière de vingt ans et un master en santé publique reçu en 2010, j'ai décidé de poursuivre des études doctorales en santé publique. L'élément majeur qui a déclenché mon intérêt dans les politiques publiques fut sans aucun doute ma présence en tant que déléguée nationale à l'atelier organisé par l'Organisation Mondiale de la Santé en 2010. Cet atelier visait notamment le développement de plans nationaux de lutte contre l'obésité. La diversité des interventions présentées par les délégués nationaux, et les échanges que j'ai eus avec eux par la suite, m'ont alertée sur les réalités différentes, ne serait-ce que sur les aspects socio-culturels, constitutionnels et contextuels uniques qui caractérisent chaque pays. Il fallait comprendre, plus et mieux. Les études doctorales seraient l'avenue prometteuse.

En 2011, changement de cap, j'arrive au Québec. Avec beaucoup de détermination, je me suis familiarisée au contexte québécois, et cela, dès ma première année au doctorat. Les travaux que j'ai fournis dans le cadre de mon doctorat ont été faits sur le Québec. J'ai également suivi une formation pour m'inscrire à l'Ordre professionnel des diététistes du Québec. Parallèlement, et depuis 2015, je suis bénévole dans un organisme communautaire, le Mouvement allaitement du Québec, dont la mission est de contribuer à rendre les environnements favorables à l'allaitement. J'ai aussi contribué à la certification universitaire des nutritionnistes œuvrant en santé publique au Québec en 2015 et 2016. Ces implications m'ont aidée à optimiser mon travail terrain, notamment à conduire mes entrevues sur tout le territoire québécois et à recueillir mes données documentaires.

Par cette thèse, j'espère pouvoir prêter main forte aux acteurs québécois, canadiens et autres acteurs concernés par les politiques publiques et, notamment, les politiques de prévention de l'obésité en contribuant à une meilleure compréhension du processus politique, afin de mieux l'influencer. Bonne lecture.

INTRODUCTION

Obesity prevalence has been growing worldwide in both children and adults. It's an epidemic almost present in every country irrespective whether the country is developing or developed albeit with varying degrees (WHO, 2018a). Notwithstanding its impacts on health, obesity contributes highly to the total health expenditure (Sassi, 2010) and is rightfully considered one of the most serious health challenges of the 21st century (WHO, 2018b; Chan, 2015).

For the last decades, obesity rising rates have occupied the national and international scene. The commitment of the international community and various actors worldwide to decreasing the rates of the global obesity epidemic or the so-called "globesity" was unequivocal (WHO, 2018c). At the international level, efforts were pioneered by the World Health Organization (WHO). They materialized with the launching of the Global Strategy on Diet, Physical Activity and Health (DPAS) in 2004 during the 57th World Health Assembly (WHO, 2004). Keeping up with this commitment, in 2011, the WHO convened a high-level meeting of the United Nations General Assembly on the Prevention and Control of Noncommunicable Diseases. The UN political declaration of the meeting was endorsed by heads of government and state. It reasserted WHO's engagement to progress in the implementation of its Global Strategy on Diet, Physical Activity and Health (WHO, 2018a). Following this meeting an action plan was developed; one of its main targets is halting obesity rates at the global level to the 2010 rates by 2025 (WHO, 2018a).

WHO's sustained commitment to halting or decreasing obesity rates is still ongoing. In 2014, WHO convened a high-level Commission on Ending Childhood Obesity (WHO, 2017). The Commission is a WHO initiative to tackle childhood and adolescent obesity through a comprehensive approach in different country contexts across the world (WHO, 2017). In 2017, and during the 70th world health assembly, an implementation plan of the recommendations of the Commission was proposed. The plan is framed as a guide to foster action on the recommendations issued by the Commission (WHO, 2017).

The sustainable development goals (SDGs), set by the United Nations in 2015 are yet another fundamental example of international efforts to tackle obesity (UN, n.d. a). Obesity

being a major risk factor for Noncommunicable diseases (NCDs), its constant rise has a serious potential of negating many of the health benefits that have been achieved so far worldwide (WHO, 2017). A core priority under the SDGs is the prevention and control of NCDs with a target indicator of reducing premature deaths attributed to NCDs by one third by the year 2030 (UN, n.d. b).

Despite undeniable efforts, obesity rates are still escalating in many countries leaving international and national actors perplexed as to how to go about developing comprehensive obesity prevention policies in various contexts. So far not any government has been able to reverse the obesity epidemic (Roberto et al., 2015; Clarke et al., 2016; OECD, 2017). A recent reminder of the ominous health and economic effects of obesity was the recent publication of the Global Burden of Disease (GBD) 2015 Obesity Collaborators in the Lancet (Gregg and Shaw, 2017). The study pointed out that the prevalence of obesity had been on a constant rise in most countries between 1980 and 2015, doubling in more than 70 countries. Alarmingly, the rate of increase in obesity prevalence was higher in children than in adults in most countries even if prevalence in children was lower than in adults (Afshin et al., 2017).

Obesity is a complex phenomenon that is the result of multiple interlinked causal factors; thus, its solutions should be multi-component, comprehensive and integrated across multiple levels and sectors (WHO, 2000; WHO, 2004; Kumanyika, 2007; WHO, 2009; Gortmaker et al., 2011; Roberto et al., 2015; WHO, 2017). The WHO has called obesity a "social and environmental disease" (WHO, 2018c). Thus, a fundamental strategy to respond to obesity is through "making healthy choices easy choices" (WHO, 2018c). Two guiding principles are at the core of this strategy: a whole-of-government and a whole-of-society approaches (WHO, 2017).

Nevertheless, obesity policy is currently in a situation described as "policy cacophony" which poses a great challenge to policy makers as to which policy solution to consider and champion (Lang and Rayner, 2007 p.166). Policy solutions to obesity are built around an attributable cause to obesity. The resulting portfolio of policies reflects a gap between policy recommendations and the prevailing policy environment (Lang and Rayner, 2007; Roberto et al., 2015; Huang et al., 2015).

Adding to the complexity of obesity policy itself, other factors accentuate the burden of said policy. The multi-level modern governance system and the ideological fears of not respecting personal choices when it comes to life style and diet coupled with the relatively long time-table needed to bring obesity under control and the lack of evidence on obesity policy, all combined make it thorny to establish firm policy action against obesity (Lang and Rayner, 2007). Besides personal choice issues, other dichotomies are central to the current debate as well (Roberto et al., 2015). To name a few, collective versus personal responsibility for action, demand versus supply drivers for overconsumption, government regulation versus industry self-regulation (Roberto et al., 2015). Scholars and international health organizations have promoted population-level upstream interventions to create healthy environments to make the healthy choice the easy choice (Nugent et al., 2018; Barberio et al., 2017; Kickbusch & Nutbeam 2017; WHO, 2017). Currently, government interference in obesity prevention policies varies greatly among countries as well as the degree of desirability and acceptability of such interference. This leaves policy makers with the constant challenge of justifying any government interference so that it is not looked at as being paternalistic and hence it is met with resistance (Sassi, 2010).

In fact, obesity has been described as a wicked policy problem; it is characterized with a long-standing stakeholders' disagreement and debate on its nature and possible solutions (APSC, 2012; Johnston, Matteson and Finegood, 2014; Roberto et al., 2015). Wicked policy problems interest many policy actors who might be equally equipped to assess the solutions, however none has the authority to establish decision rules required to determine the accuracy of the solution. In addition, there is a marked discrepancy in judgment on the appropriateness of the solution among concerned actors based on differences in values, personal interests and ideological predilections (Rittel and Webber, 1973). Wicked policy problems are constantly evolving making it hard for policy makers and other actors to keep up with a moving target (Rittel and Webber, 1973). Accordingly, their management poses a lot of challenges to actors as to what approaches and skill sets they must develop, making of it an evolving art. Many of those problems have been plagued with decades of policy failure (APSC, 2012).

Since the mid-1990s, there has been a shift in the discourse around obesity prevention. The professional and academic dialogue around preventing obesity, previously dominated by clinical research and basic science, has shifted to a public health approach (Richardson,

Williams, Fontaine and Allison, 2017). This shift is party due to successful public health efforts in tobacco policies leading to increased attention to obesity prevention policy approaches (Richardson et al., 2017). In fact, the shift can be traced back to the adoption of the Ottawa Charter for Health Promotion in 1986. Under the Charter, health promotion denotes any of the following five actions: building healthy public policy, strengthening community actions, creating supportive environments, developing personal skills and redirecting health services (WHO, 2018d).

Following the adoption of the Ottawa Charter for Health Promotion, policy considerations in health promotion were embraced by various stakeholders and have become a rhetorical argument in almost every health promotion publication or government speech (Breton and De Leeuw, 2010). Policy makers are requested to have health at the core of their agenda, irrespective of sector and level of government (WHO, 2018d). Moreover, they are held accountable for the health consequences of their actions (WHO, 2018d). Accordingly, the role of public health actors in influencing policy makers' agenda and advocating for healthy public policies grew wider (WHO, 2018d). In parallel to this growing role, there was an increased need for public health actors to understand how to influence the policy process (Breton and De Leeuw, 2010).

The literature on health promotion policy process research is scarce and provides them with little support (Breton and De Leeuw, 2010). Instead policy-focused publications in public health tend to describe the content of the policy or evaluate its impact rather than bring insights into the policy making process (Bernier and Clavier, 2011). The limited use of policy process theories drawn from political sciences has also been evidenced in the field of obesity prevention policies (Clarke, Swinburn and Sacks, 2016). More recent research has attempted to address this shortcoming by increasing the focus on the policy process itself (Cullerton et al., 2015). However, it still falls short on explaining policy change and analyzing the role of power in the policy process (Cullerton et al., 2015). This limits the capacity of public health actors to influence the policy process or even improve current policy models (Breton and De Leeuw, 2010).

In parallel to the shift to a policy-focused discourse, there was a renewed attention to the use of scientific evidence in policy making or "evidence-based policy" in recent years. This

raised some questions on how knowledge is identified in the policy process and how it gets mobilized (Wesselink, Colebatch and Pearce, 2014). Sabatier (1987) argues that new information and knowledge on a policy issue is one factor that may contribute to learning experienced by policy actors, or what he identified as policy-oriented learning. One possible path for policy change according to Sabatier (1987) is policy-oriented learning.

In fact, the heated debate around obesity prevention policy revolves around values and morals that are in fact hard to reconcile. Instead, the debate gets deferred to assessing the quality of the evidence, avoiding as such a value-laden debate (Richardson et al., 2017). This brings about another disagreement concerning the strength of the evidence and how supportive it is to a given policy position. Some questions such as what type of evidence is needed for a given situation, how can it be produced and whether evidence is needed all together to justify the adoption or the refusal of policy proposals find their way onto the political actors' negotiation agenda (Richardson et al., 2017). What seems to fall off the actors' minds however, is that producing such evidence spans both politics and science (Pearce and Raman, 2014).

In the first place, defining what constitutes evidence is highly subjective; there is a significant difference between researchers and policy-makers over what is considered evidence. Researchers tend to promote evidence as the main determinant of a policy decision. The appeal of evidence use in decision-making is attractive to policy-makers who seem to have embraced the political importance of such a rhetoric (Richards, 2017). Second, the production of evidence, being the result of human activity, is by itself a value-laden process (Weinstock, 2007). The process of producing evidence entails frequent decisions on evaluative, ethical and political aspects that are not value-free (Weinstock, 2007). Decisions to research specific areas of the world, not others are driven by politics and values. In the actual context, governments and their funding agencies are in hold of these decisions and not researchers. Other decisions such as those concerning the thresholds to set for statistical significance, the choice to research one topic not the other, and how evidence is presented to its users are all driven by values (Weinstock, 2007). Therefore, presenting evidence production as a neutral process is simply misleading (Pearce and Raman, 2014).

This research responds to the urge expressed by various scholars (Breton and De Leeuw, 2010; Cullerton et al., 2015; Clarke et al, 2016) and public health actors to apply frameworks

drawn from the policy science field on health promotion, specifically obesity prevention. In light of the surge of "globesity" and the rise of a populist dialogue mistrusting the role of scientific evidence and questioning some well-founded scientific facts such as climate change, this research also aims to answer questions about the use of evidence in the formulation and adoption of obesity prevention policies.

Using the Sabatier Advocacy Coalition Framework (Sabatier and Weible, 2007) and a political analysis model (Champagne et al., 1991), we seek to explain policy change in the case of a governmental plan to prevent obesity. Through our conceptual framework, we aim to explain the policy adoption by identifying policy actors, factors and processes and analyzing their contribution to policy change in a situation described as "policy cacophony". We will identify advocacy coalitions that are dynamically participating in the policy process. We will analyze their belief systems and political interests, identify their strategies and explain how they affected the policy process. We will draw a closer look on how various advocacy coalitions utilize knowledge in pursuit of their goals. We will analyze whether knowledge use has contributed to policy-oriented learning, policy formulation or policy change. We will also identify and analyze significant events and contextual factors and explain their effect on the policy process. The advocacy of a strategic group of key actors namely dietitians will be analyzed and their contribution to the policy process will be highlighted. Our goal is to contribute to the body of knowledge on the policy process by bringing insights into government policy decision on obesity prevention.

CHAPTER 1 – Literature Review

Our research belongs to policy process research. Policy process is one of three subfields that have emerged from policy studies, the other two being policy analysis and policy evaluation (Smith and Larimer, 2013). Research concerning the policy process is defined as the study of interactions occurring over time between the public policy and the components evolving around it, namely the concerned actors, contexts, events and the policy or policies' outcomes (Weible, 2014).

The following literature review will cover an examination of the published literature on the policy making processes related to obesity prevention. We will set up first a framing of obesity prevention policy starting with a brief review of obesity definition, prevalence and burden of disease followed by a presentation of the obesity causal web and a definition and typology of obesity prevention and obesity prevention policy. A definition of the policy process will follow along with a presentation of various well-established models, frameworks and theories that have been used in the literature to analyze the policy process. The results of two systematic reviews on the use of policy process theories in public health nutrition and obesity will also be presented. A review of some relevant applications on the analysis of the obesity prevention policy process will follow. We will conclude with some key points the literature review raises.

Obesity Definition, Prevalence and Attributes

Obesity describes a condition in which adiposity or body fat accumulates excessively leading to health impairment (WHO, 2018a). Its most useful population-level measure is provided by the body mass index, BMI, calculated from the ratio of weight in kilograms to the square of the height in meters. An individual is considered obese when his/her BMI is greater than or equal to 30, while an individual with BMI greater than or equal to 25 is overweight (WHO, 2018a).

From fewer than one in ten in 1980 obesity has risen to one in three in some OECD countries (OECD, 2014). The recent obesity update published by the OECD revealed that so

far, not any country has shown any indication of retrenchment of the epidemic (OECD, 2017). Worse, obesity prevalence is expected to increase in OECD countries by 2030 (OECD, 2017). In 2015, more than 50% of adults were overweight or obese across the OECD, with 19.5% of the adult population suffering from obesity (OECD, 2017). Much like France, the United States, Mexico and Switzerland, Canada witnessed an increase in obesity and overweight during the past decade (OECD, 2017). In addition, the prevalence of overweight, including obesity, in children in Canada was 24.5%, second highest across the OECD after the United States (31%) (OECD, 2017). The ratio was one overweight or obese child to six across the OECD. Canadian adults suffered a higher obesity rate: more than one in four Canadian adults were obese as compared to less than 6% of Korean and Japanese adults (OECD, 2017). Besides, there is a reciprocal negative association between obesity and labour market. On one hand, socio-economic background and education are determinants of obesity and on the other hand, obesity have negative impacts on labour market outcomes which in turn exacerbate existing social inequalities (OECD, 2017). Tackling obesity and its labour market negative outcomes would contribute to breaking the vicious circle of health and social inequalities (OECD, 2017).

Worldwide, obesity has almost tripled since 1975; in 2016, obesity affected 13% of the adult population, more than one in ten adults, while 39% were overweight (WHO, 2018a). People who are severely obese die 8-10 years earlier than those of normal weight. Excess weight of fifteen kilograms increases the risk of early death by almost 30% (OECD, 2014). In addition to its impacts on health, obesity contributes highly to the total health expenditure, 1-3% in most countries reaching 5-10% in the United States (OECD, 2014). Its economic burden was estimated to vary between 4.6 and 7.1 billion dollars in Canada in 2008, an increase of 19% since the year 2000 (PHAC and CIHI, 2011). Costs are expected to rise in the future in parallel to the rise in obesity-related diseases (OECD, 2014).

In Quebec, the most recent data on obesity prevalence published by the Institut de la Statistique du Québec (ISQ, 2017) shows that obesity and overweight rates within the population aged 15 years and older were 18.8% and 34.9% respectively for a total of 53.7% suffering from an excess weight problem in 2014-2015. In comparison, in 2008, the prevalence of obesity was 15.8%, whereas overweight prevalence was the same. A 2.4% of the population

aged 15 years and older suffered from underweight in 2014-2015. This prevalence was unchanged with respect to the 2008 prevalence (ISQ, 2017).

With respect to the economic impact of obesity in Québec, two studies were conducted to measure the economic impact of obesity on (i) the hospitalization and medical consultations and (ii) the cost of medication use and the cost of loss of productivity due to invalidity (Blouin et al., 2014; Blouin et al., 2015). Results revealed an estimated increase of the economic burden due to hospitalization and medical consultations that amounts to 1.5 billion dollars a year for Québec in the year 2011 (Blouin et al., 2014). This amount corresponds to 10% of the total hospitalization and consultation costs of adult Quebecers for the same year (Blouin et al., 2014). With respect to medication use, the findings of the authors revealed an increase of 40% and 17% in the relative risk of medication use in obese and overweight adult individuals respectively as compared to normal weight individuals (Blouin et al., 2015). Not only the risk of medication use was higher in adult obese individuals, but they were more likely to suffer from invalidity than adult individuals of normal weight. This last finding was however not significant yet was well aligned with the statistically significant Canadian observation data on higher invalidity among the obese. Both the increased medication use, and the increased invalidity frequency would result in estimated costs that amount to 1.4 billion dollars a year for Québec in the year 2011 (Blouin et al., 2015).

Obesity Causal Web

The International Obesity Task force has developed a causal web (Appendix 1) depicting processes and societal factors influencing the population prevalence of obesity, through an imbalance between obesity proximal determinants, namely energy intake and energy expenditure (Kumanyika, Jeffery, Morabia, Ritenbaugh & Antipatis, 2002). At the population level, obesity results from a chronic excessive energy intake as compared to energy expenditure within a large number of individuals (Kumanyika, 2007). Factors and processes influencing the individual encompass several levels starting from the most proximal to the individual such as school, home and work to more distal ones at the regional, national and even global levels (Kumanyika et al., 2002; Kumanyika, 2007). Genetic factors related to individual susceptibility to obesity are certainly not the culprit; the rapid rise in obesity in a very short time span draws

its root causes from societal changes and environmental factors (Kumanyika et al., 2002). The health sector is in fact one determinant amongst many other sectors whose roles in influencing the obesity epidemic are quite crucial (Kumanyika, 2007). The pressure and influence of globalization of food markets, urbanization, modernization and economic growth have led to decreased physical activity and increased fat and energy consumption. A less physically demanding work, an increased use of technology, automated transport and passive leisure are leading to decreases in energy expenditure that are not compensated otherwise (Kumanyika et al., 2002).

There are powerful societal forces that are driving the obesity epidemic. The obesity causal web shows a complex interaction of a vast array of factors that challenge the individual "free will" with respect to energy expenditure and food choice. Societal policies and processes across various sectors and settings affect diet and physical activity patterns and consequently population weight (Kumanyika et al., 2002). Therefore, interventions targeting individual lifestyles that are not coupled with societal changes will have little success; worse, they increase disparities given that they are most effective in modifying the behavior of the socially advantaged (Kumanyika et al., 2002). Obesity has indeed been described as a manifestation of inadequate societal structures which frame what people eat and do, leading them to become obese (Lang and Rayner, 2007). As Kumanyika (2007 p. 102) rightfully states it: "Obesity is then an adverse side effect of progress and development in a free market system where obesity-promoting eating and physical activity patterns were both socially desirable and good business".

Obesity Prevention Approaches and Typology

Obesity prevention should be based on an integrated approach involving actions at the environmental, educational, technical, economic and legislative levels within a health care system that promotes screening and early treatment (WHO, 2000). Three public health approaches in addressing the obesity epidemic have been put forward by Sacks et al. (2009), based on Baum (2003), Labonte (1998) and Lawrence and Worsley (2007). The approaches do not share the same perspective of the obesity epidemic and are distinguished based on their intended impact. These approaches are the *socio-ecological*, the *behavioral* and the *health*

services approaches. They are also known as "upstream", "midstream" and "downstream" approaches respectively.

The socio-ecological approach is defined as policy actions that are aimed at improving the social, economic and physical environment, both the built and natural environments (Sacks et al, 2009). They are also called upstream given that they target environmental changes that fall at distal levels with respect to the individuals (Kumanyika, 2007). Policy actions that fall under this approach are categorized under three types of actions based on their targets namely the underlying determinants of health, the food system and the physical activity environments (Sacks et al, 2009). In Québec, these actions correspond to the interventions promoted under the enabling environments' vision. This vision was developed by the MSSS and its partners to promote policy actions addressing the four types of environment: the socio-cultural, physical, economic and political environments (MSSS, 2012). Such environments are characterized with conditions that promote healthy choices. They shall help people adopt healthier eating habits and physically active lifestyles. They will also promote the development and maintenance of self-esteem and a good body image (MSSS, 2012). Policy actions that influence diet and physical activity behavior belong to the lifestyle approach whereas clinical interventions and other policy actions supporting health services would fall under the health services approach (Sacks et al, 2009). The latter are also called downstream because they work at the level of the individual on a one by one basis (Kumanyika, 2007). While the individual-focused or downstream approaches for intervention are essential, the upstream approaches are more cost-effective as compared to downstream interventions and provide greater savings for the healthcare system (Cullerton et al., 2015).

Another typology of obesity prevention policy focuses on governmental action to prevent obesity (Sassi, 2010). A minimum of four types of actions can be undertaken by governments in the field of obesity prevention. These actions are: (1) type I: increasing choice; (2) type II: information, education and influencing established preferences; (3) type III: raising prices on unhealthy choices; and (4) type IV: banning unhealthy behaviors (Sassi, 2010).

In this research, obesity prevention policy is assumed to embrace all actions aimed at preventing obesity, whether policies, programs, interventions or action plans. Obesity prevention can be a primary or a secondary objective of said actions. Besides, these actions

should address any of the two proximal determinants of obesity, namely diet and physical activity.

Policy Process

The policy process describes the why and the how aspects of policy making (Smith and Larimer, 2013). Of concern is the reason why a problem gets onto the policy agenda, the formulation of the policy itself, the role actors have in developing it and the explanation of change and stability of policies over time (Smith and Larimer, 2013). How does the literature define the policy process and what instruments exist to analyze it?

A process is commonly defined as "a series of actions or operations definitely conducing to an end" (Jones, 1984 p. 24). The policy making process focuses on problem-solving, involves various people with different interests and perpectives and has a technical and substantive component to it (Clark, 2002). From a problem-solving perspective, the policy sciences abstracted the conception of the policy and social processes in a framework to help professionals map them in a logical and comprehensive way. Three principal dimensions make up the framework: the social process, the decision process and the problem orientation (Clark, 2002). The decision process is mapped under seven functions: intelligence, promotion or recommendation, prescription, invocation, application, appraisal and termination (Clark 2002, 9; Lasswell 1956, 93 in Weible, 2014). These decision functions have become a common reference to describing the policy process (Weible, 2014). Jones used the policy cycle term to describe these categories, although he acknowledged that the word cycle would imply "more neatness of pattern" than what he intended to suggest (Jones, 1970, 120 in Weible, 2014). Following Jones, other scholars adapted Lasswell's functional categories of the decision process under a policy cycle description (Weible, 2014).

Howlett and Ramesh (2003) introduced a five-stage model of the policy cycle. They associated each step of problem-solving to a stage in their model. The first stage, *agenda-setting* refers to problem recognition and how problems attract government's attention. The second stage, policy *formulation* describes the process of formulating solutions within government while the third stage, *decision-making* consists of the adoption of a specific course of action or non-action to these problems. The fourth stage is policy *implementation* which is putting the

proposed solution into effect and the final stage policy *evaluation* describes the processes of monitoring the results of the policy by state and societal actors. Despite dividing the policy making process into stages the authors warn from confining the policy making process to a linear and systematic view (Howlett and Ramesh, 2003). Still, the policy cycle attracted several criticisms, especially from Jenkins-Smith and Sabatier (1993) who criticized this model referring to it as "stages heuristic". Among others, shortcomings of this model were its lack of testable hypothesis or causal theory, failure to integrate the role of policy-oriented learning in the policy process and descriptive inaccuracy (Jenkins-Smith and Sabatier, 1993).

Moving away from the stages heuristic, other scholars have developed other models, frameworks and theories that have been extensively used in analyzing the policy process (Weible, 2014). In the latest edition of their book concerned with policy process research and theory, Sabatier and Weible (2014) compiled some of the most interesting and promising theories and frameworks of the policy process. Their book concluded with a critical comparison of these theories (Weible, 2014). These include the *Advocacy Coalition Framework* ACF, the *Narrative Policy framework* NPF, the *Multiple Streams Approach MSA*, the *Punctuated Equilibrium Theory PET* and the *Innovation and Diffusion Models* (Weible, 2014). In general, all these models, theories and frameworks have the necessary conceptual elements to analyze the policy process, but each emphasizes a different outcome within the policy process based on hypothesized relationships among its elements (Cairney and Heikkila, 2014).

The ACF highlights the role of competing advocacy coalitions with different beliefs in advancing their own policy solutions within a given policy subsystem. It proposes various hypotheses related to the nature of advocacy coalitions, to policy learning and policy change (Jenkins-Smith, Nohrstedt, Weible, and Sabatier, 2014). The NPF highlights the power of policy narratives proposed by rival coalitions with different strategies and beliefs in promoting policy solutions using story characters namely villains, victims and heroes in a given policy context (McBeth, Jones and Shanahan, 2014). MSA's main argument is that an opening in each of three independent streams, the policies, the problems and the politics streams would generate a "window of opportunity" that increases the chances for a policy change (Kingdon, 1984; Zahariadis, 2014). Policy entrepreneurs are policy actors who play an important role in coupling the three streams (Kingdon, 1984). Borrowing from the study of complex systems, the PET tries

to explain both incremental policy making and punctuations while emphasizing mainly two elements of the policy process: issue definition and agenda setting. It advances two concepts: positive feedback and negative feedback. While the former promotes policy change by forcing an issue onto the macro-political agenda, the latter favors stability (Baumgartner, Jones and Mortensen, 2014). Last but not least, Innovation and Diffusion Models have been used to explain government innovation. Two explanatory concepts have been developed: *diffusion mechanisms* and *internal determinants*. On one hand, a policy might diffuse through one or a combination of mechanisms of diffusion and on the other hand political, social and economic characteristics reflecting a government's internal determinants may lead to policy diffusion. A unified model, the Event History Analysis (EHA), which makes use of both concepts in explaining policy diffusion has also been developed (Berry and Berry, 2014).

So how has the literature on policy making in the case of health promotion in general and obesity prevention incorporated theories of the policy process? The response the literature provides us with is promising, and the horizon seems brighter.

Literature Reviews and Case Studies

While the political science field has benefited from the systematic study of the policy-making process as early as the 1950s, it was not until recently that such analysis started attracting scholars in health promotion (Breton and De Leeuw, 2010), public health nutrition (Cullerton et al., 2015) and obesity prevention (Clarke et al., 2016). Breton and De Leeuw (2010) conducted a systematic review of the health promotion literature between January 1986 and June 2006 to identify those research projects or theoretical papers on health policy that apply theoretical approaches from the political science field to that of health promotion.

In their systematic review, the authors examined how rigorously theories of the policy process are used in the health promotion literature (Breton and De Leeuw, 2010). The authors developed rigorous criteria and search terms to identify peer-reviewed journals with substantive scholarly contribution to the development of the health promotion field. They developed a journal list that they validated with experts and colleagues with good knowledge and understanding of the health promotion field. They developed another set of criteria and search terms to identify the articles to analyze. Their results showed that there were very few published

articles that utilized theoretical frameworks of the policy process drawn from the political science field. Not only these articles were scant in number, but even those articles that used a policy process theory have used it superficially. Research papers that presented results guided by a theory of the policy process were scarce (Breton and De Leeuw, 2010). This indicates that the health promotion field has made very few strides in utilizing the body of knowledge from the political science field and learning from it. One common problem the authors discuss is the adherence to a limited conceptualization of policy whereby policy is interpreted as a law, regulation or legislation. This perspective according to the authors is well against current theoretical constructs (Breton & Leeuw, 2010).

Given that many questions remain unanswered, the impact is felt on policy advocacy research and practice in health promotion. Some critical questions still have no answers, such as how evidence informs health promotion policy, what strategies coalitions utilize to successfully influence the policy process. However, the increase in the volume of publications on policy research in health promotion is looked at as a positive shift from a largely a-theoretical approach to one that is theory grounded (Breton and De Leeuw, 2010).

Cullerton and colleagues (2015) conducted a systematic review on the use of policy process theories in the field of public health nutrition. The review included articles published between 1986 and 2014 on policy decisions occurring in high income, democratic countries. An increase in the use of policy process theories was noticed as of 2003, becoming more significant after 2007. Despite this increase, only a small fraction of the reviewed papers used policy process theories (14%) (Cullerton et al., 2015). This increase occurred earlier, after 1999, in the field of health promotion (Breton and De Leeuw, 2010).

An increase in the number and in the diversity of nutrition subjects addressed was noted (Cullerton et al., 2015). Obesity was of major prominence (38% of the studies), probably related to the increase in global attention to obesity prevention. However, very few papers investigated the policy change explaining *how* it occurred. This was possibly due to the lack of awareness of the authors of the complex dynamics of the policy making process. Instead, a general description of the policy process along with a description of barriers and facilitators was done (Cullerton et al., 2015).

While the review of Cullerton and colleagues (2015) was mostly descriptive in terms of the use of policy process theories with respect to the type of policy, type of theory, country and level of government, Cullerton and colleagues (2016) reanalyzed the results of their previous systematic review through a systematic thematic analysis to identify enablers and barriers to the policy making process in public health nutrition. Informed with the PET, ACF and MST (Multiple Streams Theory or Multiple Streams Approach), the authors were able to identify numerous themes under one overarching category of *political will*. This category reflects the support of decision-makers, namely politicians and senior bureaucrats, to policy change. Another major category that underpinned political will is *public will*. It is closely related to political will, given that politicians are reluctant to act on issues that do not receive public attention, worse can provoke a backlash from the public (Cullerton et al., 2016).

Another systematic review of interest to our research is the one conducted by Clarke and colleagues (2016). The authors conducted the review to investigate the use of theories drawn from the political sciences to the study of obesity prevention policies. Studies up to July 2015 were included in their review (Clarke et al., 2016). Their results showed that the application of these theories was limited; only seventeen studies applied a theory of the policy process, out of which thirteen utilized a "synthesis" theory. Clarke et al (2016) referred to the theories of ACF, MST and PET as synthesis theories. Synthesis theories are superior in terms of explaining mechanisms of policy adoption (Clarke et al., 2016). Two significant contributions of this review are important in the scope of our research. First, the review focused exclusively on obesity prevention policy. Second, the authors performed a meta-synthesis of the themes they had identified under each study. The meta-synthesis approach allowed for generating an understanding on how key determinants affected the policy process rather than simply describing findings (Clarke et al., 2016). As a technique, the meta-synthesis of qualitative research parallels the meta-analysis methodology used in quantitative research. It is used by qualitative researchers to understand and explain phenomena. With an interpretive intent, the technique attempts to integrate the results of different yet inter-related qualitative studies (Walsh & Downe, 2005).

The review revealed non-mutually exclusive and sometimes interrelated meta themes (Clarke et al., 2016). Frequently, these themes matched those reported by Cullerton and

colleagues (2016) in their study on public health nutrition policies. These were: influences of the industry and of coalitions; beliefs and experiences; leadership of key policy actors; personal values; political ideology; institutional factors, narratives and framing; exogenous factors; timing and the use of evidence (Clarke et al., 2016). Strategies that were noted included the creation of working groups. These groups advanced strategies to change the dominant narrative around the policy problem and to alter public awareness. Lobbying was also identified as a successful strategy. When working groups directly lobbied policy makers, their strategies were more effective at achieving their impacts (Clarke et al., 2016). Forming diverse coalitions that are well-connected and that establish broad commitment and synergy around a common goal across a diversity of stakeholders was also identified as an enabler (Cullerton et al., 2016).

Political institutional factors that were identified related to inter-departmental collaboration, policy feasibility and organizational structures. Feasibility was associated to cost, sustainability of resources, existing infrastructure and accountability pathways. Broader characteristics of *political systems* were also found important. Specifically, the openness of the decision-making venue and the degree of decentralization of processes related to public health policy (Clarke et al., 2016). An important barrier identified in the literature was the government operational mode in silos and the priority each department places on its own mission (Cullerton et al., 2016). Complex policy issues were spread across different government departments, characterized with narrow and diverse perspectives. Discrepancy in perspectives was even noted within the same government department (Cullerton et al., 2016).

Political ideology influenced the agenda-setting and the policy instruments that were adopted. For instance, key actors with neo-liberal ideologies were against policy instruments that might have detrimental economic consequences (Clarke et al., 2016). Neoliberal ideology and pressure from industry were also identified as a policy barrier by Cullerton and colleagues (2016). The priority given to economic prosperity was reported in several studies as a barrier to policy action. The overriding desire to protect personal freedoms and free markets coupled with a priority given to short-term economic benefits were also identified as barriers for policy change. Agricultural policies are a good example of how priority setting affected policy making. The subsidies provided by these policies lowered the prices of unhealthy foods as compared to healthy foods (Cullerton et al., 2016).

Political ideology also influenced the priority given to obesity prevention policy within other public health issues. The relative influence of the ministry of health as compared to other ministries was also an important factor. Ideological values of powerful groups influenced the policy process as well (Clarke et al., 2016). Studies were able to highlight industry strategies that were reported as key barriers to policy change (Cullerton et al., 2016). Four main strategies were identified: intense lobbying, partnering with government or professional groups, creating scientific uncertainty and influencing social norms through issue framing. The last strategy focused on the creation of a narrative that portrays government action as being intrusive and limiting to individual freedoms. All these strategies prioritized corporate benefits over government interests (Cullerton et al., 2016).

The critical presence of *policy champions* was found to influence the policy process by providing needed *leadership*. Policy champions were motivated by their values, political ideologies, beliefs and experiences. A supportive context facilitated the policy action of these champions (Clarke et al., 2016). The importance of policy champions in advancing the policy process was also emphasized in Cullerton and colleagues' review (2016). Their vision, skills, enthusiasm, flexibility, watchfulness, persistence, and competence in communication enabled progress in policy change (Cullerton et al., 2016). Among others, their role was important in increasing awareness to policy issues. An increase in the visibility of the policy issue, the acknowledgment of decision-makers of its worthiness and the public mobilisation around it helped advance the policy process. One of the triggers of policy action identified in the literature was high profile events and reports. The development of reports and the creation of events that are focused on the policy issue helped increase awareness on it and were among the most effective strategies identified (Cullerton et al., 2016). Moreover, engaging with the media, and the use of prominent individuals and organizations to draw media attention helped foster policy change (Cullerton et al., 2016).

Narratives around policy options and their framing influenced policy progress and adoption. When the narrative aligned with the dominant political ideology, it fostered progress on the policy issue. In addition, policy progress was promoted when the narrative was broadened to highlight other goals beyond the originally narrow focus of the policy (Clarke et al., 2016). The narrative was also successful when it used emotions and compelling stories to engage

values. Among others, social justice and protecting children's health were used in successful advocacy strategies. The latter had the ear of policy-makers in neoliberal governments (Cullerton et al., 2016).

Timing was an important factor given that critical times enabled the positioning of the policy issue through an alignment of other previously disparate factors. Some *external factors* also allowed windows of opportunity to drive policy change. Among others, budgetary crises, national events, natural disasters, change in government priorities impacted decision-making (Clarke et al., 2016). While advocates' attentiveness to policy windows is always crucial, their readiness when windows of opportunity open, is critical in advancing the policy process (Cullerton et al., 2016).

Scientific evidence was one important component of the policy making process. An increasing body of evidence allowed the policy issue to receive more priority on the political agenda. Policy actors considered the availability of evidence on effectiveness an important feature of the policy option (Clarke et al., 2016). For instance, the lack of data on cost effectiveness of nutrition interventions or the difficulty of generating such data was reported as a barrier to policy making (Cullerton et al., 2016). Coupling of problems correctly with effective solutions was an enabler of the policy process. Clear, well-thought, costed interventions were all characteristics of solutions that resonated well with policy makers (Cullerton et al., 2016). In general, the least intrusive interventions were the preferred choice of policy makers. Regulatory policies were less favored. Higher support was granted to non-legislative solutions, irrespective of their effectiveness. Typically, popular solutions were among others, nutrition and health education at schools, collaboration with industry and voluntary salt reduction (Cullerton et al., 2016). The authors were not conclusive with respect to how evidence could drive decision-making. Other enablers and barriers seemed more important in driving policy change (Clarke et al., 2016).

A key barrier identified in the literature related to the lack of resources and the lack of skills and knowledge of health advocates. A limited understanding of the policy process characterized health advocates. This translated in their reduced capacity to identify leverage points and to strategically target policy makers, build relationships with them, try to influence them and gain their support (Cullerton et al., 2016). To help overcome this barrier, and foster

the understanding of the policy process, some strategies were identified in the literature. Solutions should be politically palatable and should at least align with one of the government's goals and the ruling political ideology while promoting community benefit, ensuring political neutrality and avoiding conflict and criticism (Cullerton et al., 2016).

The scientific literature is getting richer with the analysis of the policy process related to public health, public health nutrition and obesity prevention. However, most of the policy process studies in the published literature on health promotion and public health nutrition fail to use validated theoretical frameworks or use them at face value (Breton and De Leeuw, 2010; Cullerton et al., 2015). Instead policy-focused publications would tend to describe the content of the policy or evaluate its impact rather than bring insights to the policy making process (Bernier and Clavier, 2011; Breton and De Leeuw, 2010; Cullerton et al., 2015).

The reviews on the use of policy process theories we have discussed earlier highlight the determinants of policy decisions and how they influence the policy process. We will bring further insights to policy change from the literature by reviewing three studies on policies modifying food environments. The first is an ACF-based analysis of menu-labeling (Johnson, Payne, McNeese and Allen, 2012). This study was included in the two reviews mentioned earlier. The second study uses a policy cycle-based analysis on labelling policy at the federal level in Canada (Vogel et al., 2010). The contextual importance and the use of a policy model that was less considered in the first two reviews justifies our choice. The third study is on a national policy on taxation of sweetened beverages, inspired of the policy cycle model (Thow et al., 2011), a policy that is relevant in the context of Québec and Canada and that is currently generating a lot of advocacy efforts and debates (cqpp, 2018; dietitians of Canada, 2016; MSSS, 2016).

Applications on Obesity Prevention Policy

Johnson et al., (2012) described the development of the recently passed menu-labeling regulation in King County in Washington. The authors applied theoretical constructs drawn from the policy process research field to describe said policy and to inform future nutrition policy processes. The framework they utilized is the ACF because it provided the best-fit explanatory model to analyze the policy actions that are specific to menu labeling regulations

in King County (Johnson et al., 2012). The authors' methodology consisted of document reviews and interviews with major players involved in the policy process. Their results showed two major coalitions that were active in the policy subsystem: a public health coalition and an industry coalition. Members of coalitions agreed with respect to some stable parameters affecting the restaurant business namely the contribution of meals eaten away from home to overall dietary quality, the need for profitability of restaurant business and the rising prevalence of obesity and diabetes. External events played an important role in the policy process. Three were particularly influential: the availability of funding for capacity building for policy, the transfer of technical expertise from New York City that had implemented a similar policy and the effect of the economic recession (Johnson et al., 2012).

According to interview results, actors were driven by their own belief systems and values whereas tensions were obvious between three main dichotomies: the consumer's right for nutrition information versus the industry's freedom, a regulatory approach versus an educational approach, a change in the food environment versus individual's responsibility to choose healthy foods (Johnson et al., 2012). Public health advocates called for regulation, environmental changes and consumers' right for nutrition information whereas industry advocates highlighted the negative effects of regulation on the economy and called for voluntary mechanisms (Johnson et al., 2012).

Using the ACF, the authors were able to assert that substantial policy learning occurred through coordination between both coalitions until final negotiated agreements among them were reached following the devil's shift experienced by the industry advocacy coalition. The importance of technical knowledge early in the process was also highlighted in the authors' results. It is due to technical information actors were equipped with that concerns on restaurant food labeling issue were efficiently transformed into actions. Institutional and political context also played a favorable role in negotiating feasible compromises (Johnson et al., 2012).

Nutrition labeling policy has also received the attention of other scholars who analyzed it with a different theoretical lens. Vogel, Burt and Church (2010) utilized a case-study methodology to analyze policy-making processes at three stages of the policy cycle: agenda-setting, formulation and decision-making. Three levels were analyzed: the individual, the organizational and the system level. The authors' objectives were to identify key barriers and

enablers at all three levels that affect the formulation and adoption of three related policies in Canada: nutrition labeling, health claims regulation and nutrient content regulation (Vogel et al., 2010). Reviewed documents and interviews with key informants were analyzed and results presented with respect to two themes: consensus building on policy-making and contextual ideas and factors. It is interesting to note that the focus of the study was primarily nutrition labeling because of its magnitude and innovative character as compared to health claims and nutrient content claims (Vogel et al., 2010).

The results revealed a strong consensus on the one contextual trigger to launch nutrition labeling at the federal level, namely the document *Nutrition for Health: an Agenda for Action*, a document published by the Nutrition Steering Committee emphasizing the importance of nutrition labeling. Maintaining the same policy frame, that of health promotion, all throughout the agenda-setting and the formulation stages helped keep the consultation focused. The importance of stakeholder consultation, consensus building and communication to achieve stakeholder convergence and to relieve tension was highlighted by the authors. Moreover, an external inter-sectoral advisory committee working under well-defined guiding principles was able to drive the process forward. The success of the policy innovation was also due to the commitment of policy champions at all levels; it also necessitated overcoming organizational silos that rose between Health Canada and the Canadian Food Inspection Agency on the grounds of lack of resources and competing priorities (Vogel et al., 2010).

Another obesity prevention policy that is receiving global interest is taxing of sugar-sweetened beverages (Thow, Quested, Juventin, Kun, Khan and Swinburn, 2011). Using a case study research design, Thow et al. (2011) examined the policy processes of taxing soft drinks in four pacific islands: Fiji, Samoa, Nauru and French Polynesia. The policy cycle model inspired the authors in their data collection and analysis. They also used the ACF to identify coalitions and to highlight their roles in agenda-setting. The authors focused mostly on the policy processes related to agenda-setting, the nature of the proposed policy and the rationale behind it as well as the implementation and outcomes of the policy. Interview data, media reports and policy documents were analyzed along with data on policy impact to answer the research questions related to the aforementioned processes.

The authors' findings support the existence of competing coalitions, one that is industry-led, another cross-sectoral coalition that is led by the ministry of health, the ministry of finance and the revenue-collecting body. Surprisingly, non-governmental organizations, NGOs, had a minor role in agenda-setting for the soft drinks tax. The cross-sectoral advocacy coalition was a key determinant that brought the tax policy onto the agenda; this was further promoted by a clear and culturally sensitive justification of the tax initiated and led by the ministry of health. Another key component of agenda-setting was the potential contribution of this tax to the government budget. Considering the interests of the implementing agency along with the ministry of health and finance and decreasing the tax's administrative costs led to increased support for and acceptability of the tax (Thow et al, 2011). In conclusion, while the added value of the tax to the government fiscal policy was the trigger for agenda-setting, the active contribution of health policy makers was the key to policy initiation. Moreover, making use of existing legislative mechanisms was a critical component of successful implementation. Lastly, both health and financial aspects of health promoting taxes are to be emphasized to gain support and acceptability of the tax (Thow et al, 2011).

Public policy action to address nutrition related problems is still inconsistent across high-income democratic countries explaining in part why limited progress has been achieved (Cullerton et al., 2015). Based on what we have presented earlier, obesity prevention seems to move beyond the realm of public health practitioners to other professionals leading to a sense of unease and disempowerment that is felt by public health professionals as the framing of obesity prevention goes beyond the traditional sphere of public health practice (Kumanyika, 2007). Policy making represents one of the core functions of public health practice (Pommier and Grimaud 2007; MSSS, 2003). Yet, the literature is scarce in the application of theoretical policy making frameworks, theories and models to public health problems. In addition to limiting the capacity of the field to be informed by policy research, it provides little support to those intending to influence the policy process or even improve current models (Breton and De Leeuw, 2010).

Key Points from the Literature Review

The literature shows that there has been little use of theories, frameworks or models in analyzing health promotion and specifically obesity prevention policy processes. This may be due to lack of comfort of public health professionals with conjectures drawn from the policy science field. Studies that made use of such hypotheses revealed some enablers and constraints in the public policy making process. They also revealed that competing advocacy coalitions are active in the policy environment in trying to advance their own policy options and to resist those that do not maximize their interests and goals. While the leadership of the health ministry is essential in justifying, initiating and accompanying successful policy change, cross-sectoral advocacy has a central role in advancing and adopting policies. Key actors' support is fundamental all throughout the process including an active involvement of policy makers. Acknowledging the need to negotiate with all concerned stakeholders to reach a win-win agreement seems to drive the process forward.

Contribution of this Research

There is a gap in the current body of knowledge related to the understanding of obesity prevention policy processes. In fact, research in this field is limited, and is still in its infancy stage. Previous studies have made little use of theoretical models to analyze the policy process and therefore have been limited in explaining the policy process. This research aims to analyze the policy process concerned with obesity prevention with a focus on policy learning, formulation and adoption. Not only we seek to determine factors and conditions that are conducive to policy learning and change and those that hinder policy progress, we also aim to improve the understanding of the policy processes embedded in obesity prevention policy. By going beyond the *what*, we aim to explain the *how* and *why* of policy making. We also aim to contribute to the limited body of knowledge concerned with policy process research in public health, public health nutrition and obesity prevention policy. Policy process research has been less embraced in these fields and we aim to bridge the gap between them. By offering insights into a less explored area of research in public health, we hope to provide support to those intending to influence the policy process or improve current models and frameworks. We also

hope to empower researchers interested in the policy process through providing them with a methodology that is possible to replicate in future case studies.

CHAPTER 2 - Conceptual Framework

The framework (Appendix 2 – Conceptual Framework) we used to answer our research question is the *Advocacy Coalition Framework (ACF).* A political analysis model (Champagne et al., 1991) based on the *Theory of the Strategic Actor* (Crozier and Friedberg, 1977) was used alongside the ACF to provide key conceptual elements for the analysis of the strategies actors used to advance their policy options. The latter have been less highlighted in the ACF. In fact, the ACF has been blamed for its large focus on cognitive and normative dimensions and much less interest in political and institutional dimensions and analysis of interrelations between political actors (Gagnon et al., 2007; Nohrstedt, 2005; Schlager, 1995).

The Advocacy Coalition Framework - ACF

The ACF is mostly useful to answer questions about coalitions, learning and change in policy occurring in high-conflict situations. Ever since it was formulated in the early 1980s, the advocacy coalition framework theoretical logic has undergone various revisions and modifications putting the framework at the forefront of the most utilized policy process frameworks nowadays (Jenkins-Smith, Nohrstedt, Weible and Sabatier, 2014). The basic premises of the ACF will be described in the following paragraphs, specifically its assumptions, scope, concepts and general relations among these concepts.

Basic Premises of the ACF

Policy Subsystem

The ACF posits that the primary unit of analysis of the policy process is the policy subsystem. A subsystem is characterized by a policy topic, the actors that are affecting the subsystem affairs, whether directly or indirectly and by its territorial scope. Sabatier (1998) and Nohrstedt and Weible (2010) (in Jenkins-Smith et al., 2014) have developed several defining properties for policy subsystems that are helpful in terms of applying and interpreting the framework. First, policy subsystems comprise a large number of components that interact with each other to generate policy outputs and impacts. Among these components are the actors'

resources and belief systems as well as institutional and physical characteristics. Second, a policy subsystem separates integrated from unintegrated actors; not all those who are affected by or interested in the policy are necessarily engaged actors in the policy subsystem. Third, a policy subsystem is semi-independent; on one hand it overlaps with other policy subsystems and on the other hand it is nested in another one. Fourth, there is some authority that is provided by a given policy subsystem, such as what is typically found in the enforcement or the monitoring of the policy. Fifth, policy subsystems experience periods of stasis, periods of incremental change and periods of radical change (Jenkins-Smith et al., 2014).

Policy Subsystem Actors

Subsystem actors include any person that is trying to affect subsystem affairs on a regular basis, whether directly or indirectly. As such an actor can belong to any level of government, can be a member of the private sector, a private consultant, an academic scientist or a researcher, a member of the court, of news media or of not for profit organizations (Jenkins-Smith et al., 2014).

Model of the Individual

Individuals are boundedly rational because of their limited cognitive abilities, thus, their ability to process and act on a stimulus is limited. Belief systems motivate and inspire individuals in their actions. Deep core beliefs, policy core beliefs and secondary beliefs make up the three-tiered structure of the belief system of the ACF (Sabatier, 1998; Appendix 3 – Structure of Belief System). In addition to belief systems, contextual factors come also into play to influence individuals' behaviors, specifically the nature of related institutions, the sternness of opponents' threats and the intensity of conflict. Individuals are also prone to undergo the "devil shift" which is characterized by an attempt to exaggerate the opponents' power in order to demonize them (Jenkins-Smith et al., 2014 p. 190).

Advocacy Coalitions

Whether policy learning or change, this is accomplished by individuals that make up a given coalition. Jenkins-Smith et al. (2014) use the word coalition metaphorically to refer to the individuals making up a given coalition. This assumption considers that aggregating actors into

coalitions represents an effective approach to simplify subsystems' analysis given that it is highly intricate to analyze a subsystem comprising hundreds of actors. Actors in the same coalition share the same beliefs and strategies (Jenkins-Smith et al., 2014).

Beliefs and Public Policy

Actors' beliefs are translated into policies and programs that represent specific causal theories. Thus, embedded in public policy is the belief system of coalition actors and the causal theory that describes the logic behind achieving the policy's outputs and outcomes (Jenkins-Smith et al., 2014).

Technical and Scientific Information

The ACF considers technical information highly important particularly because the reasoning behind the causal theory is not an abstract representation of beliefs, but rather technical and scientific information. It is this source of knowledge that is important to understand the subsystem affairs according to the ACF (Jenkins-Smith et al., 2014).

Time Frame

Given that the policy process is an ongoing process with no clear boundaries, namely a beginning and an end (Lindblom, 1968, 4 in Jenkins-Smith et al., 2014), thus ACF posits that a long-term perspective should be adopted in order to understand the strategic behavior and learning of actors as well as the patterns and logic of policy change (Jenkins-Smith et al., 2014).

Why the ACF

Some well-established frameworks, theories and models have been extensively used in analyzing the policy process such as the *Multiple Streams Approach MSA,* the *Punctuated Equilibrium Theory PET,* and the *Narrative Policy Framework NPF*. However, they are less conceptually supportive in answering our research questions. In fact, choosing between theories should take into consideration whether all the elements of a theory are dealt with. Among others, these elements are scope, concepts and relationships among them, level of analysis, explicit assumptions and a model of the individual. One should also consider how well the theory explains the policy process (Cairney and Heikkila, 2014).

Although many of the concepts of the MSA are highly relevant in the case of obesity prevention policy, yet the MSA is not the most helpful in analyzing the obesity prevention policy at hand. In fact, the MSA has been blamed for putting less emphasis on institutions (Cairney & Heikkila, 2014; Clarke et al., 2016). Institutions can essentially establish venues for policy making and set up the rules of participation of actors in the policy process (Cairney and Heikkila, 2014). The policy of interest, the GAP, being a governmental action plan developed by several ministries and government agencies, institutions can not be overlooked given their expected influence on the policy process. In addition, the MSA assumes there is a broad "policy community" and puts less focus on well defined policy subsystems (Cairney and Heikkila, 2014).

Unlike the ACF, the MSA is less concerned with the processes of policy formulation, knowledge utilization and policy-oriented learning. These processes can only be studied and understood through a long-term perspective of the analysis of the policy process that is proposed by the ACF (Jenkins-Smith et al., 2014). Besides, the MSA focuses on actors who couple three streams together: the policies, the problems and the politics streams (Kingdon, 1984; Zahariadis, 2014). The MSA further stipulates that the three streams are independent (Kingdon, 1984; Zahariadis, 2014). We are particularly concerned with the problems and the policy streams. Both streams are in fact inter-related; solutions to problems can not be developed independently of them (Sabatier 2007, 332 n5 in Zaharaidis, 2014).

An interesting concept the MST advances is the *policy entrepreneur* (Kingdon, 1984). The concept of policy entrepreneur can strengthen an ACF-based analysis (Mintrom and Norman, 2009). During the policy process, there are critical times whereby the three separate streams, policy politics and problems come together. (Kingdon, 1984). Policy entrepreneurs are policy actors who play an important role in coupling the three streams (Kingdon, 1984). Policy entrepreneurs are ready to invest their own resources to promote a specific policy. The anticipated return is some future gain be it material, solidary or purposive benefits (Kingdon, 1984). Once a policy window is open, the likelihood it remains open long enough is quite low. If policy participants fail to act on it, the policy window will close as factors that prompted the window fade and political attention shift to other more pressing agenda items. Policy

entrepreneurs are ready and awaiting, they have an alternative proposal available and grasp this opportunity to advance their proposal (Kingdon, 1984).

Entrepreneurs have specific characteristics that contribute to their successes. These qualities fall into three general categories. Firstly, they have a legitimate claim to a hearing. The claim draws its validity from one of three sources: expertise, leadership or an authoritative decision-making position. Secondly, entrepreneurs are politically savvy; they are known for their negotiating skills or their political connections. Thirdly, entrepreneurs are persistent and tenacious at pushing their cause to the forefront (Kingdon, 1984).

Concerning the PET, it has been extensively used in the United States (US) context to explain the distribution of change in budget over time (Cairney and Heikkila, 2014). Lately, the scope and breadth of its application spread significantly to non-US contexts and diverse policy issues (Baumgartner et al., 2014). Both concepts of positive and negative feedback have been useful in explaining punctuation and equilibrium. The US context is characterized with multiple venues and various political institutions that are resistant to policy change. Over time, this results in an institutionally reinforced stability (Baumgartner et al., 2014). Policy monopolies are the entities that deal with policy issues according to the PET. A policy monopoly represents a single interest and dominates a policy subsystem (Baumgartner et al., 2014). It is characterized by a definable institutional structure that assumes the policy making responsibility based on its own political values and policy image. A policy monopoly is considered a negative feed back for policy change. The policy monopoly might break up under the pressure of new policy actors and institutions that are supported with a new policy image. New actors change the power balance and rewrite the rules, altering existing institutional structures and establishing as such a lasting new equilibrium (Baumgartner et al., 2014). A key element in this process concerns the policy monopoly's power, legitimacy and prestige on one hand and on the other hand, the power of those trying to replace it. It may not be easy to discredit the policy community who is eager at its end to maintain its control and authority (Baumgartner et al., 2014).

Although the PET offers the conceptual elements of the policy process that explain policy change (Cairney and Heikkila, 2014), it doesn't offer the conceptual elements to examine and analyze policy-oriented learning, namely the structure of the belief systems of the ACF

(Sabatier, 1998). Besides, and unlike the ACF, the PET dos not provide two levels of analysis that span both the policy subsystem and the coalitions (Cairney and Heikkila, 2014).

The NPF is helpful in explaining how narratives are utilized in the policy making process; the power of narratives is key to explaining the policy process (Cairney and Heikkila, 2014; McBeth et al., 2014). NPF scholars have leaned on other theories, such as the PET and more so the ACF, to develop some of the NPF concepts (McBeth et al., 2014; Cairney and Heikkila, 2014). At the meso or policy system level of analysis, the NPF adapts from the ACF the concept of competing coalitions; these coalitions try to put forward narratives that are appealing and compelling for their audiences (McBeth et al., 2014; Cairney and Heikkila, 2014). Policy beliefs are embedded in the policy narrative; thus, a change in the narrative elements will illustrate a change in policy beliefs (McBeth et al., 2014). Unlike the ACF, the NPF uses policy narratives to quantify the belief system (Shanahan et al., 2011). Beliefs explicited by policy narratives are less stable than the normative and empirical based ACF beliefs. Policy narratives are subject to some instability resulting from strategic manipulation of narratives depending on political dynamics (Shanahan et al., 2011). Besides, it is not clear whether the narrative is simply based on beliefs, similarly to the ACF, or if it includes some marketing elements that are used tactically to persuade the audience (Cairney and Heikkila, 2014). In fact, the origins of the NPF go back to research interested in what was termed as "policy marketing" and strategic construction of narratives (McBeth and Shanahan, 2004 in Shanahan et al., 2011).

Furthermore, the role of science and technical information in policy change, which is typically important in the ACF, is less explicit in the NPF. A good story according to the NPF, might alter policy learning irrespective of scientific information (Shanahan et al., 2011). Moreover, scientific information can be strategically used to construct or modify a policy narrative (Shanahan et al., 2011). Unlike the ACF, the NPF does not offer the conceptual elements to explain learning. It rather offers complementary concepts to optimize the ACF's explanation of learning. Thus, the NPF can not replace the ACF in our research. However, it can provide additional conceptual elements to broaden the scope of an ACF-based analysis.

Another interesting framework to examine policy decisions is the one developed to study health care reforms in Canada (Lazar et al., 2013). The researchers developed an analytical framework to analyze agendas and explain health care reforms in five Canadian provinces

between 1990 and 2003. They combined Kingdon's model of agenda-setting and four clusters of factors they had identified following a thorough review of the literature (Lavis, 2013). Those factors are institutions, ideas, interests in addition to external factors. Interests consist of various types of policy actors and include among others elected officials, social interest groups, researchers and public servants. Institutions comprise government structures, policy networks and policy legacies. Ideas include beliefs, values and a combination of knowledge and values. External factors occur outside the policy community and influence any of the three factors: institutions, interests and ideas (Lavis, 2013).

The concepts studied under this framework are comprehensive and allow for an examination and understanding of policy decisions. However, this framework does not provide the analytical concepts needed to analyze policy-oriented learning. The framework doesn't offer the conceptual elements required for the examination and analysis of belief systems of policy actors, namely the belief structure of the ACF (Sabatier, 1998). This limits the understanding and explanation of the precepts of beliefs that are affected with policy-oriented learning and their contribution to the policy decision. Policy-oriented learning is a fundamental concept in our research and can not be overlooked. In addition, aggregating actors in advocacy coalitions that share the same beliefs and coordinate their strategies helps identify strategies that are motivated by the coalition's policy beliefs. Furthermore, combining the ACF to a political analysis model will help identify interests and explain strategic behavior of policy actors. Accordingly, the framework we propose to use offers a better analytical framework to answer the questions of interest to this study.

Given what we have presented earlier, the ACF encompasses and explains many of the conceptual elements of the policy process of interest to our research. First the focus on the policy subsystem for analysis and the assumption that subsystems are nested in other subsystems and overlap with others apply well to obesity. In fact, obesity prevention policy is integrated into a larger national noncommunicable disease policy and overlaps with other policy subsystems such as agriculture, transportation, education, urban planning, food systems, sustainable development, climate change and others. Second, the ACF puts a lot of emphasis on coalitions and coalition beliefs that inspire policy options. Central to those beliefs are causal theories of obesity and preferred policy solutions, the main sources of entrenched dichotomies that are

hindering progress in obesity prevention (Roberto et al., 2015). One important reason for using the ACF is the emphasis the framework puts on scientific and technical information, whose importance cannot be overlooked in the case of obesity policy. Third, the contextual concepts that the ACF proposes for the analysis of the policy process, namely the relatively stable factors, external subsystem events, coalition opportunity structures and policy impacts provide important insights in explaining the process of elaborating obesity prevention policies.

Theory of the Strategic Actor

The theory of the strategic actor seeks to explain empirically observable behaviors of actors in the context of collective action (Crozier and Friedberg, 1977). Three strategic elements structure the theoretical foundation of strategic analysis. These elements are power, uncertainty zone and concrete system of action (Bernoux, 1985). Power according to Crozier and Friedberg (1977) is better described as a relation rather than an attribute. A defining characteristic of power relation is disequilibrium between two individuals or groups of individuals because of the capacity of one to influence the other in a way that favors self-interests. Actors with different vision and objectives adopt different strategies; thus, conflicts may arise out of their interactions (Crozier and Friedberg, 1977). These conflicts are shaped by power struggles over what seems to be a better solution to each party (Crozier and Friedberg, 1977).

Four sources of power are described by Crozier and Friedberg (1977): expertise, control of the relations with the environment, control of communication and of information, and knowledge of operating rules. These sources of power have a direct effect on the uncertainty zone of the actor, another fundamental concept that is needed in the scope of the strategic analysis. The importance of the uncertainty zone is that it is differentially mastered by actors leading to an increase in power of those who master it better. Uncertainties can come from internal sources as well as external environments (Crozier and Friedberg, 1977; Bernoux, 1985).

The last theoretical element of the strategic analysis is the concrete system of action. It is the entity that structures relations between interdependent and interrelated actors (Crozier and Friedberg, 1977; Bernoux, 1985). Underpinning this system are relatively stable mechanisms of coordination among participants and mechanisms of regulation that maintain the system's structure (Crozier and Friedberg, 1977; Bernoux, 1985). The concrete system of action is a

concept that can be applied to any action situation whether occurring in an organization or in the context of collective action (Friedberg, 1993). It can be thought of as a continuum with four main dimensions: the nature of the "organization" or structure and how formal it is, the existence of goals around which are articulated regulation mechanisms as well as mechanisms for establishing awareness and integration of these goals by actors and finally the willingness of some actors to implement a few regulations (Friedberg, 1993).

Strategic analysis makes use of the three concepts described earlier mainly through a careful analysis of power and uncertainty zone, and through delineation of the concrete system of action. It is mostly pertinent at the level of the actors and strives at explaining their behavior, whether struggling to acquire, make use or expand their power (Bernoux, 1985).

Description of the Conceptual Framework

The conceptual framework we used is a pluralistic innovative framework, combining the ACF with a political analysis model inspired of the Theory of the Strategic Actor (Appendix 2). The ACF's basic conceptual premises and their relations are shown in Appendix 2. The framework shows two *coalitions* with different *belief systems* and various *resources* that are active within the policy subsystem. Making use of diverse strategies, these coalitions compete to put pressure on government authorities so that they affect their decisions. The aim is to influence the institutional rules, the policy outputs and ultimately the policy impacts. A feedback loop would in turn lead those decisions to affect not only the coalitions but also the *external subsystem events*. This category of variables comprises events that are dynamic or subject to change and that are external to the policy subsystem. Examples include public opinion, socio-economic conditions, changes in the system governing coalition and spillover effects resulting from other policy subsystems. Another category of variables are the *relatively stable factors* that are also external to the subsystem but rather stable. They represent the basic contextual structures where the policy subsystem is rooted, be it institutional, cultural, social, physical or economic (Jenkins-Smith et al., 2014).

Another category of variables, the *long-term coalition opportunity structures* represents one key by-product of the relatively stable parameters on policy subsystems. It falls in between relatively stable parameters and the policy subsystem. Among others, this category includes the

political system openness, the degree of consensus required for major policy change to occur and the overlapping societal cleavages. A parallel to this category of concepts is the *short-term constraints and opportunities of the subsystem actors*. It actually falls in between external subsystem events and the policy subsystem. It focuses on events that occur outside the policy subsystem yet affect the subsystem. These events are of significance especially due to the opportunities actors may exploit or to the constraints such events may inflict on their actions (Jenkins-Smith et al., 2014).

Two concepts we need to highlight are: *policy-oriented learning* and *policy change*. They are the theoretical foci of the ACF of interest to this study. Learning results in changes in belief systems and may be experienced not only at the level of each coalition but also between competing coalitions or what is known as cross-coalition learning. Four categories of factors have been proposed to explain learning: the *level of conflict*, the *attribute of the stimuli*, the *attribute of the individual* and the *attribute of the forum* that prompts learning (Jenkins-Smith et al., 2014; Weible and Nohrstedt, 2012).

The second concept is *policy change*. The ACF proposes four paths for change: *policy-oriented learning, external events, internal events* and *negotiated agreements* between coalitions (Jenkins-Smith et al., 2014; Weible and Nohrstedt, 2012). The change in policy is a translation of policy beliefs (Jenkins-Smith et al., 2014). It is illustrated by major or minor changes. Any change in the policy core aspects is considered a "major policy change" while a change in secondary aspects is described as a "minor policy change" (Sabatier and Jenkins-Smith, 1999: 147-8 in Weible and Nohrstedt, 2012).

The main proposed contribution of this framework is the integration of the concept of *power* to analyze subsystem actors' strategies. Power is one of the elements of the strategic analysis discussed earlier. It represents the capacity of keeping any term of agreement with every other party congruent with one's own benefits; this includes conflict resolution and negotiated agreements. The use of power sources is a strategy that actors utilize in order to achieve their objectives (Crozier and Friedberg, 1977; Bernoux, 1985). Power sources defined earlier were

used to analyze the actors' strategies in the context of collective action that best describes their interactions namely, the concrete system of action.

A political analysis model that has been proposed by Champagne, Denis, Pineault and Contandriopoulos (1991) offers the adequate conceptual categories in order to analyze the actors' strategies (Appendix 2). The framework is inspired by Crozier and Friedberg (1977) strategic analysis. It permits the analysis of the strategies of actors interacting in a given power bases distribution and shows how dominant actors only support those change decisions that help them actualize their goals; in parallel only those innovation goals that are supported by dominant actors will be able to see light (Champagne et al., 1991). This model for political analysis completes our conceptual framework. As such, our conceptual framework is a complex network of hypotheses that we intend to test guided by the research questions that follow. The empirical inquiry of this study will seek to find support to any of the pathways to policy change and policy-oriented learning described in the conceptual framework.

Research Questions and Objectives

This research aims to answer questions about obesity prevention policy formulation and adoption in the case of the Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012: Invest in the Future (GAP), adopted in Québec in 2006. The research question we aim to answer is:

What explains the elaboration and the adoption of the GAP?

To this end, we will seek to answer the following questions:

With Respect to Coalition Formation and Development

Descriptive questions:

1. What are the interests, beliefs and networks of advocacy coalitions?
2. What strategies do advocacy coalitions use in pursuit of their goals?

With Respect to Policy Formulation

Descriptive questions

1. What strategies do advocacy coalitions use in pursuit of their goals?

2. What types of obesity prevention policies are formulated or promoted by coalitions?
3. Do coalitions experience policy-oriented learning?

Explanatory questions

1. How do coalitions utilize knowledge?
2. What is the role of knowledge utilization and policy-oriented learning in the GAP elaboration?
3. What fosters policy-oriented learning?

With Respect to Policy Adoption

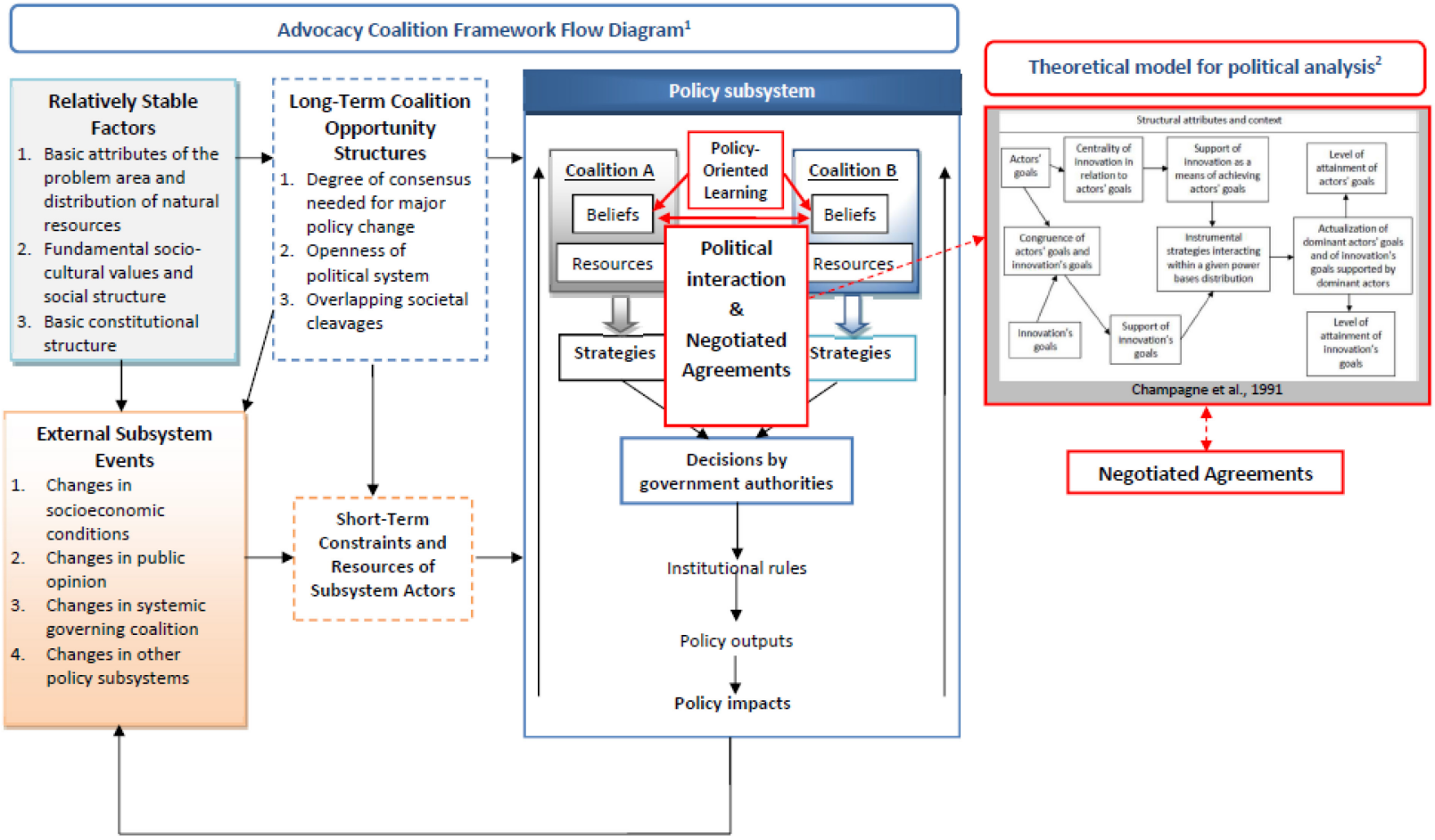
Descriptive questions

1. What strategies do advocacy coalitions use in pursuit of their goals?
2. What are the contextual factors, external or internal events and previous policy decisions that influenced the adoption of the GAP?
3. Do coalitions experience policy-oriented learning?

Explanatory questions

1. How and why did the government adopt a governmental plan to prevent obesity?
2. How did enablers and barriers influence the adoption of the GAP?
3. What is the role of knowledge utilization and policy-oriented learning in the GAP adoption?

Conceptual Framework



CHAPTER 3 - Methodology

Research Design

The research design is illustrated as the logical plan that draws the path from the research questions all the way through to their answers (Yin, 2014). The research design we used to answer the question of interest consists of a ***case study***. As a research method, a case study's definition is two-folded (Yin, 2014). One part describes the scope and the other specifies the features (Yin, 2014). With respect to scope a case study is defined as an empirical inquiry that investigates thoroughly, or *in-depth*, a contemporary phenomenon within its real-life context particularly when the boundaries amid the said phenomenon and its context are fuzzy (Yin, 2014). This limitation gives rise to the need to specify certain methodological characteristics or features for a case study (Yin, 2014). Technically, the case study investigation deals with a lot more variables than data points resulting in two methodological requirements. First, a case study uses multiple sources of evidence whose data should converge in a triangulation manner and second a case study benefits from the prior development of theoretical propositions whose main aim is to guide both data collection and data analysis (Yin, 2014).

The rationale behind the selection of the case study research design is multifold. First our research seeks to answer two types of questions: "what" and "how and why". Case studies are well suited to answer descriptive questions of the "what" type and explanatory questions such as "how" and "why" (Yin, 2014). Second, our research concerns the "in-depth" and holistic study of a contemporary event in its real-world perspective. The events we are interested in can be directly observed and traced back into the recent past. Third, the concerned behavioral events, i.e. policies elaborated and enacted cannot be manipulated.

The selection of a single case study design instead of a multiple-case study design is appropriate under various circumstances (Yin, 2014). Five rationales for doing a single case are proposed by Yin (2014): *critical, revelatory, unusual, common, or longitudinal* case. Case selection rationale must be related to the theory of interest as it represents the context for each of the rationales (Yin, 2014). With respect to this research, the rationale for selecting a single case study design is the *longitudinal case*. This rationale offers the best fit with the ACF assumption of the need for a long-term perspective, a decade or more to analyze a policy subsystem.

Five elements of a research design are particularly important in case study research and these are the case study's questions, the case study's propositions, the unit of analysis, the logic connecting the data with the propositions and the criteria put forth to interpret the findings (Yin, 2014). The first two components have been discussed in the preceding section and the next three will be developed in the following sections.

Unit of Analysis and Case Selection

The unit of analysis relates to two elements: the case definition and the case bounding (Yin, 2014). With respect to the definition of the case, the study will focus on the *Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012: Invest in the Future (GAP)*, as the unit of analysis. The context for the study is the province of Québec in Canada, a high-income country. The reason for choosing a high-income country is the relatively weaker national capacity of lower-income countries to tackle Noncommunicable diseases (WHO, 2012), and the lack of information on interventions (WHO, 2009) on one hand and the extensive applications of the ACF in higher-income countries on the other hand (Jenkins-Smith et al, 2014).

The interest in Québec is multifold. Québec is well recognized as a leader in public health across Canada (NCCHPP, 2010). The province is known for its multiple distinguished levers that favor public health policy action. The province issued its Public Health Act in 2001. It has been since then the only Canadian province that is legislatively equipped with a distinguished legislative lever mandating all ministries to conduct health impact assessment for significant policies or legislative actions with potential effects on health (*Public Health Act* art. 54; Aslanyan et al, 2012; NCCHPP, 2008; NCCHPP, 2010). The first national public health program (PNSP) was adopted in 2002 (PNSP 2003-2012). One of the intervention domains under the PNSP is chronic diseases that includes obesity. Yet, the alarming increase in the prevalence rates of obesity (GTPPP, 2003; GTPPP, 2005) echoed the similar trends observed in most OECD countries, making obesity the number one enemy in public health (Sassi, 2010).

The GAP is a governmental action plan. Based on our literature review, there are very few policy process analyses done on a plan that includes a multitude of policy actions borne to

numerous ministries and government agencies. Much of the available research would tend to describe one specific policy focus, such as taxation of sweetened beverages, labelling or healthy schools among others. Not only was the GAP mandated by the Premier, but also the breadth, diversity, and multitude of policy actors was extensive. Beyond public health policy actors, there were policy actors from various ministries and government agencies, implying as such a commitment of various government sectors in public health policy (MSSS, 2006) and a whole of government approach to obesity prevention as per the WHO recommendations (WHO, 2017). The GAP has in fact been proclaimed by public health policy actors in Québec as a trigger and lever for collaborative intersectoral work on prevention (Le Bodo et.al., 2016; MSSS, 2015a). In addition, The GAP gave rise to an innovative public-private partnership that helped secure funds for the GAP-related actions (MSSS & FLAC, 2007).

Despite coming to an end in December 2012, the GAP was still proclaimed by senior officials as part of the Government activity in promoting healthy life styles. Remarkably, activities that fell under the GAP had been maintained prior to the launch of the new governmental policy on prevention (ASSNAT, 2014). In addition, the elaboration of the policy on prevention, launched in 2016, somehow reproduced a comparable model of inter-sectoral stakeholder collaboration (CSSS, 2014). The GAP is even perceived as being a kind of predecessor for this policy (MSSS, 2016).

Obesity has been described as a wicked policy problem that is characterized with a long-standing stakeholders' disagreement and debate on possible solutions (APSC, 2012; Johnston, Matteson and Finegood, 2014; Roberto et al., 2015). The agreement of various policy actors on a governmental action plan addressing a wicked policy problem, such as the GAP adoption in Québec, is an interesting phenomenon that challenges the nature of the problem itself. Therefore, the policy process related to the adoption of this plan deserves a thorough and detailed examination and analysis.

As part of the case bounding, delineating the time frame needed to study the case are essential (Yin, 2014). According to the ACF, understanding the contextual events, actors' strategic behavior and the patterns and logic of policy change necessitates a long-term perspective, at least a decade (Jenkins-Smith et al., 2014). Therefore, we demarcated the time boundary of the study to include national public health policies adopted by the government or the Ministry of Health and

Social Services (MSSS) as of 1996. In 1992, the Government of Québec adopted its Health and Well-Being policy with a time-frame of ten years. Within that period, and in 1997, the MSSS issued its Public Health Priorities 1997-2002. The first Québec *Public Health Act* was adopted in 2001 and was followed with the publication of the first National Public Health Program 2003-2012 (*Programme national de santé publique 2003-2012, PNSP)* (MSSS, 2003). The program sets specific targets regarding decreasing overweight and obesity in Québec population. Therefore, the Health and Well-Being policy delineates the time boundary of the case study. Governmental actions prior to this year were only considered when relevant in the scope of this case study.

With respect to physical activity and sedentary lifestyles, the government of Québec has been quite committed to the promotion of physical activity and the prevention of sedentary lifestyles. In fact, its policies date back to 1978 when it launched its inter-ministerial program *Kino-Québec* (Kino-Québec, 2005). The program's mission is to encourage active living to improve people's wellbeing (Kino-Québec, 2005).

The governmental action plan was the result of numerous endeavors engaging various stakeholders from seven ministries and three governmental organizations (MSSS, 2006). Following its publication, the National Assembly adopted a law that provides funds for the promotion of healthy lifestyles (National Assembly, 2007). The provisions of this law required the government to finance the funds with $20 MM per year up until the government decides to terminate said provisions, but not before April 1, 2017. The government partnered with the philanthropic organization *Fondation Lucie et André Chagnon* (FLAC). Under the terms of their agreement, the organization committed to invest with an equal sum of $20 MM per year so that a total of $400 MM are mutually spent over the period of agreement. The mandate was to develop programs and actions aiming at promoting the adoption of sustainable and healthy lifestyles, namely a healthy diet and a physically active lifestyle, by youths under 17 years of age (MSSS & FLAC, 2007).

Variables

Variables in the case study are presented as interlinked concepts in the conceptual framework. These variables are nested in networks of interdependent relationships which were tested empirically. When doing case study research, variables cannot be classified into dependent

and independent variables as they can assume the role of any of them depending on the relationship we are interested to examine (Contandriopoulos, Champagne, Potvin, Denis and Boyle, 2005). A thorough definition of concepts (Appendix 4 – Definition of Concepts) guided the empirical inquiry.

Data sources and data collection

We followed Yin's (2014, p.105) four supporting principles for data collection: (i) using multiple sources of evidence; (ii) creating a case study database; (iii) maintaining a chain of evidence and (iv) exercising care when using data from electronic sources of evidence. Using multiple sources of evidence allowed data triangulation. Information was drawn from more than one source of information to corroborate case study findings (Yin, 2014). The case study database was crucial, in the sense that it represented a reference for further inspection or consultation of documents if need be. The chain of evidence would allow any external observer to trace evidence from questions to findings and vice versa (Yin, 2014).

We utilized specific techniques to ensure the validity criteria of credibility, transferability, confirmability and dependability of our research findings. To increase credibility, we described our research methodology thoroughly; the research design, data collection and data analysis sections have been described rigorously allowing the reader to ascertain the credibility of the procedure that we followed. We explained the rational behind our key methodological decisions such as developing various databases and keeping a chain of events. We also used data triangulation to increase credibility of our research findings. We looked for convergence of various sources of information across different data sources to corroborate case study findings.

To enhance the credibility of our findings, we ensured data saturation before we stopped interviewing new key informants. In collecting and analyzing our data, we looked for disconfirming evidence or evidence that would support rival explanations of the GAP adoption. We also used member checking technique to increase the credibility of our research findings. This technique consists of sharing the data with the participants and asking them to confirm the accuracy of the data and the narrative account provided to them (Creswell & Miller, 2000). Member checking is considered one of the "the most crucial technique for establishing credibility" (Lincoln and Guba, 1985, p. 314 in Creswell & Miller, 2000) in a research. We shared with some

participants draft reports of two of the articles in this thesis and asked them for feedback. We integrated their comments to the final version of this thesis.

Another technique we used to increase the credibility of our research is the provision of thick and rich descriptions to ensure a detailed account of the events, situations and participants. Multiple quotes were presented in our results to provide vivid details of the events that occurred, and the situations encountered. Rich explanations help inform the applicability of research findings to similar or different contexts (Creswell & Miller, 2000). Therefore, the transferability of our research is enhanced through the thick and rich descriptions we provided on the context, the in-depth explanations of events, situations and participants as well as on the factors and characteristics related to the policy issue within its specific context. This description allows judgment whether the findings can be transferred to other settings and contexts.

Researcher reflexivity helped enhance the confirmability of our research findings. Researcher reflexivity is the process during which researchers report on their personal beliefs and values and any bias that may influence their inquiry (Creswell & Miller, 2000). In this research, the principal investigator's background was presented as a narrative account at the beginning of this thesis. She reflected on the factors that may shape her inquiry and interpretations, allowing as such the reader to understand her position. These biases were suspended as the study proceeded and recurrent checks were made throughout the research to ensure confirmability of research findings is maintained.

To ensure dependability of our research we followed both tactics recommended by Yin (2014). We developed and maintained a case study database. Full records are available for interview transcripts, procedures related to interviews and follow ups with key informants, memos, unpublished material and documents related to data analysis. We also developed a case study protocol for our research.

Appendix 5 shows the variables and their sources. Data was collected from two main sources: written documents and interviews.

Interviews

Semi-structured open-ended interviews were conducted with key informants from various ministries and organizations involved in the GAP elaboration as well as in advocacy on weight

related-problems in Québec, such as the *Groupe de travail provincial sur la problématique du poids, GTPPP* (the Provincial working group on weight-related problems). To prepare for our interviews, and before starting to interview our key informants, we conducted an initial systematic internet search to help prepare field work. The search was performed to identify all provincial institutions, government and non-government agencies and organizations involved in obesity prevention in the province. Federal institutions that were cited for collaboration in any of the identified documents were included when possible. A database of institutions, their mission and their specific contribution to the GAP was developed. Another database of relevant documents was built; it included all documents identified through the internet search of the identified organizations and agencies' websites.

Following an initial document review, we developed two lists of active actors and institutions in obesity prevention in Québec. The actors' list was validated by the national GAP coordinator (2007-2012). We then developed a short-list which included the GTPPP actors and the GAP elaboration team. Our first round of interviews included short-listed key informants. We then followed a snow balling technique to identify our remaining key informants. Along with the document review, we could identify other key informants. Those included members of the Perrault Working Group, a working group created by Québec cabinet in 2004 to address the issue of prevention in the youth. We also identified the main collaborators of the Perrault Working Group from all participating ministries and organizations. Sample variability based on the relevance of the key informants to the research questions guided the strategic sampling. Interviews were discontinued after we had achieved data saturation.

An interview guide (Appendix 6) and interview themes (Appendix 7) have been developed to help cover research questions and themes. We developed a detailed version of the interview guide and translated it into French to suit the context of Québec (Appendix 8 – Detailed Interview Guide). An alignment of the queries with the information that needs to be collected under that query has also been developed (Appendix 8). Adjustments to the interview guide have been made based on the contribution of the key informant to the GAP. Accordingly, each interview delved into the areas of expertise of the key informant. Support documents, such as printed copies of the plan itself, ministerial reports, lists of participants to deliberative forums etc. were provided when needed to participants to help overcome recall problems. The principal investigator (PI) conducted

the interviews (n=25) between May 2016 and September 2017. Most interviews (n=23) were held between May and October 2016. The initial round of interviews included the GAP authors (n=2), writing directors (n=2) and the GAP coordinator (n=1). Other interviews with provincial key actors in the obesity prevention policy subsystem in Québec (n=3) were conducted to help build a better understanding of the obesity prevention policy subsystem. Most of the contacted key informants agreed to participate. Those who refused reported the following reasons for refusal: retirement (n=2), little implication in the GAP elaboration or difficulty recalling the events (n=3), no interest in obesity prevention rather in physical activity promotion (n=1) or busy schedule (n=1).

Informants were deidentified, except for those who accepted to have their identity linked to their statements. Interviews were recorded after approval of the key informant. Recording allowed us a more accurate interpretation of interviews. When needed, we communicated through email with the key informants to follow up on information or document provision. General descriptors (e.g. government professional) were used to characterize key informants in the results of our analysis. We used the descriptor *Anonymous* when the use of the general descriptor could have led to identifying the key informant. Appendix 9 presents the demographics of our key informants by institution, affiliation, profession, position and level of studies.

Written Documents

Documents (n > 200) represent our second source of information. We developed a document database using three sources of documents: (i) ministerial and organizational documents; (ii) bills, briefs, committee reports and other documents of Québec National Assembly; (iii) unpublished documents including reports, meeting minutes and other documents of interest provided by key informants. We consulted the websites of the organizations identified earlier under the list of active institutions. These included governmental and non-governmental organizations, Québec National Assembly, professional regulatory bodies, academic institutions and private sector organizations. We reviewed all policies, guidelines, position papers, press releases, scientific opinions on obesity prevention of concerned ministries and organizations. For the purpose of data triangulation, we reviewed other documents, such as annual reports and strategic plans, when needed.

Data Analysis

The principal investigator (PI) transcribed the interviews using Dragon software. We used NVivo 11 Pro to analyze verbatims. The PI analyzed the verbatims. We developed a coding guide based on the research questions and conceptual framework. As the analysis progressed, we integrated emergent themes related to the variables of interest. We used thematic codes corresponding to the variables of interest to help us understand and analyze actors' beliefs, resources, goals, strategies, opportunities and constraints. Subthemes under each category emerged and coding was done in an iterative way so as to include earlier findings under emerging themes. We used the three-tiered belief structure of Sabatier to code actors' beliefs: (i) deep core beliefs, (ii) policy core beliefs and (iii) secondary beliefs. To better understand actors' strategies and accordingly their contribution to policy change, we created a semantic structure that included: (i) actor/actors involved (ii) actor's coalition (iii) actor's goals (iv) actors' strategies related to their political interests and (v) actors' strategies related to their beliefs. In addition, and to identify influential events that affected the policy process, we also coded internal and external events that occurred throughout the study period.

To assess and understand policy change, we analyzed policies, programs, plans and consultation reports that are related to obesity prevention or promotion of healthy lifestyles up to the GAP based on Sabatier's belief system structure. We included those policies that were adopted or issued by the government or the Ministry of Health and Social Services, the ministry in charge of the GAP elaboration during the period of the study. Six were included: The Health and well-being policy 1992-2002, the National Public Health Priorities 1997-2002, the National Program for Public Health 2003-2012, the Perrault Working Group report, the Governmental Action Plan (GAP) and the agreement between the MSSS and the Lucie and Andre Chagnon Foundation (*Fondation Lucie et André Chagnon, FLAC*). We compared belief components integrated in each of these policy documents based on Sabatier belief structure.

The analytic technique we used for the case study analysis is *explanation building* (Yin, 2014). This procedure consists of analyzing the data by building an explanation about the case (Yin, 2014 p.147). It is a similar analytic technique to *process tracing* in political science research (Bennet, 2010 in Yin, 2014). The explanation we sought regarding the presumed causal links reflects the policy change hypothesis that guided the empirical inquiry. Explanation building was

iterative. We started with the initial change hypothesis and while building explanation we looked for other plausible explanations and analyzed the data to see if it supported other possible explanations. As mentioned earlier, while collecting our data, we looked for disconfirming evidence or evidence that would support rival explanations of the GAP adoption. An example is the identification of the strategic plan of the MSSS as a data source to understand the beliefs and strategies of the minister that was in office at the time the GAP was adopted. We particularly looked for negative evidence or evidence that confirms that a rival explanation explains the GAP adoption. A possible rival explanation is that the GAP was adopted based on a firm intention of the health minister as evidenced through his strategic plan. Had it been the case, we would have found the evidence in the 2005-2010 strategic plan of the MSSS.

Building explanation was performed in two phases, t_0: *pre-field work* and t_1: *post-field work*. At t_0, prior to conducting interviews, a systematic internet search was performed to create three databases: institutions, actors and documents. We performed a document analysis and wrote a preliminary report whereby we tried to build explanation around policy change. This initial analysis helped guide the inquiry and identify the information on the variables to be sought after from the interview data, particularly looking for data that support rival explanations. It also prepared for a better-informed phase of field work. For instance, during interviews, we looked for alternative description of events and other influences identified by key informants. At t_1, data analysis and explanation building were performed using all data sources including semi-structured interviews and other documents provided by key informants during field work. We started with a description of events, then we classified them in temporal order. Then we looked at possible causal links as evidenced by our data. Triangulation of data sources was performed when possible to confirm findings. When it was not possible, we looked for validation of our data from more than one key informant.

With respect to the analysis concerned with knowledge utilization and policy-oriented learning, we coded knowledge and information as a subtheme under the actors' resources. We coded the availability of knowledge and information or the lack thereof as actors' opportunity or constraint respectively. Another constraint we coded for was the conflicts experienced by actors. We also coded actors' strategies aimed at generating and diffusing knowledge. Under the sources of power of actors, we also coded for the control of communication and information and actors'

expertise. Drawing from Weiss' (1977) interpretation of research utilization, the utilization of technical and scientific information by actors was classified into: (i) conceptualization, (ii) problem-solving, (iii) knowledge-driven, (iv) political and (v) interactive use.

The conceptual use refers to the reconceptualization of the aspects of a policy issue. This may alter the policy issue perception and the alternative solutions to consider (Weiss, 1977). The problem solving can be illustrated by a linear model whereby a problem exists, and knowledge is generated to provide the lacking information or improve understanding so that a solution is reached (Weiss, 1977). The knowledge-driven is the traditional model of knowledge generation which will inevitably lead to its use and development (Weiss, 1977). The political model of utilization occurs when policy makers have taken a stand on a given policy issue that research evidence is less likely to shake (Weiss, 1977). Research evidence is wielded by interested parties to bolster supporters, get waverers on one's side or neutralize detractors (Weiss, 1977). The interactive model is a non-linear complex search for information and knowledge from a variety of actors in a back and forth way. A pooling of talents, understandings and beliefs of various actors involved in a specific issue help improve the understanding of the problem and forge a possible solution to it (Weiss, 1977).

To understand whether learning occurred and what belief structure it affected, we created a semantic structure for learning based on our coding scheme. The semantic structure included: (i) the actor (s) involved, (ii) the coalition the actor(s) belong(s) to, (iii) the type of information or knowledge, (iv) the type of utilization the actor(s) made use of the information, (v) the professional forum (meetings, discussions, committees, workshops etc.) and (vi) the pre-post beliefs of actors that were involved when possible (whether through interviews or document analysis).

With respect to the analysis of the subgroup of policy actors' advocacy strategies (dietitians), the thematic codes pertaining to dietitians were extracted from the coding pool of key informants and reanalyzed. For the dietitians' advocacy analysis, we used the thematic codes corresponding to the variables of interest to analyze actors' beliefs, resources, goals, strategies, opportunities and constraints including conflicts. To identify advocacy practices, we used the advocacy model developed by Alive & Thrive, A&T (Alive & Thrive, 2016). A guide for public health advocacy actions has been developed by A&T based on infant and young child feeding advocacy experiences in Southeast Asia (A&T, 2016). The guide can be useful to other public health advocacy efforts (A&T, 2016). Therefore, the A&T Process for Policy Change can be

helpful in identifying dietitians' advocacy strategies in the case of the GAP. Advocacy actions follow a four-part *Process for Policy Change*: (i) establish and sustain partnerships (ii) develop the evidence-base, (iii) develop messages and materials and (iv) build consensus.

Validity

In addition to the techniques described earlier, and in order to ensure the validity of our research, we describe in this section how we followed the specific tactics recommended by Yin (2014) with respect to: (i) construct validity, (ii) internal validity, (iii) external validity and (iv) reliability. Construct validity was enhanced through data triangulation, maintenance of a chain of evidence and definition of the concepts under study. In addition, some key informants were asked to express their comments on the draft versions of two articles: the article on policy change and that on dietitians' advocacy. They were selected based on diversity and representation of coalitions. Criteria for selecting these key informants were also based on the extent and diversity of their involvement in the obesity prevention policy in Québec. A letter was sent to each selected key informant to explain the objectives of this procedure. A sample letter is found in Appendix 10 (Letter of Invitation for Document Review). The reliability of the case study was enhanced with the maintenance of a chain of evidence, the case study protocol and database. Explanation building and addressing rival hypotheses increased internal validity. With respect to external validity, using theory enhances external validity in single-case studies according to Yin (2014). Therefore, using a conceptual framework that is drawn from well-established theories of the policy process helped increase external validity.

Ethical Concerns

The Institutional Review Board of the Université de Montréal reviewed the research protocol and granted approval (Appendix 11 – Institutional Review Board Approval). Credentials of the PI were presented to the key informants. In addition, key informants were asked for their informed consent for participation after a proper introduction to the study objectives and future uses had been explicitly explained (Appendix 12 – Information and Consent Form). The following core ethical principles guided the researcher through the study: respect for persons, concern for their welfare and justice (CIHR, NSERC and SSHRC, 2014).

Key informants were contacted by the principal investigator. An invitation email was sent to them to solicit their participation (Appendix 13 – Invitation Letter). Follow up on invitation was done after two weeks in case of no response. Follow up was generally done through email or through phone call to a lesser extent. When approval was granted, we requested an appointment with the key informant to meet at the time and place of convenience to the participant. Following the interview, a thank you letter, or email was sent to each key informant (Appendix 14 – Thank you Letter).

Introduction to the Results' Section

In this section, we introduce the results section of this thesis with a review of the research questions we had formulated earlier in relation to each of the following three articles. While each of the three articles focuses on a specific research question, the three articles altogether answer the main research question this thesis responds to:

What explains the elaboration and the adoption of the GAP?

The focus of article 1 is on the GAP adoption. It answers the following explanatory questions: (i) how and why did the government of Québec adopt the GAP? (ii) How did enablers and barriers influence the adoption of the GAP? Article 1 answers the following descriptive questions: (i) What are the main interests and beliefs of advocacy coalitions and what strategies did they use in pursuit of their goals? (ii) What are the contextual factors, external or internal events and previous policy decisions that influenced the adoption of the GAP? In this article we will identify and analyze the beliefs and political interests of various actors and institutions involved in the policy process. We will identify enablers and barriers including those related to external or internal events, contextual factors and previous policy decisions. We will examine how enablers were capitalized on and in parallel how barriers to policy action were overcome. We will analyze the strategies advocacy coalitions advanced to achieve their goals and how they impacted the policy process.

The focus of article 2 is on the role of a group of policy actors, specifically dietitians, in the policy process related to the GAP. The questions we seek to answer are of the descriptive type (i) What are the belief systems and networks of dietitians? (ii) What are the advocacy strategies of dietitians? In this article, we also seek to answer two explanatory questions: (i) How did dietitians'

advocacy influence the elaboration and the adoption of the GAP? (ii) How did enablers and barriers to dietitians' advocacy influence the GAP elaboration and adoption?

Article 3 delves further into the GAP elaboration and adoption. Through a thorough dissection and description of the beliefs of advocacy coalitions based on Sabatier's three-tiered belief system (Sabatier, 1998), we aim to explain the processes related to policy-oriented learning and their influence on the GAP elaboration and adoption. The belief system of each advocacy coalition that were presented briefly in article 1 are thoroughly described. This is essential to highlight the precepts of the belief system that are affected with policy-oriented learning and consequently change in those precepts, if any. Article 3 answers the following descriptive questions: (i) What are the belief systems and networks of advocacy coalition members; (ii) Do coalitions experience policy-oriented learning? (iii) What types of obesity prevention policies are formulated or promoted by coalitions? Article 3 answers the following explanatory questions: (i) How do coalitions utilize knowledge? (ii) What fosters policy-oriented learning? (iii) What is the role of knowledge utilization and policy-oriented learning in the GAP elaboration and adoption?

CHAPTER 4 – Article 1 - Generating a National Plan on Obesity Prevention: An Advocacy Coalition Approach

Introduction

Emerging from rising expectations of a new public health movement across the world, the 1986 Ottawa Charter for Health Promotion enhanced the understanding and the meanings of health promotion pre-requisites and actions (WHO, 2018). Health advocacy, enabling people to achieve their highest health potential and mediating various interests in pursuit of health is at the core of the pre-requisites for health improvement (WHO, 2018). Encompassing the health sector to non-health sectors, health promotion denotes any of the following five actions: building healthy public policy, strengthening community actions, creating supportive environments, developing personal skills and redirecting health services (WHO, 2018). Following the adoption of the Ottawa Charter for Health Promotion, policy considerations in health promotion were embraced by various stakeholders and have become a rhetorical argument in almost every health promotion publication or government speech (Breton and De Leeuw, 2010).

The Ottawa Charter calls for placing health at the core of policy makers' agenda irrespective of sector and level of government and making them responsible for the health consequences of their actions (WHO, 2018). Accordingly, the role of public health actors in influencing policy makers' agenda and advocating for healthy public policies grew wider (WHO, 2018). In parallel to this growing role, there was an increased need for public health actors to understand how to influence the policy process (Breton and De Leeuw, 2010). The health promotion literature on the policy process is scarce. The use of theoretical frameworks drawn from policy science in the field of health promotion is still in its infancy stage. Most studies on the nature and content of policy or policy process in the published literature on health promotion fail to use validated theoretical frameworks or use them at face value (Breton and De Leeuw, 2010; Cullerton et al., 2015). Instead policy-focused publications in public health would rather tend to describe the content of the policy or evaluate its impact rather than bring insights to the policy making process (Bernier and Clavier, 2011; Cullerton et al., 2015). In addition to limiting the

capacity of the field to be informed by policy research, it provides little support to those intending to influence the policy process or even improve current models (Breton and De Leeuw, 2010).

The limited use of policy process theories drawn from political sciences has also been evidenced in the field of obesity prevention policies (Clarke, Swinburn and Sacks, 2016). In their systematic review investigating the use of such theories in studying obesity prevention policies, Clarke et al. (2016) found that the application of these theories was limited. When used to understand policy processes related to obesity prevention, studies had major methodological limitations namely with respect to credibility and dependability (Clarke et al., 2016). The authors recommend improving the rigor of future empirical studies through integrating multiple theoretical perspectives. Considering the complexity of decision-making related to obesity prevention policies, multiple theoretical perspectives would help inform and guide decision-makers on possible and effective leverage points to influence the policy process (Clarke et al., 2016).

Unsurprisingly, the current obesity prevention policy context reflects a gap between policy recommendations and the policy environment (Lang and Rayner, 2007; Roberto et al., 2015; Huang et al., 2015). Despite the highly advocated policy-led approach to obesity prevention, the path is still paved with political difficulty (Clarke et al., 2016). Being the result of various interlinked causal factors, obesity calls for multi-component, comprehensive and integrated solutions across multiple levels and sectors. The health sector is only one amongst many others whose roles in obesity prevention are quite crucial (WHO, 1998; WHO, 2000; WHO, 2004; Kumanyika, 2007; WHO, 2009; Gortmaker et al., 2011; Roberto et al., 2015). The framing of obesity prevention is no longer within the traditional sphere of public health practice. The new frame leads to a sense of unease and disempowerment that is felt by public health professionals (Kumanyika, 2007).

In this light, there is a need to better understand decision-making related to obesity prevention policies. The use of theoretical frameworks drawn from political sciences has been advocated as a promising avenue (Huang et al., 2015; Cullerton et al., 2015; Clarke et al., 2016). The calls to examine policy processes related to formulation and adoption of obesity prevention policies have multiplied lately (Clarke et al., 2016; Huang et al., 2015). So far, scattered global efforts have only led to the identification of determinants affecting decision-making rather than

how said determinants affect decision-making throughout the policy making process (Clarke et al., 2016). This study responds to the urge expressed by various researchers (Breton and De Leeuw, 2010; Cullerton et al., 2015; Clarke et al, 2016) and public health actors to apply frameworks drawn from the policy science field on health promotion, specifically obesity prevention. The questions we seek to answer are: how and why have governments adopted policy actions to prevent obesity in their specific context? How do enablers and barriers influence the adoption of a national action plan on obesity prevention? What are the main beliefs and interests of advocacy coalitions and what strategies do they use in pursuit of their goals?

In 2006, the Ministry of Health and Social Services (*Ministère de la santé et des services sociaux, MSSS*) in the province of Québec, Canada, issued the *Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012, Invest in the Future (GAP)*, with a time frame of six years (MSSS, 2006). As part of this plan, the government has proposed measures to improve environments to promote healthy lifestyles, reduce obesity prevalence and prevent weight-related problems and their impacts on the individual and on the society at large (MSSS, 2006). Using the Sabatier Advocacy Coalition Framework and a political analysis framework (Appendix I), we will identify and analyze the beliefs and political interests of various actors and institutions involved in the policy process. We will identify enablers and barriers including those related to external or internal events, contextual factors, previous policy decisions. We will examine how enablers were capitalized on and in parallel how barriers to policy action were overcome. We will analyze the strategies advocacy coalitions advanced to achieve their goals and how they impacted the policy process. We certainly hope our analysis will help unlash some of the uncertainty public health actors and other healthy public policy actors experience in dealing with the policy process. We also hope it will pave the way to a theory-informed analysis of obesity prevention policies.

Analytical Framework

We will use the Advocacy Coalition Framework, ACF, to explain the adoption of the GAP (Appendix I). The ACF is mostly useful to answer questions about coalitions, policy change and learning occurring in high-conflict situations. Ever since it was formulated in the early 1980s, the advocacy coalition framework theoretical logic has undergone various revisions and modifications

putting the framework at the forefront of the most utilized policy process frameworks nowadays (Jenkins-Smith, Nohrstedt, Weible and Sabatier, 2014). The basic premises of the ACF will be described in the following paragraphs, specifically its assumptions, scope, concepts and general relations among these concepts. We will also utilize a political analysis model informed by the Crozier and Friedberg strategic actor model (1977) to analyze actors' interactions and strategies. The latter have been less highlighted in the ACF. In fact, the ACF has been blamed for its large focus on cognitive and normative dimensions and much less interest in political and institutional dimensions and analysis of interrelations between political actors (Gagnon, Turgeon and Dallaire, 2007). By complementing the ACF with the political analysis model, we will also be responding to the call to use various theoretical perspectives to conduct empirical studies on policy process analysis related to obesity prevention. We will also analyze the role of key political actors through the MSA's lens of political entrepreneur. According to the the MSA, an opening in each of three independent streams, the policies, the problems and the politics streams would generate a "window of opportunity" that increases the chances for a policy change (Kingdon, 1984; Zahariadis, 2014). Policy entrepreneurs are policy actors who play an important role in coupling the three streams (Kingdon, 1984). The concept of policy entrepreneur can strengthen an ACF-based analysis (Mintrom and Norman, 2009).

Policy Subsystem

Based on the ACF, a policy subsystem constitutes the primary unit of analysis to understand policy processes. A policy topic, its territorial scope and its actors define a given policy subsystem. Subsystem actors include any person that is trying to affect subsystem affairs on a regular basis, whether directly or indirectly. An actor can belong to any level of government, can be a member of the private sector, a private consultant, an academic scientist or a researcher, a member of the court, of news media or of not for profit organizations (Jenkins-Smith et al., 2014).

Several defining properties characterize policy subsystems and help interpret the framework (Sabatier, 1998 and Nohrstedt and Weible, 2010 in Jenkins-Smith et al., 2014). Policy subsystems comprise many components that interact with each other to generate policy outputs and outcomes. Among those components are the actors' resources and belief systems as well as institutional and physical characteristics. A policy subsystem is semi-independent; on one hand it overlaps with other policy subsystems and on the other hand it may be nested in other subsystems

(Jenkins-Smith et al., 2014). This leads to some actors being termed as "regulars" and others as "periodic". What distinguishes these two categories is that the former are involved in virtually all matters whereas the latter are involved in a limited well differentiated subset of issues (Sabatier and Jenkins-Smith, 1999 p. 137). There is some authority that is provided by a given policy subsystem, such as what is typically found in the enforcement or the monitoring of the policy (Jenkins-Smith et al., 2014). Policy subsystems can encompass all levels of government or can be delineated by government level, each level corresponding to a subsystem (Sabatier and Jenkins-Smith, 1999). Guiding criteria are empirical considerations referring to the degree of legal autonomy each level has and the degree of integration of the actors across all governmental levels (Sabatier and Jenkins-Smith, 1999). Lastly, policy subsystems experience periods of stasis, periods of incremental change and periods of radical change (Jenkins-Smith et al., 2014).

Two additional concepts are useful to distinguish between policy subsystems that are being established, which are termed "nascent" versus well established ones termed "mature". Mature subsystems are characterized with the presence of participants who have a common domain of expertise and consider themselves as a community that is semiautonomous. Their interaction occurs at different levels of government and within specialized subunits integrated to agencies. Besides, there are interest groups or subunits within those interest groups that consider the policy topic a major one. In mature subsystems, participants' attempts to influence public policy relevant to the policy domain have lasted for a long time, more than seven years (Sabatier and Jenkins-Smith, 1999).

Advocacy Coalitions

The ACF aggregates actors in advocacy coalitions and highlights the role of competing advocacy coalitions with different beliefs in advancing their own policy solutions within a given policy subsystem (Jenkins-Smith et al., 2014). Coalitions are defined as "groups of actors sharing policy core beliefs and coordinating their behavior in a non-trivial manner" (Weible and Nohrstedt, 2012 p.127). Actors in the same coalition share the same beliefs and strategies (Jenkins-Smith et al., 2014). Coalitions compete over access to venues, resources and influence on the policy process (Weible et al. 2009 in Weible and Nohrstedt, 2012). Coalition resources help understand the power and capacity of coalition actors (Sabatier and Weible 2007, 201-204). In addition to scientific information, financial resources and skillful leadership, resources that coalition actors can make

use of include formal legal authority to make policy decisions, public opinion and mobilizable troops (Sabatier and Jenkins-Smith, 1993:29, Sabatier and Weible, 2007:201-4 and Weible, 2007 in Weible and Nohrstedt, 2012). When a coalition has control over key political resources, specifically formal legal authority, it is considered a dominant coalition (Nohrstedt, 2011 in Weible and Nohrstedt, 2012 p.133).

Two forms of coordination between coalition actors are proposed: a strong and a weak coordination (Zafonte and Sabatier, 1998 in Sabatier and Jenkins-Smith, 1999). Strong coordination requires a common plan of action, its communication to members and monitoring of compliance to the plan along with sanctions for non-compliant members. A weak coordination involves mutual monitoring of members' actions and subsequent adjustment of one's behavior so that it is complementary to the other as long as the actions are being based on common beliefs (Zafonte and Sabatier, 1998 in Sabatier and Jenkins-Smith, 1999).

There are however some challenges that coalition actors face during their collective action. These are in fact the transaction costs involved when coalition members agree on a common understanding of the problem and means to solve it. Moreover, policies that justly address distributional conflicts among members are scant. Finally, individuals and organizations alike might experience the free-riding temptation in the policy process (Schlager 1995, 261-262). Further investigating the coordination and collective action by exploring the relationship that exists between beliefs and organizational interdependencies, Fenger and klok (1998 in Sabatier and Jenkins-Smith, 1999) categorized beliefs into congruent, divergent and unrelated beliefs whereas organizational interdependency was either competitive or symbiotic. Members of the same coalition would experience a symbiotic interdependency while sharing congruent beliefs; accordingly, coordination is expected to be easy. Members of opposing coalitions would experience competitive interdependency with divergent beliefs. The interesting cases are the cross-diagonal ones, namely actors who have congruent beliefs and competitive interdependency and actors with divergent beliefs and symbiotic interdependencies. While the former would still be in the same coalition and experience high levels of distributional conflict, the latter would be in competing coalitions and try to depoliticize their interdependencies. Sabatier and Jenkins-Smith (1999) rely on Fenger and Klok's (1998) analysis to predict (1) strong coalition members, (2)

members with distributional conflicts, and (3) moderate members (Sabatier and Jenkins-Smith, 1999).

Belief Systems

Individuals are boundedly rational because of their limited cognitive abilities (Simon, 1945). Thus, their ability to process and act on a stimulus is limited. Belief systems motivate and inspire individuals in their actions. Belief systems are mechanisms that help interpret the world and reduce its complexity. Deep core beliefs, policy core beliefs and secondary beliefs make up the three-tiered structure of the belief system of the ACF (Jenkins-Smith et al., 2014). Belief systems include values and priorities. They also include the perceived causal relationships that are believed to influence the empirical world. Embedded in any policy are implicit causal theories that reflect the beliefs of a single or several coalitions (Jenkins-Smith et al., 2014). Thus, public policies are a representation of not only the political negotiations coalitions undertake but also of causal theories (Pressman and Wildavsky 1973, xv in Jenkins-Smith et al., 2014). A major source for a causal theory is technical and scientific information (Jenkins-Smith et al., 2014). Accordingly, the ACF emphasizes the importance of understanding how this source of knowledge is integrated into actors' belief systems and how they use it in their political negotiations and debates (Jenkins-Smith et al., 2014). Interpreting policies as such offers insights on why coalitions are keen on advocating a policy over time and how they perceive the policy as being supportive of their belief systems or incompatible with them (Jenkins-Smith et al., 2014).

Strategies

At any time, a coalition can advance a strategy to promote its own policy goals. Various coalitions operating in a policy subsystem might launch conflicting strategies that are normally mediated by policy brokers (Sabatier, 1987). A policy broker is an actor in a policy subsystem whose role is to reduce the level of conflict by helping coalitions reach reasonable compromise (Sabatier, 1987). A policy broker can not be totally distinguished from a policy advocate; the difference should rather be looked at as a continuum. Many policy brokers would have a certain policy preference while policy advocates are seriously concerned with preserving the subsystem (Sabatier, 1987). High civil servants taking up the role of a broker might be policy advocates as

well specifically when they are working in an organization with a clearly defined mission (Sabatier, 1987).

Actors in a coalition use various strategies to attempt to influence decision-making to their own advantage. Actors' strategies aim at increasing their resources. Examples of strategies include attempts to secure positions of legal authority for allies either through political appointment or through elections, launch lobbying campaigns to influence officials with legal authority, engage mobilizable troops in various political activities such as public demonstrations, fund-raising and electoral campaigns and work on gaining public support (Sabatier and Weible, 2007). Actors may also use information to strengthen coalition membership, to provide arguments against an opponent's views, to influence decision-makers in favor of one's policy proposals and to sway public opinion. They may also use financial resources to procure other resources. Examples are funding research, organizing think tanks to produce pertinent information, launching media campaigns, advertising own policy views and funding sympathetic candidates to gain inside access to decision-makers (Sabatier and Weible, 2007). Actors may also seek to attract new resources to the coalition through strategic and skillful leadership (Muller 1995 in Sabatier and Weible, 2007).

Policy Decisions

One of the ACF assumptions is that policies are translations of beliefs. Therefore, it is possible to conceptualize and measure policies hierarchically similarly to belief systems. While policy core aspects represent those policy components that are salient to a given policy subsystem, secondary aspects only deal with the technical components of the policy or secondary aspects of the subsystem (Weible and Nohrstedt, 2012). Accordingly, any change in the policy core aspects is considered a "major policy change" while a change in secondary aspects is described as a "minor policy change" (Sabatier and Jenkins-Smith, 1999: 147-8).

Four paths to change have been proposed: events external to the policy subsystem, events internal to the policy subsystem, policy-oriented learning and negotiated agreements. According to Sabatier & Weible (2007, 205-6), nine prescriptions can foster negotiated agreements: (1) a hurting stalemate; (2) broad representation; (3) leadership; (4) consensus; (5) funding; (6) commitment by actors; (7) important empirical issues; (8) trust and (9) lack of alternative venues.

Policy-oriented learning is defined as "Enduring alternations of thought or behavioral intentions that result from experience and which are concerned with the attainment or the revision of the precepts of the belief system of individuals or of collectives" (Jenkins-Smith and Sabatier 1993). Policy-oriented learning may entail a better understanding of political goals, of the causal relation-ship among key factors in the subsystem and of effective strategic behaviors, especially as used in analytical debates (Weible and Nohrstedt, 2012 p.130):

Weible and Nohrstedt (2012, p.133) propose the following policy change hypothesis:

> *"Significant perturbations external to the subsystem, a significant perturbation internal to the subsystem, policy-oriented learning, negotiated agreement, or some combination thereof are necessary, but not sufficient, sources of change in the policy core attributes of a governmental program."*

The empirical inquiry of this study will seek to find support to any of the pathways to policy change described under this hypothesis. A political analysis model, described later under this section, will complement the ACF to analyze actors' goals and strategies that provide further insights to the analysis of the policy adoption.

Context

Policy subsystems exist within a broader contextual environment. Embedded in the context of any policy subsystem is a variety of factors that constrain or facilitate policy making, whether social, legal or resource related (Kiser and Ostrom, 1982 in Sabatier, 1987). When analyzing policy change, these external factors must be considered, and a distinction be made between stable and dynamic ones (Sabatier, 1987). Moreover, the relationship of the policy subsystem to other subsystems and to the political system must also be considered (Sabatier, 1987). The ACF distinguishes between external subsystem events and the relatively stable factors. While the latter are stable over several decades, the former may experience substantial fluctuations in a shorter period, a few years, leading to policy change (Sabatier, 1987).

Relatively Stable Factors

These factors are relatively resistant to actors' strategies and are not usually inviting for actors to strategize on, namely because of the difficulty in changing them. However, they can still constrain actors' behaviors and influence their beliefs and resources (Sabatier, 1987). Certain basic attributes of the problem for instance might necessitate government regulation given that markets

fail to deal with them efficiently (Ostrom, 1986 in Sabatier, 1987). Some other aspects of a problem might influence the likelihood and the degree of learning. For instance, when it is possible to measure a problem quantitatively, performance gaps can be ascertained. Moreover, comprehensive causal models including a variety of factors affecting the problem are more conducive to learning (Sabatier, 1987).

The fundamental cultural values and social structure influence the policy process as well; some policy options might be viable in some contexts and not others depending on socio-cultural values and social structure. Similarly, political power and resources are not uniformly distributed among various social groups, they are rather correlated with social class, income and large organizations (Sabatier, 1987). The presence of political resources among interest groups is leading to a slow change in "facts of life". Actors must be aware of such influence when formulating their strategies (Sabatier, 1987). Other factors that are rather stable and resistant to change, specifically the basic legal structure, can affect the extent of learning. For instance, in a decentralized political system, where local governments are relatively autonomous, it is easier to learn from policy experimentation and from the evaluation of different policy instruments (Ostrom, 1982 in Sabatier, 1987).

External Subsystem Events

These factors are external to the policy subsystem and are subject to significant variation over the course of a decade or a few years. Being most influential in affecting policy change, actors are continuously challenged to anticipate these events and readjust their strategies accordingly (Sabatier, 1987). Among others, changes in socio-economic conditions and technology can significantly alter the subsystem, mainly by weakening causal assumptions of the existing policies or through a change in the political support of advocacy coalitions in the subsystem (Sabatier, 1987). A change in government might change the perception of the problem and the level of priority granted to it (Sabatier, 1987). Other dynamic factors that might affect a policy subsystem are policy decisions and impacts from other policy subsystems (Sabatier, 1987).

Long-Term Coalition Opportunity Structures

Another category of variables, the long-term coalition opportunity structures represents one key byproduct of the relatively stable factors on policy subsystems. It falls in between relatively

stable factors and the policy subsystem. Among others, this category includes the political system openness, the degree of consensus required for major policy change to occur and the overlapping societal cleavages (Jenkins-Smith et al., 2014).

Short-Term Constraints and Resources of Subsystem Actors

A parallel to the long-term coalition opportunity structures concept is the concept of short-term constraints and opportunities of the subsystem actors. They fall in between external subsystem events and the policy subsystem. They focus on events that occur outside the policy subsystem yet affect the subsystem. These events are of significance due to the opportunities actors may exploit or to the constraints such events may inflict on their actions (Jenkins-Smith et al., 2014).

Political Analysis Model

The ACF has been blamed for not addressing behavioral issues satisfactorily (Schlager, 1995). Shared belief systems are not enough to explain how and why heterogeneous actors form coalitions and maintain coordination to achieve their policy goals (Schlager, 1995). Problems of collective action and cooperation between actors of similar belief systems are not addressed (Schlager, 1995). Little logic is made of the strategies coalitions are likely to pursue to achieve their policy goals or deter potential undesirable policies (Schlager, 1995). While the ACF assumes that individuals are instrumentally rational and that they pursue policy-oriented goals, many would disagree and believe that self-interests provide the best explanation in case of political decision-making (Nohrstedt, 2005). So, the altered belief-based explanation of policy change of Sabatier is not enough to explain a policy change. An interest-based explanation would reveal the gap between interests and policy core beliefs (Nohrstedt, 2005). According to political actors, such interests are concerned with the conditions favoring their survival, growth and autonomy (Nohrstedt, 2005).

Therefore, the main proposed contribution of our framework is the integration of the concept of power to analyze subsystem actors' strategies. The ACF fails to provide an explanation to strategies that are guided by actors' political interests and goals. Power is one of the elements of the political analysis model integrated to the study's conceptual framework. It represents the capacity of keeping any term of agreement with every other party congruent with one's own benefits and interests; this includes conflict resolution and negotiated agreements. The use of

power sources is a strategy that actors utilize in order to achieve their objectives (Crozier and Friedberg, 1977; Bernoux, 1985). Four sources of power are described by Crozier and Friedberg (1977): expertise; control of the relations with the environment; control of communication and of information; and knowledge of operating rules. These sources of power have a direct effect on the uncertainty zone of the actor, another fundamental concept in strategic analysis. The importance of the uncertainty zone is that it is differentially mastered by actors leading to an increase in power of those who master it better. Uncertainties can come from internal sources as well as external environments (Crozier and Friedberg, 1977; Bernoux, 1985). Champagne (1985) argues that uncertainty zones are power bases that include: critical functions, technology, information, critical resources, sanctions and rewards and ideology. These power bases can be controlled through power sources, namely expertise, opportunities, personality, dependence, structure and environment. Power bases and sources will be used to analyze the actors' strategies in the context of collective action hosting actors' interactions. A political analysis model that has been proposed by Champagne, Denis, Pineault and Contandriopoulos (1991) offers the adequate conceptual categories in order to analyze the actors' strategies (Appendix I). The framework is inspired by Crozier and Friedberg (1977) strategic actor model. It permits the analysis of the strategies of actors interacting in a given power bases distribution and shows how dominant actors only support those change decisions that help them actualize their goals; in parallel only those innovation goals that are supported by dominant actors will be able to see light (Champagne et al., 1991).

Policy Entrepreneurs

We will also utilize the MSA concept of policy entrepreneurs to analyze the role of key political actors. According to the the MSA, an opening in each of three independent streams, the policies, the problems and the politics streams would generate a "window of opportunity" that increases the chances for a policy change (Kingdon, 1984; Zahariadis, 2014). Policy entrepreneurs are policy actors who play an important role in coupling the three streams (Kingdon, 1984). Policy entrepreneurs are ready to invest their own resources to promote a specific policy. The anticipated return is some future gain be it material, solidary or purposive benefits (Kingdon, 1984). Once a policy window is open, the likelihood it remains open long enough is quite low. If policy participants fail to act on it, the policy window will close as factors that prompted the window fade and political attention shift to other more pressing agenda items. Policy entrepreneurs are ready

and awaiting, they have an alternative proposal available and grasp this opportunity to advance their proposal (Kingdon, 1984).

Entrepreneurs have specific characteristics that contribute to their successes. These qualities fall into three general categories. Firstly, they have a legitimate claim to a hearing. The claim draws its validity from one of three sources: expertise, leadership or an authoritative decision-making position. Secondly, entrepreneurs are politically savvy; they are known for their negotiating skills or their political connections. Thirdly, entrepreneurs are persistent and tenacious at pushing their cause to the forefront (Kingdon, 1984).

Methodology

The research design that was used to answer the research questions consists of a case study. The case is the adoption of the Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012, Invest in the Future (GAP) by the province of Québec in Canada. Adopted in 2006 with a time frame of six years, the action plan puts the concept of enabling environments and their promotion at the forefront of mandated government action in obesity prevention (MSSS, 2006). According to the ACF, understanding the contextual events, actors' strategic behavior and the patterns and logic of policy change necessitates a long-term perspective, at least a decade (Jenkins-Smith et al., 2014). Therefore, we demarcated the time boundary of the study to include national public health policies adopted by the government or the Ministry of Health and Social Services as of 1996. In 1992, the Government of Québec adopted its health and well-being policy with a time-frame of ten years. Within that period, and in 1997, the MSSS issued its public health priorities 1997-2002. Therefore, this policy delineates the time boundary of the case study. Governmental actions prior to this year were only considered when relevant in the scope of this case study. Some key informants were asked to express their comments on a draft version of this article. Selection of key informants was based on diversity, representativeness and extent of involvement in the GAP. The Institutional Review Board of the Université de Montréal reviewed and approved the study.

Data Collection

Two sources of data were used: (i) interviews and (ii) documents.

Interviews

Semi-structured open-ended interviews were conducted with key informants from various ministries and organizations involved in the GAP elaboration as well as in advocacy on weight related-problems in Québec, such as the Provincial working group on weight-related issues in Québec (Groupe de travail provincial sur la problématique du poids, GTPPP).

An initial systematic internet search was conducted to help prepare field work. The search was performed to identify all provincial institutions, government and non-government agencies and organizations involved in obesity prevention in the province. Federal institutions that were cited for collaboration in any of the identified documents were included when possible. A database of institutions, their mission and their specific contribution to the GAP was developed. Another database of relevant documents was built; it included all documents identified through the internet search of the identified organizations and agencies websites. Following an initial document review, we developed two lists of active actors and institutions in obesity prevention in Québec. The actors' list was validated by the national GAP coordinator (2007-2012). We then developed a short-list which included the GTPPP actors and the GAP elaboration team. Our first round of interviews included short-listed key informants. We then followed a snow balling technique to identify our remaining key informants. Along with the document review, we could identify other key informants. Those included members of the Perrault Working Group, a working group created by Québec cabinet in 2004 to address the issue of prevention in the youth. We also identified the main collaborators of the Perrault Working Group from all participating ministries and organizations. Sample variability based on the relevance of the key informants to the research questions guided the strategic sampling. Interviews were discontinued after we had achieved data saturation.

An interview guide was developed to help cover research questions and themes. An alignment of the queries with the information that needs to be collected under that query has also been developed (Available upon request). Adjustments to the interview guide were made based on the contribution of the key informant to the GAP. Accordingly, each interview delved into the areas of expertise of the key informant. Support documents, such as printed copies of the plan

itself, ministerial reports, lists of participants to deliberative forums etc. were provided when needed to participants to help overcome recall problems. The main researcher conducted the interviews (n=25) between May 2016 and September 2017. Most interviews (n=23) were held between May and October 2016. The initial round of interviews included the GAP authors (n=2), writing directors (n=2) and the GAP coordinator (n=1). Other interviews with national key actors in the obesity prevention policy subsystem in Québec (n=3) were conducted to help build a better understanding of the obesity prevention policy subsystem. Informants were deidentified, except for those who accepted to have their identity linked to their statements. General descriptors (e.g. government professional) were used to characterize key informants in the results of our analysis. Appendix II presents the demographics of our key informants by institution, affiliation, profession, position and level of studies.

Most of the contacted key informants agreed to participate except those who had retired (n=2) and those who reported they had little implication in the GAP elaboration or couldn't recall the events (n=3) or had no interest in obesity prevention rather in physical activity promotion (n=1) or were not available (n=1). All interviews were recorded after the consent of the key informant. When needed, we communicated through email with the key informants to follow up on information or document provision.

Documents

Documents (n > 200) represent our second source of information. We developed a document database using three sources of documents: (1) ministerial and organizational documents; (2) bills, briefs, committee reports and other documents of Québec National Assembly; (3) unpublished documents including reports, meeting minutes and other documents of interest provided by key informants. We consulted the websites of the organizations identified earlier under the list of active institutions. These included governmental and non-governmental organizations, Québec National Assembly, professional regulatory bodies, academic institutions and private sector organizations. We reviewed all policies, guidelines, position papers, press releases, scientific opinions on obesity prevention of concerned ministries and organizations. For the purpose of data triangulation, we reviewed other documents, such as annual reports and strategic plans, when needed. Data sources and variables of interest to this study are presented in Appendix III.

Data Analysis

The analysis tried to build explanation around the change in obesity prevention policy, based on the change hypotheses of the conceptual framework, by comparing case study findings against said hypotheses in an iterative way. Findings were also compared to rival hypotheses.

> *Change hypothesis: "Significant perturbations external to the subsystem, a significant perturbation internal to the subsystem, policy-oriented learning, negotiated agreement, or some combination thereof are necessary, but not sufficient, sources of change in the policy core attributes of a governmental program." (Weible and Nohrstedt, 2012, p. 133)*

The main researcher transcribed the interviews using Dragon software. We used NVivo 11 Pro to analyze verbatims. The main researcher analyzed the verbatims. We developed a coding guide based on the research questions and conceptual framework. As the analysis progressed, we integrated emergent themes related to the variables of interest. We used thematic codes corresponding to the variables of interest to help us understand and analyze actors' beliefs, resources, goals, strategies, opportunities and constraints. Subthemes under each category emerged and coding was done in an iterative way so as to include earlier findings under emerging themes. We used the three-tiered belief structure of Sabatier to code actors' beliefs: (i) deep core beliefs, (ii) policy core beliefs and (iii) secondary beliefs. To better understand actors' strategies and accordingly their contribution to policy change, we created a semantic structure that included: (i) actor/actors involved (ii) actor's coalition (iii) actor's goals (iv) actors' strategies related to their political interests and (v) actors' strategies related to their beliefs. In addition, and to identify influential events that affected the policy process, we also coded internal and external events that occurred throughout the study period.

To understand policy change, we analyzed policies, programs, plans and consultation reports that are related to obesity prevention or promotion of healthy lifestyles up to the GAP based on Sabatier's belief structure. We included those policies that were adopted or issued by the government or the Ministry of Health and Social Services, the ministry in charge of the GAP elaboration during the period of the study. Six were included: The Health and well-being policy 1992-2002, the National Public Health Priorities 1997-2002, the National Program for Public Health 2003-2012, the Perrault Working Group report, the Governmental Action Plan (GAP) and the agreement between the MSSS and the Lucie and André Chagnon Foundation (*Fondation Lucie*

et André Chagnon, FLAC). We compared belief components integrated in each of these policy documents based on Sabatier belief structure.

The analytic technique we used for the case study analysis is *explanation building* (Yin, 2014). This procedure consists of analyzing the data by building an explanation about the case (Yin, 2014 p.147). It is a similar analytic technique to *process tracing* in political science research (Bennet, 2010 in Yin, 2014). The explanation we sought regarding the presumed causal links reflects the policy change hypothesis that guided the empirical inquiry. Explanation building was iterative. We started with the initial change hypothesis and while building explanation we looked for other plausible explanations and analyzed the data to see if it supported other possible explanations.

Building explanation was performed in two phases, t_0: *pre-field work* and t_1: *post-field work*. At t_0, prior to conducting interviews, a systematic internet search was performed to create three databases: institutions, actors and documents. We performed a document analysis and wrote a preliminary report whereby we tried to build explanation around policy change. This initial analysis helped guide the inquiry and identify the information on the variables to be sought after from the interview data, particularly looking for data that support rival explanations. It also prepared for a better-informed phase of field work. For instance, during interviews, we looked for alternative description of events and other influences identified by key informants. At t_1, data analysis and explanation building were performed using all data sources including semi-structured interviews and other documents provided by key informants during field work. We started with a description of events, then we classified them in temporal order. Then we looked at possible causal links as evidenced by our data. Triangulation of data sources was performed when possible to confirm findings. When it was not possible, we looked for validation of our data from more than one key informant.

In the following section, we will present our findings in relation to the questions we seek to answer that are: how and why have governments adopted policy actions to prevent obesity in their specific context? How do enablers and barriers influence the adoption of a national action plan on obesity prevention? What are the main characteristics of advocacy coalitions and what strategies do they use in pursuit of their goals?

Starting with a description of active coalitions in the policy subsystem, we will then highlight significant stable factors on the policy problem. Contextual factors related to the socio-political system in Québec will be presented. We will also describe major external events that affected the policy subsystem. We will then analyze how both these contextual factors affected the constraints and resources of actors. We will also construe the strategies advanced by various actors from an advocacy coalition lens and a political analysis lens. We will also analyze the GAP through the belief system structure and establish a comparison with previous policies highlighting differences and similarities. We will compare our findings with the policy change hypothesis that guided this study and explain the adoption of the plan through one or more policy change paths suggested in the policy change hypothesis.

Results

Coalitions

Earlier findings have revealed the presence of four active advocacy coalitions in the policy subsystem. Major findings regarding advocacy coalitions that were active at the time the GAP was elaborated are summarized in Figure 1. An Enabling Environments Advocacy Coalition, *EEAC*, who perceives obesity as an epidemic that needs to be addressed urgently was the dominant coalition. The increase in chronic diseases associated with obesity is perceived as an incentive for urgent action. Only obesogenic environments could cause such a steep rise in obesity prevalence according to this coalition. Therefore, the ultimate solution lies in creating enabling environments including public policies. This will make the healthy choice the easy choice for every individual making up the whole population. Members of this coalition are mostly public health actors from the government and non-government sectors.

Another coalition is the Healthy Lifestyles Promoting Advocacy Coalition, *HLPAC*, who believes that obesity is a consequence of unhealthy lifestyles and accordingly, promoting healthy lifestyles, namely physical activity and a healthy diet is the key. However, this coalition warns that healthy lifestyles, and particularly physical activity, should not be simply promoted to reduce obesity and the risk of chronic diseases. Positive messages promoting well-being and pleasure in intended behavior changes should be emphasized. Intrinsic motivation rather than extrinsic one should drive behavior modification for it to be maintained. Other positive health outcomes beyond

obesity prevention should be promoted as well. A combination of health behavior education and population-level interventions such as social marketing campaigns and improving physical environments are recommended to achieve the behavior change. Given that healthy lifestyles are acquired throughout childhood, this coalition perceives children and youth as a priority group.

The third coalition, the Agri-Food Advocacy Coalition *AFAC*, is concerned with freedom of choice and individual responsibility. Obesity is still a serious disease according to the AFAC that is the result of unhealthy lifestyles. However, solutions lie in providing education and increasing awareness to achieve the desired behavior changes. Even if the government creates facilitating environments for the practice of physical activity, the ultimate decision whether to exercise or not is that of the individual. Again, food intake choices are borne to the consumer and not to the state. However, when it comes to public services, the state can promote a healthier food supply through their contractual agreements, school meals for instance. This coalition is specifically against coercive measures such as taxation of unhealthy foods because of two main concerns: the agri-food industry's competitiveness and individuals' purchasing power.

The fourth active coalition, the Community Development Advocacy Coalition, CDAC, believes that obesity is a serious disease caused by unhealthy lifestyles. However, causes vary from one community to the other. Therefore, policy actions should be based on community diagnosis. Moreover, they should be focused on mobilizing and empowering communities so that they take responsibility for their own health. At the time, this coalition promoted behavioral approaches of promoting physical activity in children from disadvantaged settings as an obesity prevention measure. This coalition believes in the need for an increased government investment in children's health. Therefore, it promoted a bipartite partnership with the government to fund preventive actions. This way two CDAC objectives would have been met: sustain a consistent government spending on children's health and improve children's health through investment in disease prevention.

Figure 1. Article 1 Main Advocacy Coalition

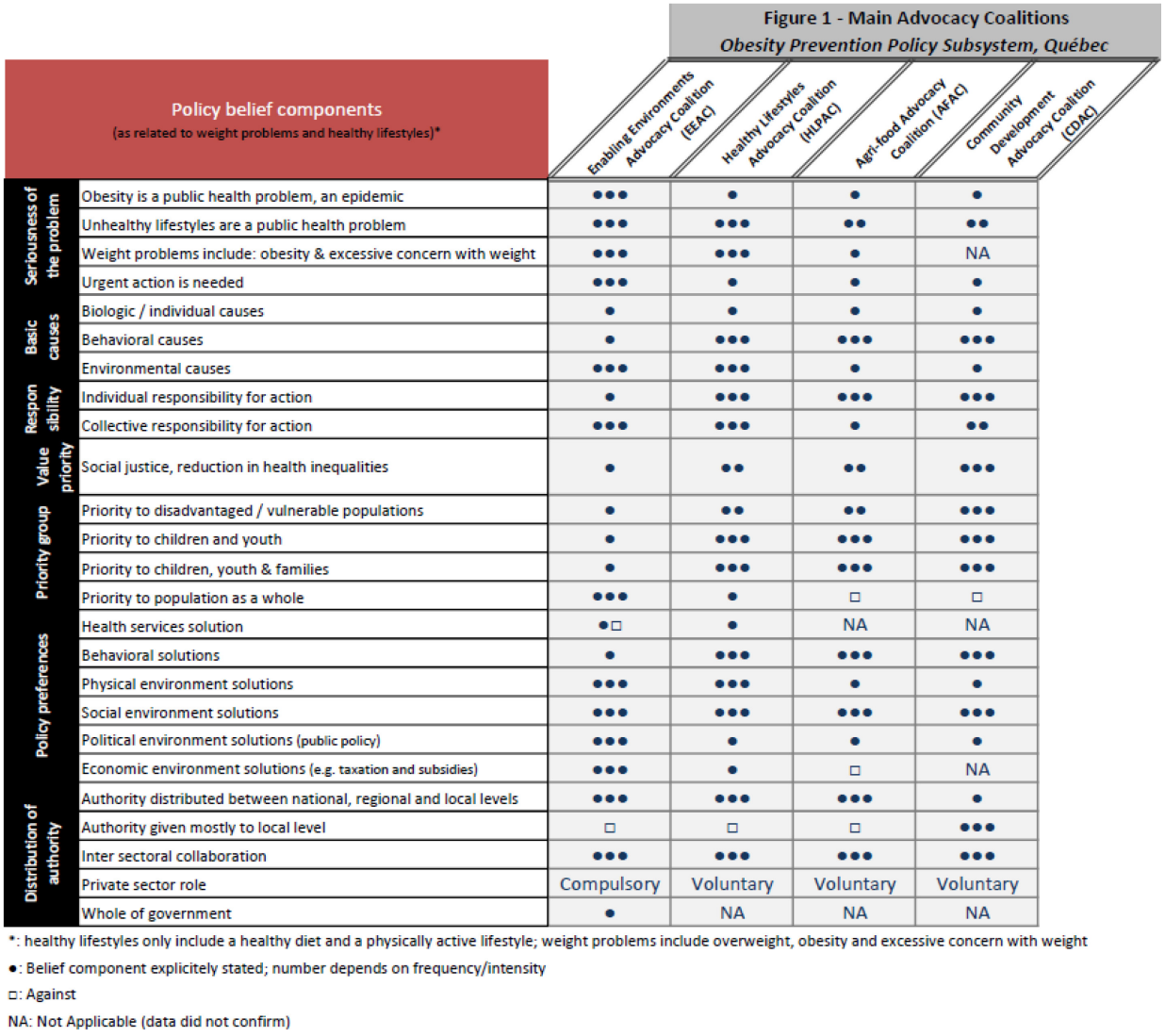


Figure 1 - Main Advocacy Coalitions
Obesity Prevention Policy Subsystem, Québec

	Policy belief components (as related to weight problems and healthy lifestyles)*	Enabling Environments Advocacy Coalition (EEAC)	Healthy Lifestyles Advocacy Coalition (HLPAC)	Agri-food Advocacy Coalition (AFAC)	Community Development Advocacy Coalition (CDAC)
Seriousness of the problem	Obesity is a public health problem, an epidemic	●●●	●	●	●
	Unhealthy lifestyles are a public health problem	●●●	●●●	●●	●●
	Weight problems include: obesity & excessive concern with weight	●●●	●●●	●	NA
	Urgent action is needed	●●●	●	●	●
Basic causes	Biologic / individual causes	●	●	●	●
	Behavioral causes	●	●●●	●●●	●●●
	Environmental causes	●●●	●●●	●	●
Respon sibility	Individual responsibility for action	●	●●●	●●●	●●●
	Collective responsibility for action	●●●	●●●	●	●●
Value priority	Social justice, reduction in health inequalities	●	●●	●●	●●●
Priority group	Priority to disadvantaged / vulnerable populations	●	●●	●●	●●●
	Priority to children and youth	●	●●●	●●●	●●●
	Priority to children, youth & families	●	●●●	●●●	●●●
	Priority to population as a whole	●●●	●	□	□
Policy preferences	Health services solution	●□	●	NA	NA
	Behavioral solutions	●	●●●	●●●	●●●
	Physical environment solutions	●●●	●●●	●	●
	Social environment solutions	●●●	●●●	●●●	●●●
	Political environment solutions (public policy)	●●●	●	●	●
	Economic environment solutions (e.g. taxation and subsidies)	●●●	●	□	NA
Distribution of authority	Authority distributed between national, regional and local levels	●●●	●●●	●●●	●
	Authority given mostly to local level	□	□	□	●●●
	Inter sectoral collaboration	●●●	●●●	●●●	●●●
	Private sector role	Compulsory	Voluntary	Voluntary	Voluntary
	Whole of government	●	NA	NA	NA

*: healthy lifestyles only include a healthy diet and a physically active lifestyle; weight problems include overweight, obesity and excessive concern with weight

●: Belief component explicitely stated; number depends on frequency/intensity

□: Against

NA: Not Applicable (data did not confirm)

Context of Québec

The system of Government in Québec, Canada, is parliamentary and is based on the Westminster British Regime. The *parliament* is composed of the *Lieutenant-Governor* who is the Crown representative, and the *National Assembly* (ASSNAT, 2012). Québec is one of thirteen Canadian provinces and territories, the largest among all provinces and most populated after Ontario. Canada is a federal state, a parliamentary democracy and also a constitutional monarchy (Government of Canada, 2012). Three branches of Government synchronize their efforts to secure rights and freedoms for Canadians: the *Legislative*, the *Executive* and the *Judiciary*. The

Legislative, or the parliament, has three parts: the *Sovereign*, the *Senate* and the *House of Commons*. For a bill to become a law in Canada, it needs to be passed by both chambers and to receive royal assent.

Unlike Canada, the parliament of Québec has only one house and is thus a unicameral Parliament (ASSNAT, 2014a). At the provincial level, the elected legislature is responsible for passing laws that fall under provincial jurisdiction (Government of Canada, 2012). The *Constitution Act of 1867* defines the responsibilities of the federal and the provincial Governments. The federal Government attends to national and international matters namely foreign policy, defense, interprovincial trade and communication, citizenship, criminal law, currency and navigation whereas provincial Governments attend to education, health, municipal Government, property and civil rights, natural resources and highways (Government of Canada, 2012). Agriculture and immigration are shared jurisdictions between the federal and the provincial Governments (Government of Canada, 2012).

The Legislative Process

The National Assembly in Québec consists of 125 elected members representing the 125 electoral divisions (ASSNAT, 2018). The legislative process is made of many stages depending on whether the bill is public or private. Public bills concern public policy issues; most of them are proposed by ministers and they mirror the Government's legislative agenda. Only a minister can propose a bill with a financial impact, for instance imposing a new tax. For a bill to become a law it must go through several stages from the time it is introduced in the Assembly until it is given final assent by the Lieutenant Governor (ASSNAT, 2014b).

Part of the parliamentary work in Québec is borne to parliamentary committees. There are eleven standing committees in Québec each having its own area of competence. Among the committees, nine are sectorial each working in a specific activity area of the state such as the Committee on Agriculture, Fisheries, Energy and Natural Resources and the Committee on Health and Social Services (ASSNAT, 2015a). Within its area of competence, a sectorial committee has the power to initiate public consultations when deemed necessary (ASSNAT, 2015a).

Role of the Premier

The Premier is the government leader and the head of the political party who was able to secure the highest number of elected deputies in the general elections, the election cycle being of four years (ASSNAT, 2014c). The Premier is officially designated by the Lieutenant-Governor (ASSNAT, 2014a) and has the role of appointing the ministers or Cabinet members; the Premier has also the power to transfer or dismiss his or her ministers (ASSNAT, 2014c). The Cabinet or Executive Council is comprised of the Premier and his or her ministers (ASSNAT, 2014a). The Government of Québec consists of the Premier, the ministers and the Lieutenant Governor.

All the ministers are members of the National Assembly and are generally members of the same parliamentary group of the Premier (ASSNAT, 2014a). Practically, the Premier heads the government and the public administration along with his or her ministers. The Premier chairs the cabinet and the *Comité des priorités*, a committee comprised of various ministers which addresses current issues of interest to the government. The Premier is also responsible of all youth-related affairs. The *ministère du Conseil Exécutif* is the government department that provides the Premier and the cabinet with advice and support in governance (Government of Québec, 2014). The administrative apparatus of the Québec Government consists of the Executive Council Department and the Treasury Board Secretariat along with almost twenty other ministries and numerous agencies. Besides Government ministries, autonomous agencies are in charge of some administrative functions. Their management falls under the responsibility of a minister who shall be accountable before the National Assembly (Government of Québec, 2015a).

Citizen Participation in Democratic Life

Participation of citizens in the democratic life in Québec includes voting in elections and participation in public consultations the government decides to hold for matters or projects that are of high public interest (Government of Québec, 2015b). Citizens can comment on bills or any subject under study; they can also introduce private bills. Citizens can also participate in the democratic life through starting, signing or viewing a petition (ASSNAT, 2012).

Uniqueness of Québec within the Canadian Federation

Québec has asserted its unique identity within the Canadian federation. At the cultural level, it is the only North American jurisdiction with French being the only official language. With

respect to social policies, it has the most generous social policies as compared to other Canadian provinces, public day care being an example (Pomey, Martin & Forest, 2013). Health being of provincial responsibility, Québec has been reluctant to participate in joint federal-provincial health care initiatives. As such, Québec has shielded itself from any potential federal interference in what it considers as exclusively provincial matters (Pomey et al., 2013)

Québec is also an autonomous provincial actor when it comes to healthy living strategies. The province did not subscribe to the Pan-Canadian Healthy Living Strategy adopted in 2005 by the federal, provincial and territorial health ministers (PHAC, 2010a). In addition, the province did not subscribe to the 2010 pan Canadian strategy in childhood obesity prevention: The Framework for Action *Curbing Childhood Obesity* (PHAC, 2010a). Although Québec intends to share information and expertise on the issues and shares the general goals of the frameworks, yet the province intends to be the sole responsible for the development and implementation of programs for promoting healthy living (PHAC, 2010a; PHAC, 2010b).

Political Party Dynamics

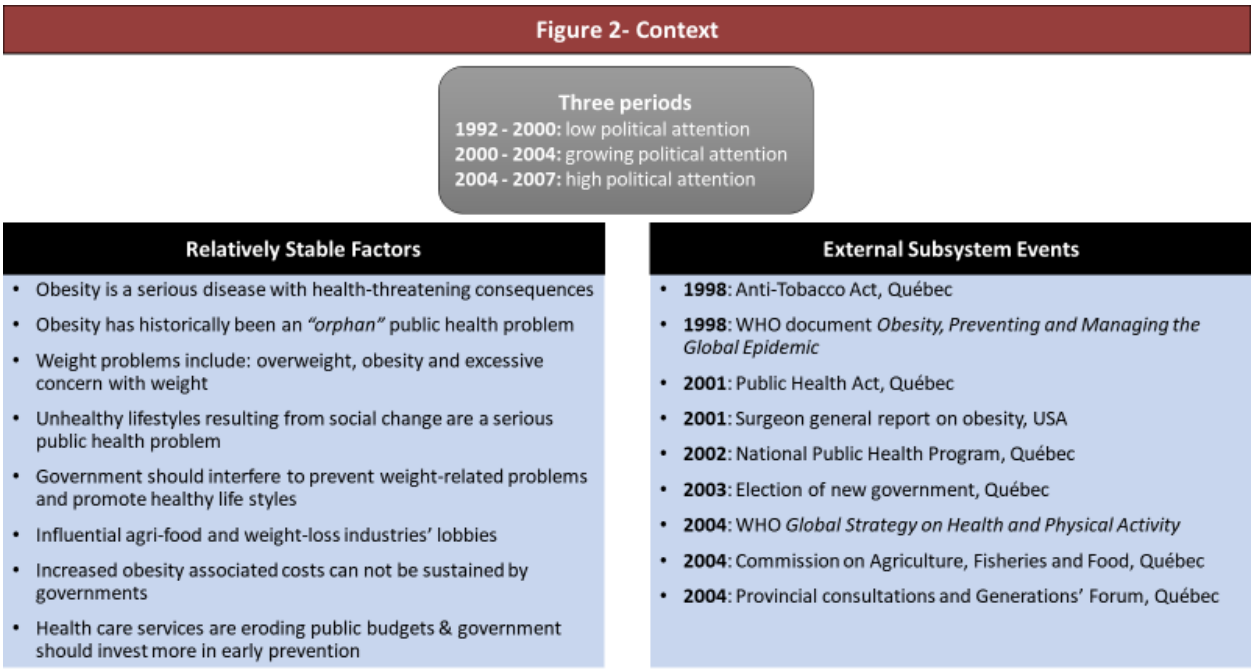
Between 1990 and 2003, various political parties were active in the political landscape in Québec. Two large political parties competed for power during this period: the *Parti Québecois* and the *Liberal Party of Québec* (Elections, 2018). The main political differences between both parties concerned mostly the role of the state and the status of Québec in the Canadian Federation (Pomey et al., 2013). The Liberal Party of Québec promoted liberal economic policies, individual freedoms, reduced role for the state, social justice, and a strong role for Québec within Canada (PLQ, 2003). The Parti Québecois promoted an economic development that takes into consideration Québec sovereignty, social progress, social justice, equity and an increased role for the state (PQ, 2008 in Pomey et al., 2013)

Attributes of the Obesity Problem in Québec

Political attention to obesity was variable during the period of the study (Figure 2). This reflects the various stages of the development of the policy subsystem from nascence to maturity. We could define three distinct periods: (i) 1992-2000: low political attention; (ii) 2000-2004: growing political attention; (iii) 2004-2007: high political attention. The policy subsystem was nascent between 1992-2000 and suffered a lack of a cohesive policy community and supporting

institutions. In contrast, the years 2000 to 2004 were marked with a significant heightened concern of a community of actors, a launch and consolidation of a policy community and an involvement of various institutions in the policy process.

Figure 2. Article 1 Context



The triggering factor in the heightened political attention to obesity was a WHO consultation on the obesity problem. Around the year 2000, the WHO warned of the increased obesity prevalence worldwide calling it an epidemic and requesting governments for an urgent response (WHO, 1998; WHO, 2000). At the time, weight-related problems were not on the political agenda in Québec. There was no common vision around the obesity problem; obesity was portrayed as a clinical problem by the media. In response to a public concern around obesity, the media would call for clinical experts. Their media intervention simply promoted the vision of an individual problem that is best treated with behavior education. The environment role in preventing obesity was absent from the mainstream media discourse. The public discourse around the role of enabling environments in promoting healthy choices was inexistent then.

At the governmental level, ministries concerned with obesity proximal determinants namely diet and physical activity were not even considering obesity issues on their agendas. Out

of the seven public health priorities developed by the Ministry of Health and Social Services (MSSS) in 1997 none targeted obesity. In fact, the whole policy document did not even mention obesity (MSSS, 1997). The Ministry of Agriculture, Fisheries and Food's (*Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec, MAPAQ*) main mission was to support the growth of Québec's bio-food industry (MAPAQ, 2005). Attempts made by actors of the MSSS to launch dialogue and collaboration on diet matters were met with resistance and disinterest. Only the promotion of physical activity had a well-structured program in its support and was running province wide under the program Kino-Québec, a joint agreement between the MSSS and the Sports and Leisure Secretariat.

At the private sector level, four sectors were directly concerned: the agri-food, the weight-loss, the physical fitness, the image and media industries. Other sectors such as those blamed for sedentary lifestyles, namely, computers, cars and oil industries were less perceived as possible sectors actors can strategize on. Out of the four sectors, the agri-food and weight loss industries were believed to have strong and influential lobbies that might interfere with government decisions. Their means and power in influencing choices related to food, diet and weight-loss means, products and services outweigh by far the government's means. They exert strong control on the supply side and they have the means to influence the socio-cultural environments that affect choices. They seek growth and aim to increase their sales, profits and market shares. Therefore, the legislative context that best fits their needs is one where freedom of action is promoted.

Within this context, more evidence was available on the Québec population's lifestyle changes resulting from the social change that had occurred during the previous thirty years. People had modified their eating habits and were leading a more sedentary life style. Consumption of ready-made high caloric density meals have increased at the expense of home-made meals. In addition, larger portion sizes were promoting higher caloric intakes (GTPPP, 2003). There was a severe drop, amounting to half in 7-8-year-old students walking to school; from 80% in 1971 the number had dropped to 41% in 1999 (Mayer & Roberge, 2002 in GTPPP, 2003). Obesity rates increased from 9% in 1987 to 13% in 1998, an increase of 44% in the population aged 15 and above (GTPPP, 2003). During the same period, overweight prevalence rose similarly from 19 to 28% in the adult population aged 20 to 64 (GTPPP, 2003). Direct costs linked to overweight and obesity were estimated at $1.8 billion dollars in 1999 in Canada (Birmingham et al., 1999, in

GTPPP, 2003). In addition, the 2003 data (Statistics Canada, 2003 in MSSS, 2006), showed previously unobserved striking socio-economic inequalities (Mongeau et al., 2005 in MSSS, 2006). In fact, 18% of the lower income group suffered from obesity as compared to 12% in the higher income group. In parallel, one in five of those with no high school diploma was obese as compared to less than one in ten of those with university diplomas (Mongeau et al., 2005 in MSSS, 2006).

Similarly, evidence on concerns with body image had also emerged. Weight related problems were not exclusively rallied to obesity and overweight; they also include the desire for extreme thinness which is the other side of the problem (GTPPP, 2003). In 1998, half of the women with healthy weight wished to lose weight (Ledoux & Rivard, 2000 in GTPPP, 2003). This excessive concern with weight extended to children and adolescents as well. In fact, in 1999, 60% of the adolescent girls of the age of 13 and 16 wished they had a different body shape, despite having a healthy weight for the majority. Moreover, 35% of 9-year old girls were actively trying to lose weight within the same period; most of them had healthy weights initially. Similarly, adolescent boys wished they were slim and muscular (Ledoux, Mongeau & Rivard, 2002 in GTPPP, 2003). What was alarming as well was the approach to tackle obesity which considered the obesity problem as a simple outcome of personal choices for which an individual person should be held responsible. Not only that approach tagged obese people and encouraged discrimination against them, but it also drove people to strive for miraculous solutions irrespective of their effects on health (GTPPP, 2003).

Many study participants reported an increase in attention to obesity around the year 2005. According to many key informants, the increase in attention was related to data on the increase in obesity prevalence in the United States, Canada and Québec that was available to various actors, and that increase was unquestionable. Even though many study participants thought it was less alarming than the United States, yet they believed that the increase in prevalence contributed to a shared understanding among various actors on the seriousness of the problem. In fact, with the endorsement of the WHO DPAS by Canada in 2004 (PHAC, 2010a) and the adoption of the Pan-Canadian Healthy Living Strategy in 2005 by the federal, provincial and territorial health ministers (PHAC, 2010b), the broader Canadian context was getting more and more receptive to promoting healthy living strategies. Besides, many provinces and territories were actively working on or have

developed their own healthy living strategy (IHLN, HLTG and ACPHHS, 2005). In July 2005, diffusion of new data on obesity and overweight in Canada revealed the magnitude of the problem: 57% of adult Québecers, 18 years and older were either overweight (35%) or obese (22%) (Mongeau, Audet, Aubin and Baraldi, 2005) while more than one out of five children was overweight or obese (15% and 7% respectively) (GTPPP, 2005). Public health actors' warnings from failure of governments to respond to the increased obesity associated costs were at their highest. Still, while public health actors perceived obesity as a collective problem, this perception did not resonate well with many other actors who still believed it was an individual problem.

Around the year 2005, a public opinion survey showed that obesity was indeed perceived as an important problem by most respondents (52%; in addition, 9% viewed obesity as a very important problem). The survey also questioned the perception of the public on obesity causal factors, specifically with respect to the dichotomy between individual responsibility and collective responsibility. Unsurprisingly, the results showed a strong public support to the individual responsibility for obesity (59%). Only 33% perceived obesity as a collective problem and the remaining 9% perceived it as both, an individual and a collective problem (GTPPP, 2005). This was no surprise however, given the obesity discourse promoted by the main stream media, media reports and other sources that had been sustained over the past years (GTPPP, 2005). As for the public opinion on obesity solutions, there was a strong support for the development of educational programs (97% and 98% were in favor of educational programs on healthy eating and the benefits of physical activity respectively). What also received strong public support (92%) was the banning of fast food and carbonated beverages from schools (GTPPP, 2005).

External Subsystem Events

Changes in contextual factors occurred during the study period and prior to the GAP elaboration and adoption (Figure 2). A new governing party was elected in Québec in April 2003. Decisions in other policy subsystems, namely those with different policy topics or different territorial scopes occurred as well. The agri-food policy subsystem was affected by the report of the Commission on Agriculture, Fisheries and Food (*Commission de l'agriculture, des pêcheries et de l'alimentation, CAPA*) (CAPA, 2004); its actors became more open to collaborative approaches on issues related to health. New knowledge and experience emerged from public health action in tobacco control policies. Internationally, the WHO put more pressure on governments to

reinforce their strategies in obesity prevention (WHO, 1998; WHO, 2000; WHO, 2004). Moreover, the public health policy environment was transformed in Québec; a new Public Health Law was enacted in 2001 and a National Program of Public Health was adopted in 2002.

Change in Systemic Governing Coalition

Various political parties were active in the political landscape prior to Québec elections in 2003. Only three were able to propose 125 candidates for the 2003 elections. They were the *Québec Liberal Party (PLQ)*, who won the elections, the *Parti Québécois (PQ)* and the *Action démocratique du Québec/Équipe Mario Dumont (A.D.Q./É.M.D.)* which only got four seats (Elections Québec, 2018). Three political slogans were at the heart of the 2003 elections: *We Are Ready (Nous sommes prêts)* for the PLQ, Stay Strong *(Restons forts)* for the PQ, and The *Future Differently (L'avenir autrement)* for the A.D.Q./É.M.D (Marceau, 2018). Among others, the guiding values for the PLQ were respect for individual freedoms, economic prosperity and social justice. Some of the PLQ promises were to preserve the health system, offer quality health services across the province, reintegrate disease prevention and promotion of healthy lifestyles to the agenda and reduce regulations (PLQ, 2003). The PLQ also promised to multiply the public-private partnerships to achieve prosperity and growth. The PLQ government fostered a government that enabled businesses "to do what they do better than the state: create jobs and generate wealth" (PLQ, 2003 p.20).

The *Québec Liberal Party* won the election of April 2003 and remained in power for more than eight years, until September 2012 (ASSNAT, 2014d). The GAP was adopted in October 2006 (MSSS, 2006) under the Liberal Government. In March 2004, the new Government announced the vision, priorities and values that would pevail during its mandate (Government of Québec, 2004). The underlying socio-cultural values representing the foundation of the Government proposed actions and political life were *individual freedom* that goes hand in hand with individual responsibility, *social justice*, *promotion of economic and sustainable development*, *democratic values* and the *assertion of the Québec identity* (Government of Québec, 2004). The commitment of the government to citizens' well-being is contingent to the individual responsibility with respect to choices they make (Government of Québec, 2004).

Changes in Other Policy Subsystems

International and Global Obesity Prevention

USA

The Surgeon General's call for action to prevent and decrease overweight and obesity (OSG, ODPHP, CDC & NIH, 2001) resonated in Québec. The shift in obesity perception in the USA and specifically following the Surgeon General report on obesity was of importance; the Surgeon General's report emphasized the perception of obesity as an epidemic. The Surgeon General called for a drastic change in the logic of thinking obesity prevention for the first time ever. The report proposed to change the existing logic of perceiving obesity as an individual problem calling for individual solutions to the logic of a collective problem necessitating a collective solution (OSG, ODPHP, CDC & NIH, 2001).

WHO

Calls for Government action in obesity prevention started as early as the year 1998 when the WHO issued its consultation report *Obesity: Preventing and Managing the Global Epidemic* (WHO, 1998; WHO, 2000). In its report the WHO called upon governments to adopt national strategies within well-defined national plans. The WHO also requested governments to emphasize prevention on the long run to proactively offset the inevitable progression in unhealthy life styles related to physical activity and eating habits (WHO, 1998; WHO, 2000). The global call culminated with the launch of the WHO *Global Strategy on Health and Physical Activity* and the concomitant WHO invitation to member states to develop their own plans to address the obesity epidemic (WHO, 2004). Canada endorsed the *Global Strategy on Health and Physical Activity* in 2004 (PHAC, 2010a).

Anti-Tobacco Act

Successful public health led advocacy efforts resulted in the enactment of the Québec Anti-Tobacco Act in 1998 (Breton, Richard, Gagnon, Jacques & Bergeron, 2008). The Act included provisions on restricting the use of tobacco in certain places, regulating its sale, promotion, advertising and packaging, and determining provisions on reporting, inspection and penalties for violations. Breton et al. (2008) conducted an analysis of the adoption of the Act based on two

policy analysis frameworks: Lemieux's theorization of coalition structuring (1998) and Sabatier and Jenkins-Smith's Advocacy Coalition Framework (1999). Their analysis revealed that resource pooling within the public health network and strategies challenging their opponents' actions were among the factors that contributed to the adoption of the Act. In addition, there was a common understanding of tobacco use parameters among the policy elite that favored the adoption of the Act. A series of events that occurred were also capitalized on by tobacco control advocates to push for tobacco control onto the government agenda and influence public debates despite the influence and strategies of the powerful tobacco industry (Breton et al., 2008).

Public Health Act and National Public Health Program

The first Québec *Public Health Act* was adopted in 2001 and was followed with the publication of the first National Public Health Program 2003-2012 (*Programme national de santé publique 2003-2012, PNSP)* (MSSS, 2003). One of the domains of activity of the PNSP 2003-2012 is lifestyles and chronic diseases. The provisions of the PNSP under this domain established some actions and targets at the three levels: national, regional and local (MSSS, 2003). Prevalence targets of reduction in adult overweight and obesity were established to 6% and 3% respectively. In both children and adolescents, preventing overweight and obesity was recommended. In addition, improving food security, consumption of fruits and vegetables and exercise level was recommended (MSSS, 2003).

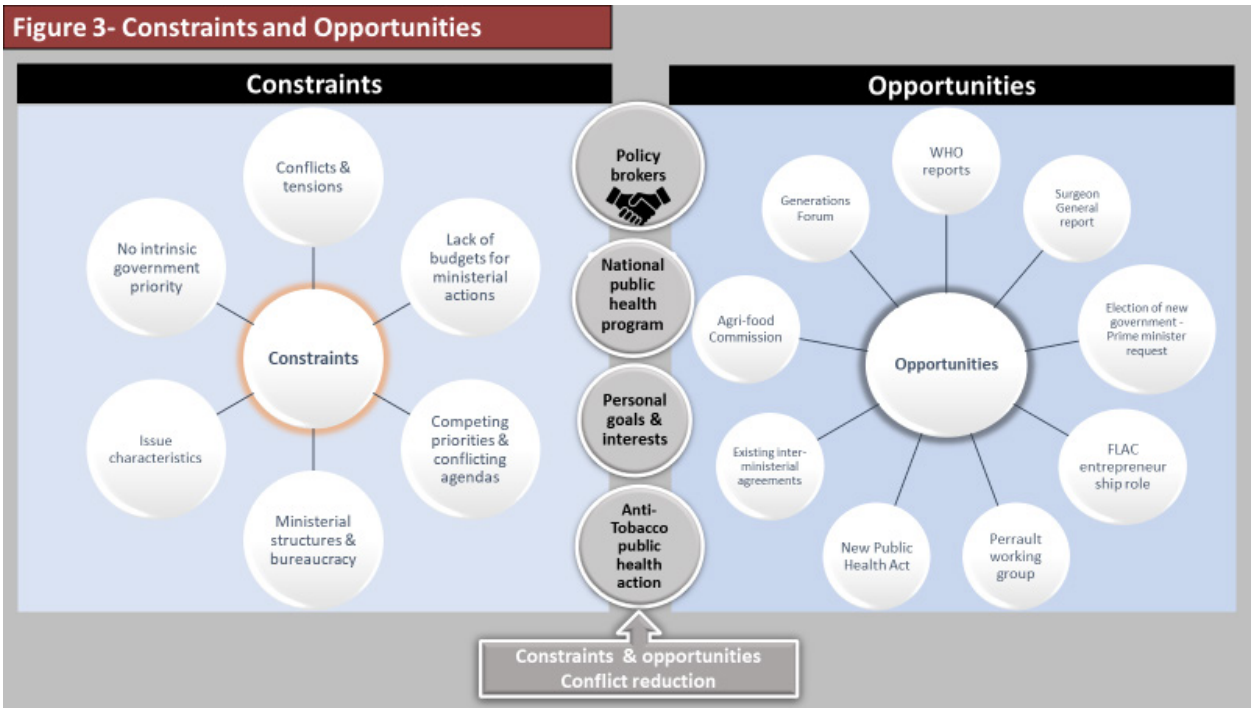
Agri-Food

A window of opportunity emerged when the Commission on Agriculture, Fisheries and Food (CAPA) submitted its report on June 11, 2004. The CAPA conducted a vast public consultation on food security in 2004 and issued a set of recommendations. The commission questioned the MAPAQ orientations in agri-food policies. It was an opportunity for the MAPAQ to look for other than business as usual interventions and to launch real collaboration with the MSSS on health and diet related matters. Three recommendations were particularly relevant to healthy life styles and their relation to public health. The Commission recommended that the Government developed an integrated policy on food security; an awareness and education program that starts as of early childhood was also recommended. The program's aim is to educate and raise awareness on nutrition, food safety and food handling. A similar program targeting the parents and the general public was also recommended (CAPA, 2004; MSSS, 2006).

Constraints and Opportunities of Subsystem Actors

Stable contextual factors and external subsystem events affected actors' strategies through a modification of their constraints and resources (Figure 3). Contextual constraints were mostly due to the lack of an intrinsic government priority to act on obesity prevention, ministerial structures, and changes in other policy subsystems. Opportunities were mostly generated following the change in the governing coalition, changes in other policy subsystems and previously existing ministerial agreements. In addition, other constraints and opportunities related to subsystem actors' goals and political interests were identified. Conflicts, tensions and competing priorities among others constrained actors' strategies whereas personal commitments, interests and goals of some actors and institutions helped open up opportunities such as the creation of working groups on the policy issue. Other opportunities and constraints were related to within subsystem resources. It is worth noting that some factors interchangeably acted as opportunities and constraints, for instance the National Public Health Program. The identification of constraints and opportunities helps bring insights to the understanding of the policy process. It also enables an enhanced explanation of the GAP adoption.

Figure 3. Article 1 Constraints and Opportunities



Change in Government and Creation of a National Working group

The liberal party won the elections of April 2003 defeating the then in power opponents, the Parti Québecois (ASSNAT, 2014a). The liberal party, led by Jean Charest, remained in power for more than eight years, until September 2012 (ASSNAT, 2014d). The GAP was adopted in October 2006 (MSSS, 2006) under the Charest liberal Government. The GAP was a governmental plan. It was not developed following an intrinsically identified need by the government in office. It was not introduced as a bill and did not benefit from a public consultation on its own and was not debated before the National Assembly.

Prior to the election of the Liberal Party of Québec, around the year 2000, there was generalized dissatisfaction with the health system and the call for change was pressing (Pomey et al., 2013). This dissatisfaction was related to the cutback in health care reforms implemented in the 1990s. Issues of accessibility and meeting the health care needs of the population emerged. Despite the new investments and the new governance principles promoting accountability in government policies and processes endorsed by policy makers, accessibility problems were not solved, and public dissatisfaction was still high (Pomey et al., 2013).

Following its election, the government launched provincial consultation forums that were organized as venues to discuss challenges Québec was facing, mainly demographic changes and public finances (Government of Québec, 2004; Perrault Working Group, 2005). At the time of the consultation, rates of dissatisfaction with the government were as high as 66% (Thibeault, 2004). There was generalized dissatisfaction particularly among unions and social groups with the new government's performance. They boycotted the regional consultation forums because it was perceived as a political recovery (Delisle, 2004). Conversely, physical educators massively participated in the consultation forums raising concerns about prevention, obesity in children and the importance of physical activity. The tour culminated in one forum, the Generations' Forum, in October 2004 that gathered provincial leaders (Perrault Working Group, 2005; MSSS, 2006).

Following the Generations' Forum, an increased public demand to strengthen government prevention efforts was evident (Perrault Working Group, 2005). Despite being perceived by some as a government's attempt to restore its image (Delisle, 2004; ASPQ, 2004), the provincial consultations and the subsequent Generations' Forum raised the issue of prevention and promotion of healthy lifestyles to the political agenda. The issue became the priority of the Premier and thus

a government priority (Perrault Working Group, 2005). Prevention became in fact the watchword that resonated well not only within the policy community but also with the civil society, and more importantly policy makers.

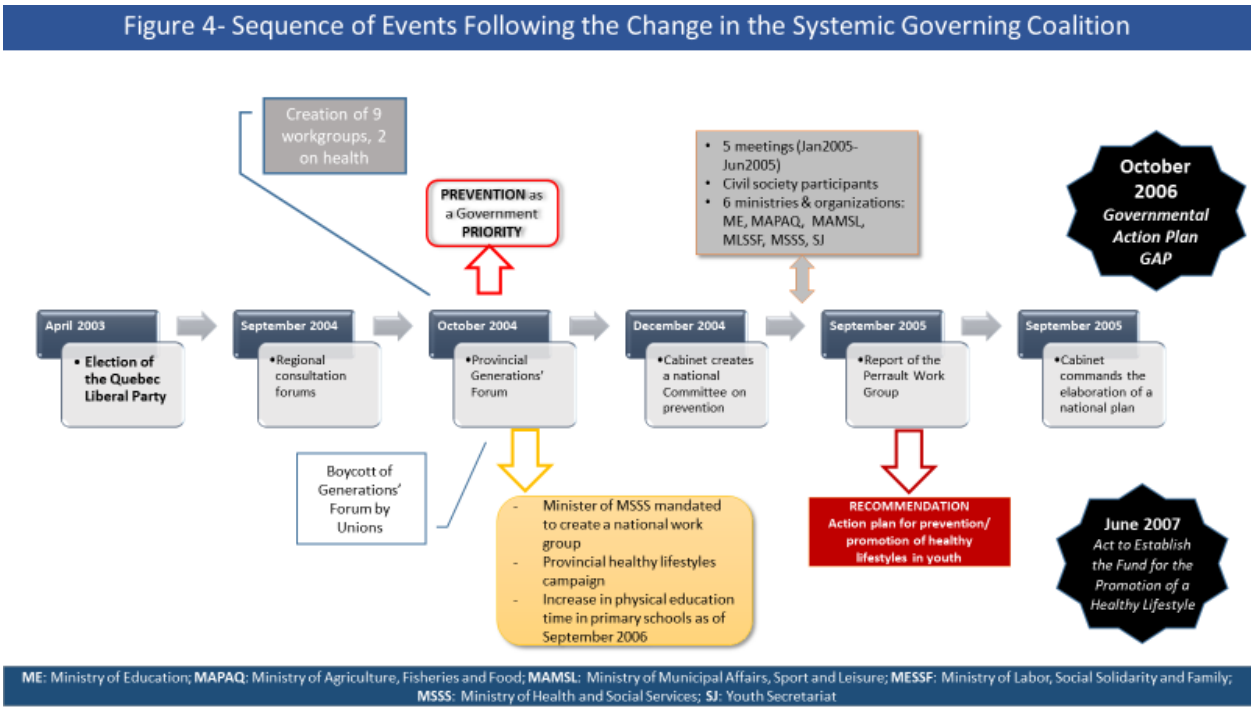
Following the Generations' Forum, working groups were identified, and mandates assigned to each, including a mandate on prevention approaches and another one on the sustainability of the health care system (MSSS, 2006; ASPQ, 2004). Two other decisions stemmed from the Generations' Forum: an immediate launching of a healthy lifestyles campaign and an increase in time allocated to physical education in primary schools as of September 2006 (ASPQ, 2004). The National Working group on prevention, the Perrault Working Group, (*Equipe de travail pour mobiliser les efforts en prévention*) was created by the cabinet in December 2004 (Perrault Working Group, 2005). The Minister of Health was assigned with the mandate on prevention approaches. The Working group was to submit its report later in 2005 (ASPQ, 2004; Perrault Working Group, 2005).

Influential representatives of the civil society and delegates of six ministries convened together in the Perrault Working Group. The presence of six ministries and governmental organizations in back venture at the Perrault Working Group was an opportunity for ministerial and organizational actors to listen to various interventions on the policy problem, increase their awareness, benefit from a policy-learning opportunity, promote their collaboration and enhance their readiness to implement the recommendations of the Working group. Other non-ministerial participants saw in the presence of ministries at the Perrault Working Group meetings as an unprecedented phenomenon of ministerial participation and direct interaction with the civil society with a specific concern to what various civil society actors had to communicate. Some other working groups that had emerged following the Generations' Forum did not benefit from such a massive and diverse ministerial participation and collaboration.

> *"…we have experienced a phenomenon that had almost never occurred; that ministries accompanied us, gave us information, they were in back venture, they were taking notes; this was the first-time ministries sat down to listen to what local actors had to say, then for us, it was a really meaningful* experience*… And this was the only committee that I worked on, out of three other, where seven ministries were present, ministries that barely communicated with each other earlier… then for us it was an obvious sign of interest. And I think that yes this committee did a fantastic job …"*
>
> *President provincial organization (2016)*

A major window of opportunity that emerged from the works of the Perrault Working Group was the recommendation the Group made to the government. The Group recommended that the government develops an action plan to ensure a swift implementation of actions aiming at promoting healthy lifestyles in youth (Perrault Working Group, 2005). The command to write a governmental plan was issued in December 2005 and the plan was to be delivered in June 2006. The sequence of events induced by the change in the systemic governing coalition are summarized in figure 4.

Figure 4. Article 1 Sequence of Events Following the Change in the Systemic Governing Coalition



The FLAC Entrepreneurship Role

The breadth, diversity, and multitude of policy actors for the GAP was extensive. Beyond policy actors from public health, there were participants from various ministries and government agencies that interacted within a context of government commitment and support to the policy (MSSS, 2006). A less usual policy actor, the president and founder of the *Lucie and André Chagnon Foundation (FLAC)* participated in the policy process and had a major influence on it.

The philanthropic organization *Fondation Lucie et André Chagnon* (*FLAC*), has been active in Québec since October 2000. Getting established in Québec, the company made use of a long-standing tradition of North American philanthropy and adapted it to the Québec social context (FLAC, 2013). Through a vast expert consultation in 2001, the CDAC was actively seeking to find the appropriate social program to invest in some philanthropic activities in Québec, until they decided to work on prevention of disease and poverty (FLAC, 2017).

Some North American philanthropic foundations have in fact become significant actors in health policy and major contributors to global health spending (McCoy, Kembhavi, Patel, & Luintel, 2009). For instance, the spending of Bill and Melinda Gates Foundation on global health exceeds that of the World Health Organization (McGoey, 2014). The Gates Foundation funds a diversity of key actors in global health including UN agencies and the World bank, in addition to NGOs and think tanks (McCoy et al., 2009). It plays an active role in agenda setting and policy making; it is also involved in establishing the research agenda of numerous public health priorities (McCoy et al., 2009). An unprecedented scale of spending characterizes current philanthropy (McGoey, 2014). With the growing role of philanthropic organizations, the emerging enthusiasm and critics on philanthropy, it is interesting to draw a closer look at the role of the FLAC president and analyze his contribution to the policy process.

In fact, the FLAC president was a member of the Perrault Working Group, the high-level Working Group mandated by the Premier to work on prevention in youth. The activities of the Working Group and the resulting report were in fact one of the milestones that marked the GAP development process and its main precursor as well. This can be examined through a policy entrepreneur's lens. Many of the entrepreneurial characteristics were demonstrated through the strategic behavior of this policy actor according to various study participants. His negotiating skills, political connections and authoritative decision-making position were mostly highlighted.

> *"Obviously, Mr. Chagnon was connected to politicians and the prime minister […] His presence is a key element because it was clear that he had an interest in prevention and he had money."*
>
> *President provincial organization (2016)*

The FLAC president critically attended to the various inputs from ministerial and civil society actors during the Perrault Working Group meetings. What was puzzling was the lack of

intersectoral collaboration and the limited results of the ongoing ministerial actions targeted to obesity prevention. Not only did the Working Group recommend an action plan but its members called for a better collaboration among government agencies and ministries.

> *"If I paraphrase, their conclusion […] said: 'there are already a lot of things that are being done, but why the ministries do not speak to each other? Why? it seems to me that it would be more effective if we could prevent together, work more together rather than work in silos and then not know what your left arm does, your right arm does, when you are in the same government.' So, the report was tabled with the Charest government, that was at the end of 2005; and then Mr. Charest mandated the Minister of Health who was Mr. Couillard to develop a government action plan."*
>
> *Government Professional (2016)*

Another government professional reported a similar description of the situation that led the FLAC president to advance his proposal in an attempt to change the "status quo".

> *"It was one of his comments, when he [referring to Mr. Chagnon] was on the Perrault team […]. Then he said […] after he had heard all the ministries presenting on their ongoing actions, 'why isn't it working? Why is there no change?' That was his 'existential' question. 'Why is it that we see no results despite all the ongoing governmental action?' So, […] in setting a contractual agreement and establishing Québec en Forme, his goal was: 'I want to have results!' […]. So, how could we have made an agreement otherwise? I think we would have lost it. He would not have put his money because he would have said 'I do not put my money in government business', then he said it anyway: 'I do not put my money in the affairs of the government, you are showing me that it does not work anyway.'"*
>
> *Government Professional (2016)*

The problem of lack of funding for the GAP emerged while it was being elaborated. The health minister in office announced to ministerial policy actors that there were no earmarked funds for the GAP. This announcement reflected negatively on ministerial policy actors who became reluctant to introduce new actions under the plan and more prone to propose ongoing actions.

> *"Given that we were told there was no money by Mr. Couillard, there will be no annual dedicated budget, all the colleagues said: 'well, what do you want us to include under the GAP?' and […] in the GAP, we have actions that were already up and running, which is only recycling […] so there is a recycling of actions that are already underway…"*
>
> *National Public Health Director (2016)*

Despite the lack of earmarked budgets for ministries, still, many study participants reported that the health minister in office at the time did not want to launch the plan without earmarked funds. His intention was to fund the GAP.

> *"Dr. Couillard […] did not want to deliver, and this is an internal information, it is not written anywhere but we know very well that he did not want to table a governmental action plan without funds. When we finished the GAP works, even if it was launched in October, […] but in June, Mr. Couillard asked 'I would like to have a status report on health promotion funds that exist elsewhere, how they are funded', among others in Switzerland, there are funds, funds with the tobacco tax, […] I remember I did an intensive search blitz in two days to document the promotional funds that could finance actions stemming from the government action plan."*
>
> *Government Professional (2016)*

The president of the FLAC played a major role as a policy entrepreneur. The fact that the health minister was casting about for ideas to fund the plan, there was a problem linked to the launch of the GAP. The FLAC president identified the political momentum and capitalized on it. The funding proposal was ready and available in the policy stream. By inserting his funding proposal to a plan that suffered low funding at birth, the FLAC president attached his solution to the problem. He identified the lack of funds that were to be earmarked to the plan as an open window and he had his solution ready. This opportunity was well aligned with his interest in investing his tax-spared money in Québec; children's development and health being central to the FLAC' s priorities. His proposal was put forward during the Perrault Working Group activities, before the writing of the GAP had even started, stating publicly his readiness for a bipartite agreement with the government. His proposal did not fall on deaf ears.

> *"Mr. Chagnon was one of the twelve members of the Perrault Working Group who said […], and it is written in the Perrault report, […] he said 'I am ready to put 40 million if the ministry, the government puts as much. Oh! Mr. Couillard, who did not want to say at all that there would be no earmarked funds […]"*
>
> *National Public health Director (2016)*

> *"The idea of a public private partnership, following the Perrault report, caught the attention of Mr. Couillard."*
>
> *Anonymous (2018)*

His proposal was politically acceptable; it was justly aligned with the intentions of the minister in office and the ideology of the party in power who was favorable towards public-private partnerships (Premier, 2004). It echoed the interest of the Premier in public-private partnerships as an innovative way to have the private sector contribute to state related missions, modernize services and increase their effectiveness (Premier, 2004). It was made in a context where he perceived the government apparatus ineffective in achieving the desired health goals. So, all parties were to achieve gains. The minister would give the desired image of launching a prevention plan with earmarked funds well aligned with his party's ideology and the FLAC president would provide a compelling alternative that seems to have an unquestionable political support. The FLAC president was successful at coupling the politics, problem and policy streams. The existence of a precedent in a connected policy subsystem, *Québec en Forme* as a public-private partnership (*PPP*) since 2002 was a facilitating factor and an opportunity. The new agreement can also be considered as a spill over effect from other another connected policy subsystem, that of physical activity promotion, where the earlier PPP was nested. In fact, some study participants saw in the previous partnership an opportunity the GAP benefited from.

> *"An opportunity was the creation of Québec en Forme in 2002. This partnership Government-Foundation was at the base of the agreement which, five years later, led to the creation of the Fund for the promotion of healthy lifestyles and the funding body, the Société de gestion de fonds."*
>
> *Anonymous (2018)*

The National Assembly adopted the *Act to establish the fund for the promotion of a healthy lifestyle* that provides funds for the promotion of healthy lifestyles (ASSNAT, 2007). The provisions of this law required the Government to provide $20 MM to this fund per year for the following ten years. Under the terms of the partnership agreement, the organization committed to provide an equal sum of $20 MM per year so that a total of $400 MM is mutually spent over the period of agreement (MSSS & FLAC, 2007).

The decision to create the fund had its own spill over effect given that the ministries and government agencies were expecting to have their share. The line of conduct for most ministerial policy actors collaborating with the MSSS was that of reducing collaboration on any policy action that necessitated an additional budget. The fund that was not created to finance the ministerial actions under the GAP, rather to finance community actions that are aligned with ministerial

interventions. This was perceived by all governmental actors as the main shortcoming of the GAP. It fell short on providing policy actors with the needed financial resources. Probably the following statement made by the national public health director explains some of the frustration of governmental policy actors.

> *"Mr. Couillard told us 'you will not have a penny, the money we have […] will fund external actions, it will not fund the ministries, it does not fund the governmental action plan; it will fund a citizen's mobilization strategy with the Lucie and André Chagnon Foundation.' It's useful! but those who work in prevention promotion, the regions, the CLSCs etc. they will not have a cent, then the ministries you will not have money but the money is invested to mobilize, so that it helps the community […] so there is a bit of political opportunism, we put everything on the side of those who were not experts in prevention promotion, which is correct, then we do not put a cent on the side of the government action, the GAP has not been funded […]. When it's like that, it results in a governmental action plan that is difficult to coordinate, difficult to mobilize people because there is no money".*
>
> *"the proposed fund was not intended to be used to fund government ministries or agencies, this explains why GAP actions were to be funded from ministerial budgets."*
>
> *Anonymous (2018)*

The strong belief of the FLAC regarding its role as a foundation was the main driver for the decision not to allow the fund provisions to finance ministerial actions:

> *The role of the foundations is not to play the role of the state, otherwise there is no need for a foundation, or no need for the state […]. Our role is to support the emergence, the development of ideas, solutions and the support of organizations or groups of organizations that want to innovate […]. We also have a facilitation role, and a support role. We do not have a public service role, we do not have a regulatory role, we do not have these roles, so we should not play these roles anywhere. Because if we start playing them, well it's a form of, it can become a form of, there can be a slippery slope in there to offload some public responsibilities […]. I would even say that the idea of partnership with the government was written in saying, 'well we will never be the state.'"*
>
> *Anonymous (2017)*

Ministries' and Agencies' Attributes

Missions, structures, budgets and competing priorities

Whether promoting healthy lifestyles or preventing obesity or chronic diseases, such actions were not aligned with ministerial missions and mandates at the time the GAP was elaborated. Except for the Sports and Leisure Secretariat that had the promotion of physical activity rooted in its mission, for other Ministries such as Transportation and Municipalities, such alignment was less obvious. It was awkward for some ministerial partners to convene at a healthy lifestyles negotiation table. The link with their ministerial missions and mandates was almost non-existent. Besides, the ministerial professionals working on the GAP elaboration had to convey the concern in weight related problems up through the structures in their corresponding ministries. Many times, they were faced with resistance from their higher ministerial authorities because of budgetary constraints or lack of awareness of the policy issue. Therefore, restricting ministerial participation in the GAP to those actions that were planned within the ministry's budgets was the line of conduct for many of the policy participants. Despite the personal interest of some ministerial partners in proposing innovative actions and structural interventions, yet they abstained because no earmarked budget was to be provided to ministries.

> *"…the budgetary context implies that a given ministry would save its budget for actions linked to its own mission…"*
>
> *Government professional, 2016*

> *"we would have wished to be innovative […] to come up with new measures but if the ministerial authorities told us 'no you do not sign up for that because if you do, it will consume budgets and we don't have the necessary budgets in our regular credits to put them forward'. Well, this reverts to saying: 'you will put forward things that you know we are already financing, that we are able to finance', so yes indeed, at times, it is recycling of actions that the Ministry is already carrying out"*
>
> *Government professional, 2016*

Another issue that was raised by some study participants was the setbacks ministries and other government agencies would encounter in strategizing on policy issues. For instance, if they were found lobbying for a certain issue or providing support to a given position or group beyond the scope of their mission, this might jeopardize their neutrality and credibility. According to them,

the public sector is not entitled to do lobbying activities; however, government agencies and ministries can provide various forms of support to organizations who can do such lobbying activities on policy issues of interest.

Bilateral and Multilateral Agreements

Pre-existing bilateral agreements and coordination between the MSSS and other ministries were identified by study participants as opportunities that facilitated inter-ministerial collaboration. They also fostered existing ties and facilitated the communication process. A bilateral agreement on the promotion of physical activity with the Sports and Leisure Secretariat, a collaboration on food security issues with the Ministry of Employment and Social Solidarity, on healthy schools' approach with the Ministry of Education, on child care centers with the Ministry of Family were identified as facilitating factors. Other shared interests were identified as drivers for collaboration. Enabling physical environments was a common interest with the Ministry of Transportation (*Ministère des transports du Québec, MTQ*). The latter was concerned with promoting active transportation, public transportation and the cycling path network. Another facilitator with the MTQ was the established coordination and communication between the MSSS and the MTQ on road injuries. Regulations related to marketing to children were also drivers for collaboration between the Consumer Protection Office and the MSSS.

Multilateral collaboration on other policy issues were identified by many study participants as facilitators as well, an example is *The Act to Combat Poverty and Social Exclusion*. Ongoing government social marketing campaigns facilitated collaboration, namely the "Vas-y" campaign that promotes a healthy diet and the practice of physical activity (Government of Québec, n.d.). The campaign was perceived as an opportunity to collaborate with the Ministry of Agriculture. The driving force of this collaboration was the interest of the Ministry of Agriculture and its agri-food partners in promoting local agriculture and local markets.

> *"The Ministry of Agriculture, they had worked with us on the promotion of healthy lifestyles with Vas-y, and then there was the whole mercantile side of the sale of fruits and vegetables, so with them we also developed the fruits and vegetables promotion campaign then we worked with the association of producers of fruits and vegetables […] who had a commercial interest in selling the fruits and vegetables produced in Québec, local agriculture[…] because for them, they were interested in promoting the purchase of food produced in Québec […]. Because if you promote eating habits among young people in the*

general population 'why not by the way buy your local products, fruits and vegetables produced here' […] promote local markets."

Government professional (2016)

Aside from this campaign, most collaboration with the Ministry of Agriculture concerned food safety matters for which the Ministry of Agriculture took the ownership and the lead leaving health related matters to the MSSS. In fact, every time the National Public Health Director had tried to call for the Ministry of Agriculture's collaboration on a food policy, he had been denied such collaboration.

The GAP also benefited from the expertise, commitment and collaboration of various actors inside and across ministries. Policy brokers, connectors and super connectors who could connect, collaborate, negotiate and advocate within and across ministries. Actors who could also understand the mission of all other ministries, who were knowledgeable, good negotiators and great communicators with strong leadership, capable of rallying people together and had solid links with many vis-à-vis in other ministries, believed in team work, were problem-oriented and had work versatility that allowed them to collaborate equally well with researchers, policy makers and field professionals.

Issue Characteristics

The lack of evidence on the effectiveness of the interventions targeting food and physical activity environments was a major constraint. Earlier on, the PNSP had set the criteria for interventions to be included under the program. Above all, interventions must have demonstrated their effectiveness and be evidence-based. This left little room for the adoption and implementation of promising interventions and to a lesser extent natural experimentation. For instance, and according to many study participants, the EEAC members failed to include existing programs such as "about losing weight" in the PNSP because of the lack of evidence on its effectiveness.

In addition, the GAP was adopted with little understanding of the concepts of enabling environments and a healthy diet, mainly on the side of the non-EEAC coalitions. Public health actors who were quite knowledgeable of the various facets of the policy problem failed to provide some of their ministerial counterparts with education and empowerment to help reduce their uncertainty zone because of time constraints.

"what must be understood is when this concept of enabling environments came out with the GAP, people said 'what is meant with this?''

Government director, 2016

Instead, and in order to deliver a timely plan, EEAC members, namely governmental EEAC members used authoritative arguments such as: *"…we have a mandate the Premier has asked for, we have no choice, we must do it"*. It was when actors started the GAP implementation that they realized the need for a common vision on the concepts of a healthy diet and on enabling environments for the population as a whole.

Personal Goals and Interests

Policy actors from the MSSS saw in the Premier's command as a window of opportunity to engage their ministerial colleagues in obesity prevention. However, MSSS actors had been regular actors in the policy subsystem; the MSSS had been working on the policy issue for years, public health actors were aware of the issue's characteristics, there was a policy community spearheaded by the MSSS that was mobilized around it. Much knowledge had emerged throughout the works carried out with their partners. However, not all ministries were at the same starting line, some had periodic actors, very few had regular actors, and most had none. That was considered a major obstacle.

"We wanted to impose our own agenda and I do not know to which extent we managed to influence the agenda of the others…"

Government professional, 2016

At the level of other ministries, the personal interest of policy actors was a major drive to the policy process. Some ministerial policy actors had the healthy lifestyles issues deeply rooted in their health beliefs. Professionals who had a personal interest in healthy lifestyles were at frequent times proactive in writing proposals of actions for their own ministries, what they thought their ministry could be good at and how they thought the proposed action could align with the MSSS request in addition to how they can improve existing actions in their own ministry.

While some ministerial actors were personally interested in the policy issue, others were not at all. The level of collaboration often times matched the level of interest of the ministerial respondent in the policy issue.

"… the ministry was called for because we were identified as one of the partners in the healthy lifestyle action plan, and then we had no choice, the command came from higher authorities, top ministers, deputy ministers…"

Government professional, 2016

Despite good will, the MSSS failed to prepare the ground for the GAP elaboration through earlier bilateral communication with ministries. In addition, The MSSS was criticized for its GAP development approach where it exerted an authoritative type of leadership.

"… we had the knowledge, and then we reached for ministries and told them for instance 'maybe we should build bike paths to help us prevent chronic diseases' and then people looked at us and said 'we don't understand'[…] There was work to be done, but we did not have time to do this educational work, and then we told them: 'Listen, we have a mandate, and it is the Premier who is asking us, we have no choice, we have to do it' [..] But we had no time to sit with them and then be able to talk […] I think we were a bit rushed, we were rushing people a bit, it was not always easy for them because we did not have time to sit and to look at all the implications that there was for everyone...[…] When you look at your job description and it reads building dams, building bridges, this is not promoting healthy lifestyles! Then they ask you to go sit on a healthy lifestyles' table, 'what am I going to do there? I build bridges!' So that was the reason why I said that we were abrupt with them. "

Government director, 2016

The "What's In It For Me?", WIFIM

The MSSS was way ahead in terms of framing the policy problem, its severity, indicators and effective interventions. Over and above, the MSSS was compelled to submit the plan in a very short time span. Therefore, the GAP elaboration team was rushing other ministries to deliver their plans using authority arguments. The imperatives of health, the argument that the GAP was the Premier's request and their legitimacy as mandate holders were used among others. The attitude of the MSSS was not engaging and contributed to the lack of ownership that some ministerial partners felt at the time. The MSSS was perceived as making use of the health argument far too often in an attempt to impose its solutions on other ministries rather than negotiate them.

"…even if they were asking for ministerial contributions, it was a contribution […], I would call this a minimal contribution, they did not really encourage us to be, to become a stakeholder…"

Government director, 2016

Based on many study participants, no upstream work was done to foster the GAP ownership across various policy actors. Some policy actors could not identify their potential role in preventing

obesity and chronic diseases. At certain times, ministerial delegates that were appointed for the GAP elaboration were not made aware of the problem, nor had interests in other programs besides their own. Moreover, they were reluctant to see public health authorities attempt to impose actions on them. Besides, the MSSS attitude raised doubts on how much their GAP writing team could influence the strategic directions of ministerial counterparts. At the same time, the GAP writing team was not aware of the actions some of their ministerial counterparts had with respect to healthy lifestyles. It was of no surprise why many policy actors failed to see the GAP's added value and to rally around the cause.

In addition to the national level, the MSSS was faced with resistance from regional public health actors, their own network, according to some study participants. Regional public health actors were mostly concerned with the multiplicity of public health action frameworks; the PNSP was the basis of regional public health actions and regional actors were reluctant to see another framework being introduced to their action agenda.

Leadership

Commitment of key policy actors helped moved the policy issue forward. Leadership of key policy actors was also noted. While the leadership of the National Public Health Director (*NPHD*) and his personal interest in the policy issue was highly acknowledged by most participants to the study, some noted the presence of a similar leadership in each concerned ministry. Along with a personal interest and commitment to the policy issue, the leadership of some ministerial policy actors was perceived as a positive contribution to the GAP elaboration. Conversely the leadership exerted by the MSSS in coordinating the project was perceived by most non-EEAC actors as coercive, less open and integrating which might have jeopardized the interest ministerial partners had in the plan.

Public Health Act

Enhanced Legitimacy and Authority of Public Health Actors

The recognition of the important and legitimate role of public health through the adoption of the *Public Health Act 2001* in Québec was a clear and significant message. The Act changed the legislative environment and gave public health actors in Québec the legitimacy to act in health

promotion and prevention across the government. Article 54 of the law confers upon the Minister of Health and Social Services in Québec the role of consultant for the government on issues related to health impacts, including healthy lifestyles. It was considered an opportunity for empowering public health actors by giving them authority and legitimacy. In fact, authority was perceived as an opportunity by some actors and as a threat by others. Perhaps what best explains it is a statement made by the NPHD:

> *Obviously when there is a health imperative, it makes it easier for everyone, for all other ministries, to be convinced […] when health says something […] an opinion on impact on health of a measure […], they worry for various reasons, first because health erodes budgets, but the other is […] that health remains important and any impact on it may be detrimental…"*
>
> *NPHD (2016)*

National Public Health Program, PNSP 2003-2012

The first national public health program PNSP 2003-2012 was adopted in the fall of 2002; many study participants reported that it barely mentioned obesity and weight-related problems and had little to say on healthy lifestyles. The reason for that was that only evidence-based interventions were to be included under the PNSP. At the time, evidence on successful obesity prevention interventions targeting environments were lacking.

> *"at that time, obesity was not considered at all a public health problem at least in Québec it was not really a priority […] and I remember that we […] , could attend to the development of the National Public Health Program, the working groups, the analytical framework; we were trying to influence so that there would be some actions in the program, and that the problem of obesity would be included as an important public health problem and we could not really get an entry point with the Ministry of Health that maintained the framework in which they worked for the development of the program […] they wanted to implement measures whose effectiveness was established, which is good, but at the same time when you have new emerging problems in public health, you have not necessarily demonstrated the effectiveness of the interventions but still you have to take care of it, and then we saw that with the 5-year perspective of the program, one must start addressing this problem"*
>
> *Government consultant (2016)*

The fact that the PNSP fell short on obesity prevention strategies led to dissatisfaction among public health actors working on obesity at the time. However, many of those actors were not at ease to propose actions in a context where the emphasis on the implementation of effective

measures had been the main niche of the public health network for several years. Still, the PNSP was perceived as a first step in public health action in promoting healthy lifestyles in the context of obesity prevention. Many actions were integrated to the GAP partly because public health actors failed to include actions promoting healthy lifestyles earlier in the PNSP. The GAP was perceived by some public health actors as a retaliation to the lack of actions on weight-related issues and healthy lifestyles in the PNSP.

Learning from the Anti-Tobacco Act Policy Process

Public health policy actors advocated to place the obesity problem on the public and political agenda, integrate weight related problems including body image to the problem definition, aim at reducing average population weight and work on changing environments. A similar objective, yet with a different policy topic was pursued earlier by public health actors to reduce the prevalence of smoking in Québec. Learning from the successful experience that materialized with the adoption of the *Anti-Tobacco Act 1998*, led public health actors to follow a similar strategy model to that of the tobacco model. Learning was favored because of the research that was done on the Anti-Tobacco Act in Québec and because many of the public health experts who were involved in the Anti-Tobacco Act were themselves active strategists in the obesity prevention policy. The successful adoption of the Anti-Tobacco Act was perceived as an opportunity to launch a similar strategy for obesity as reported by our study participants.

However, actors were faced with some constraints; there were some differences related to the policy issue characteristics that somehow limited actors' strategies. Many key informants reported on the differences between obesity prevention and smoking prevention. Some of those informants had been or were still involved in both policy subsystems. As much as it was easy to take a stand against the tobacco industry and demonize it, it was not possible to do so in the case of obesity. For instance, food systems integrating the agri-food industry are essential along with motorized transportation; food is a basic need and essential to sustain life. There is an adequate diet and appropriate, healthy foods; there is no appropriate level of smoking, however. As compared to sweetened beverages, there was a lot of evidence to confirm the positive effect of taxation on decreased smoking. The data on the effect of taxation of sweetened beverages on consumption were not robust during that period. Therefore, although it was inviting for public health actors to reproduce the anti-tobacco strategy model, yet they realized that there were

differences that were not only related to policy content. Such differences necessitated a thorough understanding of the policy problem and constrained their actions. For instance, the agri-food industry could not be demonized similarly to the tobacco industry, nevertheless action could be done to reduce its influence, or to re-establish an appropriate power balance.

Policy Decisions' Analysis

The GAP development works at the Ministry of Health and Social Services were launched within a historical context of low political priority given to obesity and an equal emphasis on individual and collective responsibility for action. Figure 5 shows policy decisions related to obesity and healthy lifestyles, namely diet, physical activity, and weight-related problems that were issued by the government of Québec or the Ministry of Health and Social Services as of 1992. These policy decisions were mapped based on Sabatier's belief structure. Belief components that marked dichotomies between coalitions are highlighted. Figure 5 shows the low priority, if any, given to obesity prevention from a historical perspective. It is not until the Perrault Working Group was created that the obesity problem witnessed an increase in government political priority. The triggering event was in fact the unanimous population request following the provincial consultations and the Generations' Forum calling for the government to consider prevention a priority. The subsequent appointment of a national group, the Perrault Working Group, and the report the Group produced was a turning point in how obesity and obesity prevention had been historically considered. This was matched with the interest of the president of the philanthropic organization, *Fondation Lucie et André Chagnon* (*FLAC*), who was a member of the Perrault Working Group, to provide a financial lever for interventions aligned with the GAP in local communities. The proposal of the FLAC was to fund such interventions, in parity with the government, through a public-private partnership.

> *"At the same time, our president then, who was a member of this working group, at the conclusion of the recommendations, prompts a challenge: 'we are willing to put this much money if the government of Québec is willing to put as much'. Then, it was the start of the second phase of partnership with Québec en Forme, from 2007 to 2017, on a partnership with the Government of Québec […] which was part of the process of developing the governmental action plan."*
>
> *Anonymous (2017)*

Figure 5 helps understand the influence of policy actors' strategies over time, described in the following section, and the role of scientific and technical information in the policy process.

Health and Well Being Policy *PSBE*, 1992

In June 1992, the first health and well-being policy *PSBE* was adopted in Québec by the Ministry of Health and Social Services (MSSS, 2004). The policy had two main targets: improving the health and well-being of Quebeckers and reducing health disparities among various socio-economic groups (MSSS, 1998; MSSS, 2004). In fact, the 1992 health and well-being policy was suggested by the Rochon Commission, a commission formed in 1985 by the Parti Québecois government with the mandate to evaluate the health care system and propose improvements (Pomey et al., 2013). Rochon's recommendation stemmed from his conviction that Québec should be responsive to the needs of vulnerable populations (Pomey et al., 2013).

The policy defined priority problems, actions and strategies to address them and set targets and outcomes to be reached by the year 2002 (MSSS, 1998; MSSS, 2004). Obesity was not perceived a public health problem at the time. Three public health problems were identified in said policy, none of them related to obesity: sexually transmitted diseases and AIDS, infectious diseases and dental health problems. Obesity was rather identified as a risk factor for cardio-vascular diseases, certain types of cancer and back pain (MSSS, 1998). Being a consequence of unhealthy lifestyles, obesity solutions focused on improving lifestyles through promoting weight loss, a healthy diet and the regular practice of physical activity (MSSS, 1998). It is noteworthy to mention that the renewal of the 1992-2002 health and well-being policy was integrated to the 2001-2004 strategic plan of the MSSS (MSSS, 2001 in MSSS, 2004).

National Public Health Priorities, 1997

In 1997, and in line with the health and wellbeing policy objectives, the MSSS collaborated with its regional authorities to develop the *National Public Health Priorities 1997-2002*. None of the seven priorities that make up the platform targeted obesity (figure 5). However, healthy lifestyles were promoted under the development and social adaptation of children and youth (MSSS, 1997). Commitment to fighting inequalities in health and well-being, enhanced collaboration and coordination and increased engagement with communities were the implementation principles that guided public health actions (MSSS, 1997).

National Public Health Programme, 2003

The new *Public Health Act 2001* was adopted in December 2001. One of the main provisions of the Act was that the MSSS must elaborate a national public health program. The MSSS issued its first *National Public Health Programme* in 2003 (MSSS, 2003). The program aligns itself with objectives of the PSBE in terms of improving health and well-being and reducing health disparities (MSSS, 2003). It also ensures the continuity of the National Public Health Priorities 1997-2002 while integrating other problems that fall under the public health scope (figure 5 - MSSS, 2003). The program emphasizes both individual and collective responsibility for health maintenance (MSSS, 2003). One of the six domains identified in the program concerns healthy lifestyles and chronic diseases (MSSS, 2003).

Obesity was perceived as a chronic disease and as a risk factor for other chronic diseases such as diabetes and cardio-vascular diseases. It was considered an epidemic in children and adults. Its causes span biological, individual, psychosocial, behavioral and environmental factors (MSSS, 2003). In addition, obesity affects individuals from disadvantaged settings (MSSS, 2003). Obesity and overweight reduction targets in the PNSP were 6 and 3% respectively in adults. No specific targets were set for the youth and adolescents, rather a general recommendation of preventing overweight and obesity in this age group (MSSS, 2003).

MSSS Strategic Plan, 2005

Not being an obesity prevention policy per se, however the MSSS strategic plan 2005-2010 was analyzed to understand the orientation of the health minister in office then with respect to the policy problem. Besides, in their study of health care reforms in Québec, the findings of Pomey et al. (2013) revealed that the role of the health minister was preponderant in the adoption of a given health reform. Particularly when said minister was also a physician, this bestowed a credibility and trust from the public that allowed him to pursue his ideological convictions (Pomey et al. 2013). The health minister in office at the time was also a physician and had significant contributions to the health care system (Pomey et al. 2013). We specifically looked at the MSSS strategic plan to shed the light on the positioning of the health minister in office with respect to a governmental obesity prevention plan.

The strategic plan was issued after the Generations' Forum and around the time the works leading to the GAP were launched. The MSSS issued its strategic plan 2005-2010 in alignment with the new government plan of the elected party brought to power in 2004 (MSSS, 2005). The electoral platform of the newly elected party included a seminal document whereby the government announced its priorities, health being amongst them (Premier, 2004). Similar values of social justice, individual accountability and sustainable development guided the ministry's prospective actions. The plan highlighted the importance of shared responsibilities amid the individual, communities and governmental actors. The population must be equally informed on its health status and how to maintain its health. Individuals could prevent potential health problems, participate in the management of any health problem they might suffer from and even prevent undue deterioration of their health. Examples of individual choices were exercising, consuming a healthy diet and abiding to medical prescriptions. Alongside the individual, actors operating in various living environments such as at schools, workplaces and municipalities are expected to carry out projects to ensure better living conditions. The Ministry of Health and Social Services and its network must provide the support to those community initiatives (MSSS, 2005).

Similar to diabetes, asthma and arthritis, obesity was considered a chronic disease that had important consequences on the quality of life of affected individuals. Other chronic diseases the plan referred to were cardiovascular diseases, cancer and respiratory diseases; they were in fact responsible for three quarters of all caused death. Chronic diseases could be prevented with a healthy diet and regular practice of physical activity in addition to smoking cessation (MSSS, 2005).

Obesity was not considered an epidemic nor any actions targeting it were listed as a priority in the MSSS strategic plan 2005-2010. Interventions that were intended under this plan mostly targeted improving healthy lifestyles. They fell under informing/educating the population on one hand, and preventing chronic diseases through provision of preventive services on the other hand. Representing the beliefs of the minister in office, the ministerial actions focused on information and education, midstream actions in obesity prevention, and downstream actions such as services provision. There were also actions targeting improved access to integrated perinatal and early childhood services, including access to diet programs, for families living in a context of vulnerability. As such, the emphasis on environmental causes of obesity and environmental

solutions was quasi absent from the MSSS strategic plan 2005-2010. Simultaneously, advocacy for upstream actions in obesity prevention were at their highest within the General Directorate of Public Health of the MSSS. The marked concern for prevention was at its peak for the government in office and the civil society equally (Perrault Working Group, 2005).

Perrault Working Group Report

It was not until the civil society voiced its concern regarding prevention (Perrault Working Group, 2005) at a time when government dissatisfaction was very high (Thibeault, 2004) that the momentum for change occurred. In December 2004, and for the first time, the cabinet created a cross sectoral working group to advise the government on health promotion in youth. It was the outcome of the government's commitment and leadership in defining preventive approaches to provide enabling environments for the adoption of healthy lifestyles for the youth (Perrault Working Group, 2005). Unhealthy diets, sedentary lifestyles and weight related problems were perceived a public health crisis that needed to be addressed urgently (Perrault Working Group, 2005). They were identified as a societal problem rather than just a youth problem. Similarly to the WHO, the Group considered obesity an epidemic (Perrault Working Group, 2005). The Group modified the diet component of its initial mandate given by the Health Minister. From an initial mandate of developing preventive approaches aiming at offering an affordable healthy diet in child care centers and schools, members of the Group decided to expand their mandate further. They tackled issues related to a healthy diet similarly to the physical activity component of their mandate, namely ensuring youth grow in enabling environments promoting a healthy diet. The 0-18 years age range was included under the youth definition (Perrault Working Group, 2005).

While the report cited individual factors as contributors to the problem, it abundantly emphasized and discussed factors related to social determinants of health, namely socio-economic status, related to contemporary lifestyles and environmental factors namely the socio-cultural, economic, political and physical environments. Proposed solutions aligned with the contributing factors; they included actions targeting the four types of environments. Other priority actions were those aiming at reducing poverty and social inequalities to reduce health inequalities. Coordinated, immediate and sustainable actions were called for. Such actions were to be carried out by various sectors and at all levels of government. The population and individuals should be mobilized and made aware of youth health issues. The private sector mostly the agri-food, not-for profit and

profitable organizations have a role. A public-private partnership to finance the actions the Group recommended was proposed (Perrault Working Group, 2005). The Group emphasized the need for a high-level political leadership to help reach the objective of healthy youth development. Accordingly, and among others, three major recommendations emerged. One recommendation intended the creation of an interministerial decisive authority reporting to the Premier to carry out the project. The other one sought integrating government's expectations from each concerned ministry within its strategic plan. And the third was the elaboration of a national plan with clear objectives that should be submitted as early as the fall of 2005 (Perrault Working Group, 2005).

The GAP

Made public on October 23, 2006, the GAP reflects the Government orientations and recommendations of actions in promoting active life styles and healthy diets as well as preventing weight related problems (MSSS, 2006). The GAP benefited from a wide mobilization of various sectors earlier to its elaboration. In addition to the civil society and experts' mobilization through the Generations' Forum and the Perrault Working Group, other working groups provided valuable inputs to the plan; the GTPPP and its partners, the MSSS and its network. The GAP also benefited from the GTPPP publications "A Call for Action" and "A Call for Mobilization", the National Program of Public Health, the Perrault report, the MSSS workshops' reports and the scientific support of the National Public Health Institute.

As perceived by study participants, the GAP emanated from a political need to build on what has been achieved so far to help foster the Premier's political capital. Being a governmental plan, it mandated the collaboration of other ministries. The GAP imparts a public health perspective on weight related problems. Environmental causes were perceived as the culprit for the lifestyles' changes and increase in weight problems. According to the GAP authors, changes affecting lifestyles were in fact the results of the progress in technology, industry, medicine, communication, and computer science. The causes of weight related problems went well beyond individual factors namely food intake, energy expenditure and genetics. Other factors of a more distant order with respect to the individual were involved. Examples were urban planning and public transportation, food availability and accessibility. These factors were in turn the consequences of higher order policies namely regional, national and even international policies (MSSS, 2006).

While acknowledging the need to intervene at the level of individual behaviors, the GAP emphasizes the more pressing need to establish enabling environments and living conditions that promote healthy lifestyles. The aim was to make healthy, sustainable and convivial choices the easy choices (Baum 2002 in MSSS, 2006 p. 13). The main goal of the GAP is *to improve Québecers' quality of life by providing them with enabling environments that promote the adoption and maintenance of healthy life styles, a healthy diet and a physically active lifestyle* (MSSS, 2006). Its deliverables with respect to obesity prevalence were 2% reduction and 5% reduction of overweight prevalence in both children and adults respectively, by 2012 (MSSS, 2006). Its general objectives were to implement measures that (1) enable the adoption and maintenance of a healthy diet and an active lifestyle; (2) reduce the prevalence of obesity and weight related problems along with their consequences on individuals and the Québec society as a whole and (3) appraise healthy lifestyles and diversity in body size (MSSS, 2006).

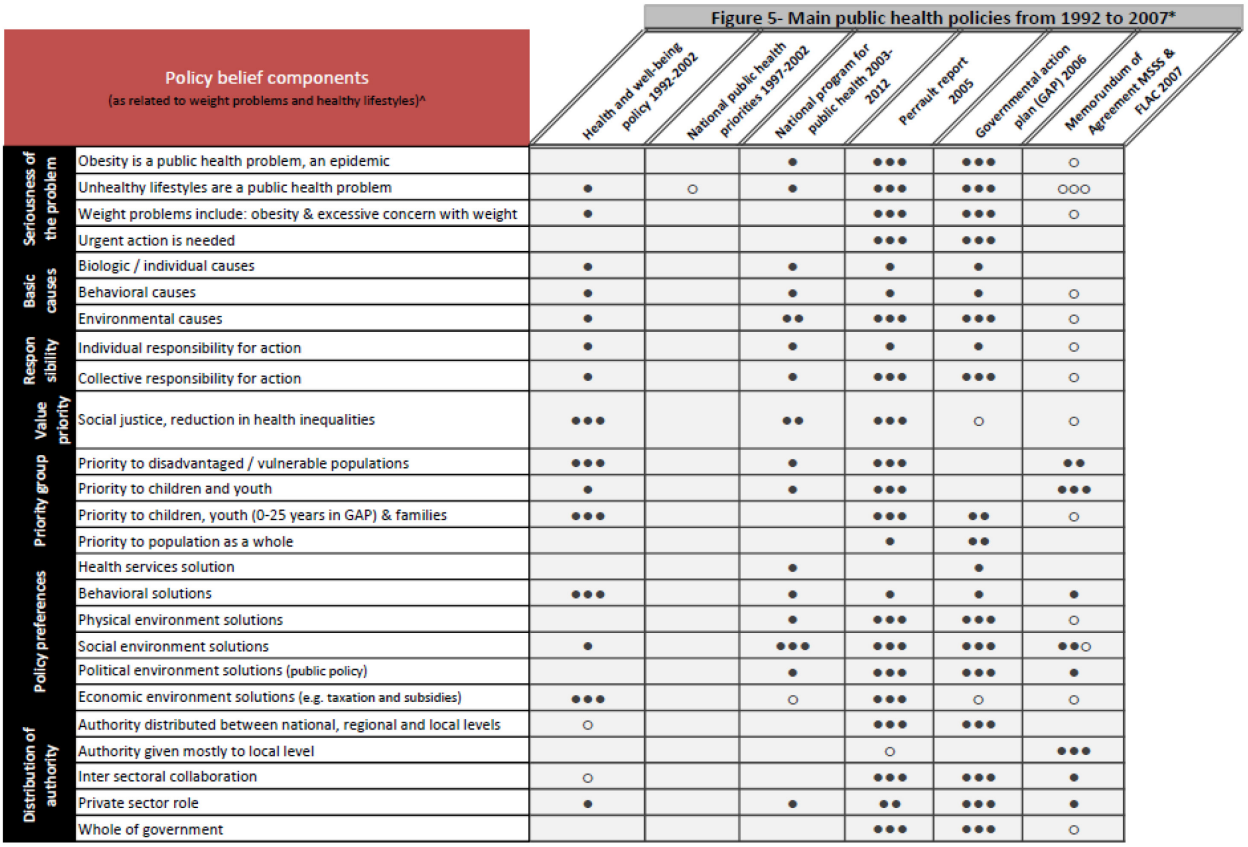
The GAP comprises five intervention axes that include all together 75 actions in various living settings and sectors: family and child care settings, municipalities, communities and associative sector, school and work settings and agri-food sector. Interventions included actions promoting a healthy diet (21 actions), a physically active lifestyle (26 actions), enabling social norms (10 actions), research and transfer of knowledge (8 actions) and improving services for people with weight problems (10 actions) (MSSS, 2006; MSSS, 2009). The MSSS assumed the GAP coordination through its General Directorate for Public Health (MSSS, 2006). The GAP called for implementation of its actions at all three levels: national, regional and local. The GAP didn't benefit from consultations and was not debated before the National Assembly. It did not establish a coordination structure headed by the Premier and did not call for each concerned ministry to integrate government's expectations within its strategic plan. Besides, neither implementation nor communication plans were elaborated for the GAP (MSSS, 2013). Moreover, numerous actions in the GAP necessitated an action plan of their own and many others were ill defined and lacking clear objectives.

Following the GAP publication, the National Assembly adopted the Act to establish the fund for the promotion of a healthy lifestyle (Act to establish the fund for the promotion of a healthy lifestyle, 2007). The provisions of this law required the Government to finance the funds with $20 MM per year up until the Government decided to terminate said provisions, but not before

April 1, 2017. The Government partnered with the philanthropic organization Fondation Lucie et André Chagnon (FLAC). Under the terms of their agreement, the organization committed to invest with an equal sum of $20 MM per year so that a total sum of $400 MM is mutually spent over the period of agreement (FLAC & MSSS, 2007). The mandate was to develop programs and actions aiming at promoting the adoption of sustainable and healthy lifestyles, namely a healthy diet and a physically active lifestyle, by youths under 17 years of age (Act to establish the fund for the promotion of a healthy lifestyle).

The GAP was adopted as a policy to promote enabling environments to make healthier lifestyle choices easier. The main problem however is that there was little understanding of the concepts of enabling environments and a healthy diet. There was a need to reach a common understanding between the concerned actors on the concepts underlying the GAP interventions. It took two years after the GAP was adopted for actors to develop a common vision for enabling environments and a healthy diet. Accordingly, two structural documents defining those two concepts were developed after the GAP adoption (MSSS, 2010; MSSS, 2012). While these documents helped orient GAP related interventions, little structural guidance on what actions fall under enabling environments was available to policy actors at the time. Each coalition proposed actions based on their own understanding of the concepts.

Figure 5. Article 1 Main Public Health Policies from 1992 to 2007*



	Policy belief components (as related to weight problems and healthy lifestyles)^	Health and well-being policy 1992-2002	National public health priorities 1997-2002	National program for public health 2003-2012	Perrault report 2005	Governmental action plan (GAP) 2006	Memorundum of Agreement MSSS & FLAC 2007
Seriousness of the problem	Obesity is a public health problem, an epidemic			●	●●●	●●●	○
	Unhealthy lifestyles are a public health problem	●	○	●	●●●	●●●	○○○
	Weight problems include: obesity & excessive concern with weight	●			●●●	●●●	○
	Urgent action is needed				●●●	●●●	
Basic causes	Biologic / individual causes	●		●	●	●	
	Behavioral causes	●		●	●	●	○
	Environmental causes	●		●●	●●●	●●●	○
Respon sibility	Individual responsibility for action	●		●	●	●	○
	Collective responsibility for action	●		●	●●●	●●●	○
Value priority	Social justice, reduction in health inequalities	●●●		●●	●●●	○	○
Priority group	Priority to disadvantaged / vulnerable populations	●●●		●	●●●		●●
	Priority to children and youth	●		●	●●●		●●●
	Priority to children, youth (0-25 years in GAP) & families	●●●			●●●	●●	○
	Priority to population as a whole				●	●●	
Policy preferences	Health services solution			●		●	
	Behavioral solutions	●●●		●	●	●	●
	Physical environment solutions			●	●●●	●●●	○
	Social environment solutions	●		●●●	●●●	●●●	●●○
	Political environment solutions (public policy)			●	●●●	●●●	●
	Economic environment solutions (e.g. taxation and subsidies)	●●●		○	●●●	○	○
Distribution of authority	Authority distributed between national, regional and local levels	○			●●●	●●●	
	Authority given mostly to local level				○		●●●
	Inter sectoral collaboration	○			●●●	●●●	●
	Private sector role	●		●	●●	●●●	●
	Whole of government				●●●	●●●	○

*: Issued by the MSSS or the government

●: explicitely mentionned in the document; number depends on frequency

○: implicitely mentionned in the document

^: healthy lifestyles only include a healthy diet and a physically active lifestyle; weight problems include overweight, obesity and excessive concern with weight

Strategies

Distribution of power among coalitions favored the EEAC who was the dominant coalition. The control over the bases of power the EEAC had was three-folded: (i) the special status of health authorities in Québec engendered by article 54 of the new Public Health Act; (ii) the control over information and communication, and (iii) the control of the critical functions related to the development of health policies. It also favored the CDAC who also controlled some of the power bases, in particular the critical resources.

Strategies of various coalitions were contingent to the prospective GAP actions associated to the specific GAP objectives. Strategies varied whether said actions were within the coalitions'

actual or planned actions or independent of them. Furthermore, coalitions struggled to maintain and safeguard their autonomy in a context where the EEAC was actively seeking to reap the benefits of the plan to its own advantage. Having participated actively to the agenda setting of the policy problem and assumed the leadership of the elaboration of the policy, the support of the EEAC to the plan was undeniable. Their strategies aligned with the objectives of the plan. Besides, the plan was perceived as an opportunity to maximize their interests by gaining control over other coalitions' actions. Therefore, the risk of having the EEAC impose its own modus operandi on other coalitions was increased and exaggerated by non-EEAC coalitions. Accordingly, their support to the plan was limited or marginal.

The EEAC main goal was to introduce in the plan all the interventions they believed were effective or promising, and throughout all sectors of government activity. Many of the EEAC regular policy actors were from the General Public Health Directorate of the Ministry of Health and Social Services and the National Institute of Public Health of Québec. In the health sector, the goal of the EEAC was to introduce GAP actions they had previously failed to introduce in earlier policies, namely the National Program of Public Health. The GAP was the ultimate mean for them to advance their policy goals and accordingly they integrated to the GAP the kind of new and innovative interventions they had agreed upon earlier, throughout the GTPPP works mostly but also through their consultations with their network. Their proposed GAP interventions were highly ambitious. However, it is worth noting that they were basically the only coalition that failed to deliver some of the actions they had planned for (MSSS, 2015). This failure is noteworthy given that it mostly concerns actions under the jurisdiction of the Ministry of Health and Social Services (MSSS, 2015). Proposing new interventions can also be interpreted as a tactic by this coalition to try to influence other coalitions to do the same, by being a role model itself. The EEAC goal was also to introduce new actions under other government missions, regardless whether such interventions contravened with the concerned coalitions' goals. The EEAC used the GAP as a leverage to maximize their policy objectives.

> *"We really wanted to pass our own agenda and I do not know to which extent we managed to influence the agenda of others. Because it was still us who had the coordination of this plan, I do not know to what extent we have been able to get into the political machine of other ministries and agencies to communicate our*

interests and concerns of what was behind our plan so that we could make a difference"

Government professional, 2016

The control the EEAC was trying to exert could be anticipated in a budgetary context where health services costs are borne by the Ministry of Health, whereas other government missions might contribute to influencing peoples' lifestyles without assuming the potential health-associated costs. This resulted many times in conflicts with concerned coalitions. The EEAC strategies were perceived as adamant and forceful at certain times which did not promote a collaborative context and might have defeated the purpose of the exercise.

"Even though the ministries had identified [interventions] and then put their names on a sheet of paper, it was far, far, far from saying that every ministry had integrated [...] the prevention of weight issues in the priorities of their ministries."

Government consultant, 2016

The AFAC goal was to safeguard its autonomy by protecting itself from interventions imposed on it, mainly by the EEAC. At the same time, the AFAC wanted to show collaboration. After all, the plan was governmental; coalitions did not have the choice but to be collaborative. Accordingly, the AFAC strategy was to create a workgroup by the highest ministerial authority: the management committee of the MAPAQ. So, the level of collaboration among group members was expected to be high because of the authority linked to the party giving the mandate. The creation of the working group can be explained by a strong desire for autonomy that led the AFAC to commit administratively to creating a working group. With the support of the management committee, the workgroup decided on the AFAC course of action for the GAP. This way, the AFAC achieved a dual objective. On one hand they increased the legitimacy of their proposed GAP interventions and on the other hand they limited other coalitions' interference by decreasing their openness to any other policy intervention. However, the AFAC only proposed actions that fell within the scope of their existing actions. No additional actions were proposed in their plan. Other strategies conducted by the AFAC were to discredit and raise doubts on interventions proposed by the EEAC such as taxation of unhealthy foods. At the same time, the AFAC proposed some interventions that fell under other coalitions' lines of authority. Such interventions necessitated other coalitions' resources and conflicted with their interests. For instance, introducing quality clauses in hospital and school catering contracts to ensure nutritional quality and the purchase of local produce.

"I used to tell people from the Ministry of Education and the Ministry of Health: 'you know when you give a contract to a manager for a school or hospital cafeteria, there are none of the criteria that refer to the food quality'. At that time there was none […] 'there should be criteria in the choice of suppliers that refer to the quality of product […] It was more complicated when it came to other ministries' actions […] 'it would be interesting if you had measures concerning local products, fresh products' it was more complicated because there were issues of financial constraints…"

Government director, 2016

These interventions could even represent a threat to both EEAC and HLPAC, whose budgets or their partners' budgets might suffer if such interventions were to be implemented. These budgetary constraints caused the EEAC and the HLPAC to be less responsive to the AFAC proposals. This strategy is less aligned with the GAP objectives, although both coalitions support the GAP objectives. It can also be explained by the coalitions' desire for autonomy and their resistance to actions that are imposed by other coalitions.

Similarly to the AFAC, the HLPAC goal was to preserve its autonomy and to ensure the EEAC coalition doesn't impose its own intervention portfolio. They also wanted to make sure the EEAC doesn't take the leadership or claims ownership or rights to interfere in interventions that may be perceived as pertaining to both jurisdictions such as the school food policy. In addition, they only wanted to include ongoing or planned actions under their proposed GAP actions. For instance, the school food policy was planned prior to the GAP, accordingly it got integrated to it. With the budgetary constraints, the HLPAC goal was to avoid releasing any budget except if it is intended to support their planned institutional missions.

Given the existence of a common program managed jointly by both coalitions within two different institutions, each coalition experienced a constant challenge of keeping control over resources, even better increasing them while maximizing returns. These coalitions experienced competitive organizational interdependency which altered actors' behaviors. For instance, the HLPAC reduced its collaboration with the EEAC on a school food policy, despite its likely positive contribution. The EEAC also refused to transfer the coordination of the GAP to the HLPAC, a suggestion that was made by the Health Minister at the time.

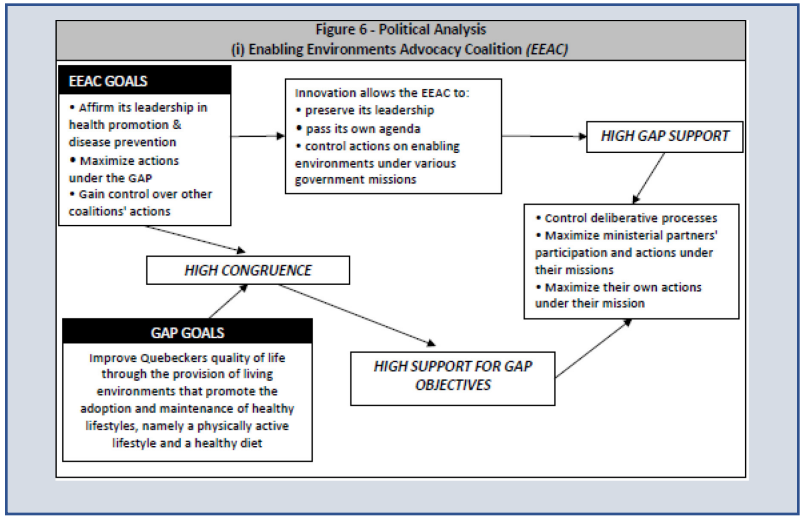
In fact, the 75 GAP actions that were assumed by the signatory ministries, had no new budgets linked to them. Accordingly, non-EEAC policy actors reverted to various strategies to avoid using their regular budgets for the non-funded GAP actions. Examples of frequent strategies

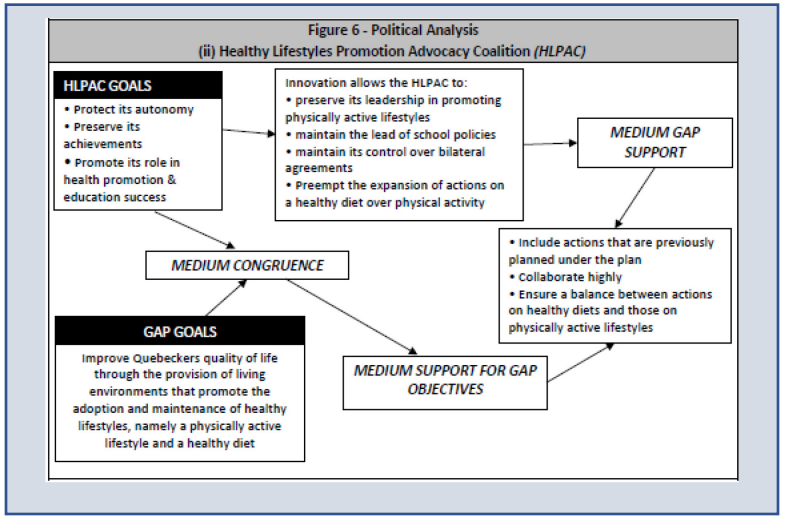
were recycling of pre-existing actions, rephrasing of interventions so that they align best with the obesity prevention objective and integrating actions planned beforehand to the plan. Some policy actors went even further in restricting their contribution to the plan. They wanted to suggest examples of possible interventions in the plan rather than commit to them. This strategy can be interpreted as an attempt to protect autonomy while at the same time avoid accountability. In a budgetary context where non-EEAC policy actors questioned their ability to deliver, and a political context opening an opportunity for the EEAC to act, a hurting stalemate resulted. The deadlock necessitated an intervention of the National Public Health Director to request the Health Minister's intervention with his colleagues. These strategies align less with the GAP objectives and may in fact hinder the attainment of these objectives.

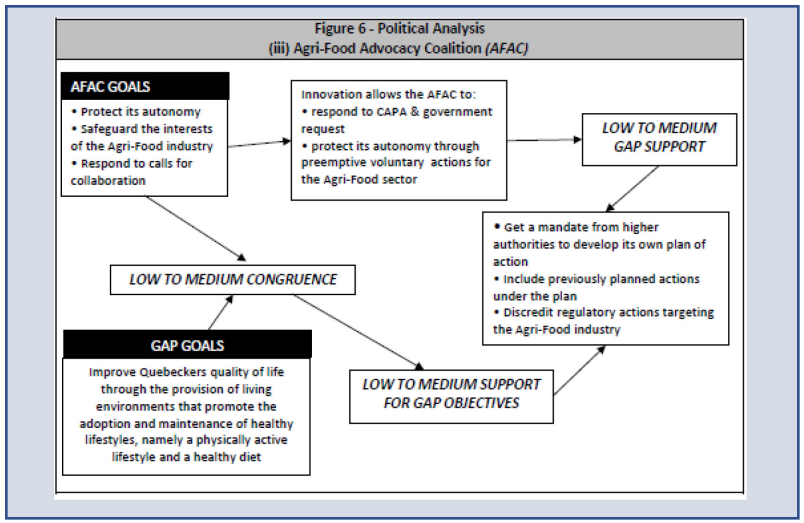
The CDAC wasn't involved in proposing actions in the plan, although it was consulted during the GAP development. As a community development coalition, it was concerned with actions directed to communities based on a local diagnosis. The GAP actions were government actions borne to ministries and government institutions. This was not perceived as a threat to the CDAC who had a well-established track of action with communities. The CDAC was aware that their previous mandate needed to extend to include healthy diets and a wider age range. Having participated in the Perrault Working Group, the CDAC was aligned with the government endeavors regarding enabling environments. Although they were consulted during the GAP development, they didn't interfere at this level. The CDAC maintained a certain distance from other coalitions during the elaboration of the plan. It can be interpreted by their desire to preserve their autonomy and leave the door wide open for its future actions. The CDAC saw in the GAP an opportunity to materialize their goals and accordingly they were supportive of the plan. Originally, a prominent CDAC member created a philanthropic organization in 2000, the *Fondation Lucie et André Chagnon (FLAC*) (FLAC, 2017). The creation of the Foundation allowed him to benefit from a tax credit of $500 million following the selling of his telecommunications enterprise Videotron (Bélair-Cirino, 2016). Through a vast expert consultation, the CDAC was actively seeking to find the appropriate social program to invest in some philanthropic activities in Québec, until they decided to work on prevention of disease and poverty (FLAC, 2017). In addition, their dual goal was to ensure appropriate bi-partite funding on one hand, and to make sure their investment doesn't go to funding government actions on the other hand. The negotiations that followed the GAP adoption resulted in a public-private partnership and the creation of a fund

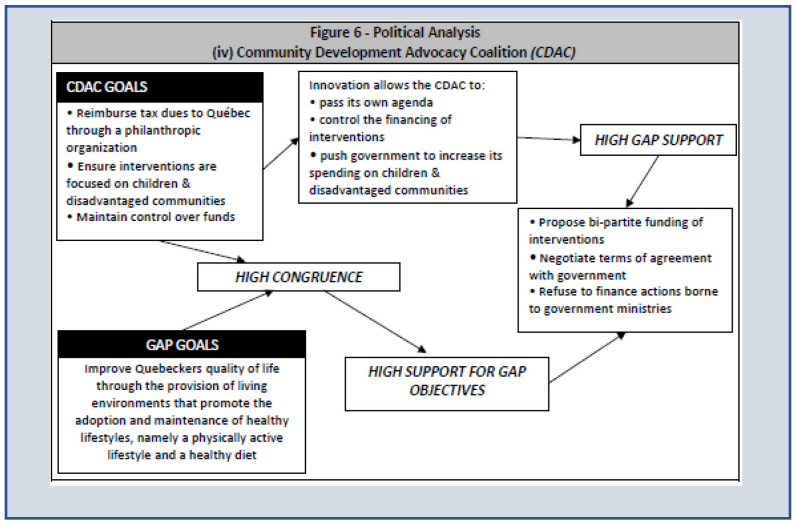
(*Société de gestion de fonds)*. 75% of the fund would go to Québec en Forme, the CDAC pre-existing entity, and 25% to supra-national projects i.e. national and regional. Figure 6 summarizes the analysis of advocacy coalitions political interests and goals

Figure 6. Article 1 Political Analysis









In addition to goal-oriented strategies, coalitions had policy goals-oriented strategies. The EEAC strategies were largely focused on generating and diffusing knowledge, as well as recruiting coalition members particularly among experts and those with legal authority. Their strategies were influenced by the strong and organized coordination patterns that characterized their interaction. The EEAC created an independent think tank, the GTPPP, that represents and integrates the beliefs of its members. Under the auspices of the provincial public health association, ASPQ, and through the GTPPP, the EEAC worked on drawing funds so that they could engage in research and policy development. The EEAC benefited from generous funds from the provincial and federal governments to be able to advance its costly strategy. The EEAC also organized a strategic workshop that gathered professionals and experts to draw the map of future collaborative action in obesity prevention. The EEAC adopted a strategic plan of action which included: (i) the creation of two organisms for policy advocacy and for health promotion respectively; (ii) the hiring of a team of experts at the National Public Health Institute; (iii) the staffing of regional public health directorates with dietitians. The EEAC sought funds to be able to implement their plan and they were successful at drawing funds.

The EEAC also influenced the selection of the members of the national working group on prevention. Following the Generations' Forum, some regular EEAC members recommended to the cabinet potential working group participants. The strategic choice of participants helped integrate members with similar policy beliefs to the working group. Moreover, it protected the working group from potential undesirable participants with conflicting policy beliefs. It also protected the group from potential political interference. The EEAC identified individual members and institutions they wished they participated. Civil society members with a known interest in and/or support to prevention, compatible policy beliefs, and those whose credibility was well praised within the public sector, were identified. For instance, from the agri-food sector, the representative of the Association of Fruits and Vegetables was called for to participate whereas no representative of the processed food industry was invited. Regular EEAC actors also helped in organizing the Perrault Working Group meetings and activities. Notwithstanding the remaining coalition participation in the Perrault Working Group, this gave the EEAC a leverage over other coalitions in advancing their own policy solutions.

Moreover, and in parallel to the Perrault Working Group, and in alignment with the rising concern of the civil society in obesity prevention, the national public health director, a regular policy actor in the EEAC, convened various deputy ministers and created an inter-ministerial committee at two levels: the deputy ministers and the professionals. Every ministry had to develop and submit its own strategy. Both committees collaborated with the Ministry of Health and Social Services to the GAP development. It took six months of negotiations to reach a final version of the plan. Political interests and goals were not alien to these negotiations as discussed earlier.

Scientific communications in professional forums was also a strategy the EEAC utilized extensively. The EEAC did not miss out on opportunities to present the findings of its thinktank, the GTPPP, in professional forums. As of the year 2000, the Annual Public Health Days included thematic days on obesity. Two seminal GTPPP documents were also presented during the Annual Public Health Days. These events received high media attention and press coverage. In addition, the Annual Public Health Days hosted a symposium on government action in obesity prevention during the year 2006. The symposium gathered renown international scholars and speakers from the USA, Europe, Australia and New Zealand (INSPQ, 2006). In parallel, a regular actor in the EEAC was constantly giving out media interviews on the importance of enabling environments in obesity prevention.

Creating a working group was also a strategy advanced by the AFAC. However, the AFAC group, Working group on Food and Health (*Groupe de travail sur l'alimentation et la santé, GTAS*) was ministerial (GTAS, 2006). The Working group did not benefit from additional funds, instead it received a lot of support from the ministry's management committee. It also benefited from a high level of coordination between the management committee and the working group chairperson. This helped mitigate any potential conflict that may result from the distributional allocation of costs borne to collective strategies aimed at pursuing common policy goals. It also helped foster the support of working group members in carrying out their own actions. Through its six-orientation plan, the report highlights the beliefs of the AFAC. Among others, the authors recommend ensuring food quality and safety standards, local food consumption, education and increase in consumer awareness, heightened responsiveness of the agri-food industry to consumer demands based on voluntary

improvement of current practices. Collaboration with the MSSS on food security issues was also planned (GTAS, 2006).

Generating and diffusing knowledge was also a strategy the HLPAC adopted. Through the scientific committee of Kino-Québec, the HLPAC issued many guidelines and scientific advice on the promotion of physically active lifestyles. In addition, one HLPAC member was also member of the GTPPP, the EEAC think tank. The presence of this policy broker helped enhance communication between the EEAC and the HLPAC on policy solutions and reduce the level of conflict between these two coalitions.

Explanation Building

Following our analysis, we conclude that we are able to confirm our policy change hypothesis. Assessing the counter-factual that the GAP adoption would have occurred irrespective of the external subsystem events that happened, and the negotiations that followed, the question we would ask ourselves: In the absence of the Generations' Forum leading to the creation of a National Working group on prevention and the consequent negotiations, would the GAP have been adopted? The most likely answer is no. First the national political concern with prevention reached a peak at the time the Generations' Forum occurred. This concern about prevention had been generated because of a long-standing history of the public's anxiety regarding the sustainability of health care system and the increased pressure on public finances because of the ageing population. We can argue that the consultations carried out by the government were a kind of catalyst that revealed the increased public concern with respect to disease prevention and the sustainability of the health care system in the context of an ageing population and increased health care costs. The consultations paved the way for the agenda-setting for disease prevention by influencing the behavior of the Premier and through a change in his priorities. The Generations' Forum created a window of opportunity to act on prevention. In parallel, media interventions on obesity and other weight problems spearheaded by an EEAC member were conveying the message of the need for a government intervention to make healthy choices the easy choices. As reported by some key informants, the stars aligned allowing for the GAP adoption.

Second, the Perrault Working Group creation was a direct consequence of the Generations' Forums' activities. Faced with the pressure of citizens requesting prevention to be a government priority, the Premier was compelled to create a working group on prevention issues. With historically low popularity, the creation of the working group would enhance the Premier's credibility in front of his electorate and enhance their support. Had he not created a working group, or had he selected an alternative course of action, the likelihood of responding appropriately to public pressure and concern is lower and thus the risk of political loss is higher. In addition, the choice of the well-reputed person to chair the working group indicates the interest and concern of the Premier in reaching solutions supported by a competent team. The chairperson had well-known interests in youth health and physical activity.

Third, the request of the Premier and his cabinet to develop a national action plan was based on a recommendation of the Perrault Working Group. The decision of the Premier could not have been simply that of *inaction* because dissatisfaction with his government was very high on one hand, and on the other hand the policy problem concerned the youth and by virtue of his position, the Premier is the ultimate responsible for youth related matters in Québec (Youth Secretariat, 2016). In addition, Québec has a long-standing tradition of establishing commissions to examine issues related to health care policies to inform its policy action (Pomey et al., 2013). Research on earlier health care reforms in Québec revealed that influential reports issued by these commissions informed indeed the policy-making process. The common event that preceded any policy action or inaction was the publication of a minimum of one report on the policy issue (Pomey et al., 2013).

Fourth, how policy actors reacted to the creation of the Working group mattered. EEAC actors' readiness to provide support to the writing of the plan couldn't be higher. Their think tank GTPPP was ready with its recommendations for priority interventions in the context of Québec. The National Public Health Director showed readiness and provided leadership for the elaboration of the national plan. EEAC policy actors capitalized on the window of opportunity that opened with the creation of the Perrault Working Group. They namely proposed members to the cabinet with similar beliefs, they provided documentation to the working group. So, they made sure that their framing of the policy problem and its solutions promoting enabling environments reached members of the Perrault Working Group. So, the

external event provided them with resources to achieve their policy objectives. These resources altered the power balance to their advantage. Accordingly, they could advance their policy agenda.

Fifth, policy actors from various coalitions negotiated the actions to be included under the prospective plan in at least two different venues: the national Working group and the inter-ministerial working group. In both groups there was a broad representation of participants from all coalitions. Various prescriptions fostered the negotiated agreement. The leadership of the national public health director was key in advancing negotiations and helping reach a consensus among policy actors. Moreover, policy actors showed a commitment to reaching a consensus. In fact, there was a lack of alternative venues; policy actors had to deliver because the plan was a request from the PM.

Last, but not least, the funding that was proposed by the CDAC gave a serious boost to moving the policy process forward. With such unprecedented funding, the plan could ensure financial support for complementary local actions aiming at promoting healthy lifestyles. Policy actors didn't have the choice but to reach a negotiated agreement. They could not waste such a valuable opportunity of investing large funds in promoting healthy lifestyles.

Discussion and Recommendations

In a field that has been marked with little application of policy process theories (Cullerton et al, 2015; Clarke et al., 2016), our study offers an interesting application of a framework drawn from these theories to obesity prevention. Based on our framework combining the Advocacy Coalition Framework to a political analysis model, we were able to confirm Sabatier's change hypothesis explaining how decision making occurred in Quebec, one of Canada provinces. Only in rare instances did previous research papers explain policy change in public health nutrition policies (Cullerton et al., 2015). Our conceptual framework offered important insights into what guides the policy actors' strategies and the determinants of policy decisions. We were able to demonstrate that in addition to policy-oriented beliefs, actors are also motivated by their political goals and interests. Being oblivious to these goals and interests will lead to subpar understanding of the policy process defeating the purpose of the scientific inquiry on policy stasis and change. Accordingly, an understanding of such goals

would complement an analysis based on the Advocacy Coalition Framework. We strongly recommend the integration of the political analysis model to the Advocacy Coalition Framework in future works on the policy process using the ACF. This will allow an enhanced understanding of policy leverage points and drivers that will inform policy actors on how to influence decision-making.

Using a conceptual framework of pluralistic nature, that includes the Advocacy Coalition Framework and the political analysis model enabled us to test our data against other theories, specifically Kingdon's Multiple Streams Theory, MST. Kingdon identifies three independent streams flowing in a policy system: the policies, the problems and the politics streams. A policy window occurs when the three streams come together enhancing as such the probability that policy makers adopt a specific policy (Kingdon, 1984; Zahariadis, 2014). Based on a recent review (Clarke et al., 2016), the MST is the most utilized policy process theory in the research on obesity prevention policy. Our data showed a favourable political context prior to the GAP. Conditions aligned auspiciously to allow policy advocates to influence decision-makers. A policy window triggered by the provincial consultation pushed prevention issues to the forefront of the political priority agenda. New data on the escalating obesity rates led to an opening in the problems stream. A think tank created by a provincial health advocacy organization generated knowledge on policy alternatives; their diffusion at the provincial level led to an opening in the policies stream. Policy champions from the dominant coalition worked on coupling these streams together, advancing their own policy options and influencing decision-makers.

In addition, our research shows that Québec seems to have followed a similar pattern to other Western democracies with respect to advocacy and government action in obesity prevention. Political attention to obesity seems to have grown similarly in many countries across the globe following the WHO consultation on obesity around the year 2000 and the Surgeon's general call for action on what was considered an obesity epidemic (Kersh and Morone, 2005; Vallgårda, 2015; Baker et al., 2017). In fact, the WHO consultation was perceived to have "launched obesity onto multiple government agendas" (Baker et al., 2017, p. 144) including the Australian federal government (Baker et al., 2017), England, France, Germany and Scotland (Vallgårda, 2015). By the year 2006, many Western democracies have

adopted national strategies of obesity prevention (Jalbert and Mongeau, 2006). Coupled to the favorable global context, such policy precedents in similar policy contexts provided decision makers in Québec with valuable impetus towards the adoption of a governmental plan.

Backed with a strong political willingness, the GAP saw light under the request and leadership of the Premier in an enabling political environment. The political climate has been identified in the literature as a determinant of the policy progress in obesity prevention (Boswell, 2014). Being a governmental plan, the GAP responded to the WHO call upon governments to develop national strategies to prevent obesity (WHO, 1998; WHO, 2000; WHO, 2004). The GAP came to an end in 2012 and was not reconducted for another term. Instead, a governmental prevention policy was adopted in Québec in 2016 (MSSS, 2016). Even though the GAP ended in 2012, the Fund for the Promotion of a Healthy Lifestyle continued until 2017. It is still operating using the Fund residual until 2019. Obesity prevalence reduction objectives were not achieved under the GAP. Worse, projections indicate an increase in prevalence until 2030 (MSSS, 2015). This increase in obesity prevalence was not alien to many parts of the world as well (Afshin et al., 2017).

This leads us to question the comprehensiveness of the intervention approach portfolio governments tend to prioritize on one hand, and the type of interventions they are likely to leave out, on the other hand. We would question whether the adopted policy solutions are harmonized with the problem framing and definition and vice versa. We would also question, and from a policy process perspective, how comprehensive Québec plan was in terms of interventions. Inevitably, we would explore some of the interventions the GAP failed to integrate. This brings us to highlight certain aspects of the policy process related to the problem framing and the proposed policy solutions. Specifically, aspects related to dichotomies between individual and collective responsibility, individual self-regulation and government regulation are to be raised.

In fact, governments have a long-standing tradition of regulating individual behavior, despite the myth of individual responsibility and self-reliance (Kersh and Morone, 2002). Alcohol restrictions, tobacco wars, seatbelt regulations are examples of government interference in private behavior (Kersh and Morone, 2002). However, “policy makers typically begin by following the path of least political resistance” (Kersh and Morone, 2005,

p.849). Clearly the GAP actions were far from being intrusive. No banning of unhealthy behaviors similarly to the wearing of seatbelts or raising prices of unhealthy food choices such as taxation were adopted under the GAP. Actions proposed under the GAP (MSSS, 2006) were more focused on providing information and education, influencing established preferences or increasing choice. Such actions are the least intrusive and the costliest for governments to implement as compared to more intrusive measures (Sassi, 2010). The latter have a higher political cost (Sassi, 2010). The type of actions adopted under the GAP reflects somehow a common government practice within the OECD and EU countries at the time (Sassi, 2010). A survey conducted in 2007-08 showed a similar trend in policy action within the OECD and EU countries (Sassi, 2010). Governments however acknowledged the seriousness of the obesity problem and their fundamental role in addressing it (Sassi, 2010). However, so far, governments' action in obesity prevention has been primarily focused on soft policy approaches of the social marketing strategies type and health promotion programs. No government has so far implemented a combination of comprehensive preventive approaches, explaining in part the limited success in halting the epidemic (Clarke et al., 2016).

Surprisingly, and given the public health legislative, programmatic and structural context in Québec, and the favorable public opinion, two main shortcomings of the GAP are to be noted. First, the GAP did not impose any actions to reduce corporate practices affecting health, nor did it press for modification of corporate behavior to improve population health. The GAP rather included soft and voluntary actions of the incentive type to be borne by the agri-food industry. At the time the GAP was adopted, there was a high demand for mobilizing efforts to reduce disease promotion caused by corporate behavior, food and beverage among others (Freudenberg 2005; Freudenberg et al., 2009). Health advocates were mobilized around the issue on one hand and the likelihood of an increase in the health-damaging corporate practices was imminent on the other hand (Freudenberg et al., 2009). Regulation of marketing, labelling and pricing of energy dense beverages and foods for example are still being advocated as necessary strategies to address obesogenic environments (Sassi, 2010; Swinburn et al., 2011). However, and despite the intensity and the diversity of corporate practices leading to health damaging consequences (Freudenberg et al., 2009), the high demand for policy interventions to curb their harm (Brownson et al., 2006; Freudenberg, 2005; Wang and

Brownell, 2005; WHO, 2004), the available body of evidence on the impact of their practices (Yach et al. 2004), and that of poor diet and physical inactivity on morbidity and mortality (Mokdad et al., 2004), this was not translated into concrete policy actions in the GAP.

The GAP failed to provide policy support to promote enabling food environments where corporate practices would encourage a healthy diet. Such difficulty in generating political priority around regulatory interventions to tackle obesogenic environments have also been reported in other policy environments as well. In Australia for instance, such priority has been remarkably absent (Baker et al., 2017). Our conceptual framework can help us explain how variables related to context, actors and strategies influenced the content of the GAP on this issue.

First, the Agri-Food Coalition who had well established communication channels with the agri-food industry was the first to present its policy action plan to be integrated to the GAP. Among others, such actions included improving the food supply through voluntary industry practices, a pre-emptive industry approach that has marked its practices in other settings as well (Baker et al., 2017). This type of control over critical functions allowed the Agri-Food Coalition to keep off the government agenda any policy proposal aiming at regulating corporate practices. It was less likely that the dominant coalition could impose policy actions that were not included in the Agri-Food Coalition plan.

Second, the literature was scarce on successful policy precedents regarding imposing policy actions on the industry in similar policy environments (Baker et al., 2017). Moreover, some experiences in other countries were less encouraging. For instance, in the case of trans fat, while a petition was launched in 1994 by the Center of Science for the Public Interest (CSPI) so that the FDA requires food manufacturers to label the trans fat content of their products, it was not until 2006 that such label became mandatory (Freudenberg et al., 2009). In other policy contexts such as in France, although the reduction in sodium content of food products and the subsequent reduction of mean daily sodium consumption was an objective of the public health policy, the indicator selected, the mean population sodium consumption (MECSL & MSS, 2005) does not reflect the industry's performance and compliance to reducing sodium content of their manufactured food products. No indicator was selected to measure the actual mean sodium decrease in manufactured food products which is the actual

vehicle through which the desired population reduction in mean sodium intake is expected to be achieved. A general approach of laissez-faire promoting voluntary action seemed to be the trend at the time.

In the Canadian context, Canada had just launched its *Integrated Pan-Canadian Healthy Living Strategy* in 2005 (IHLN, HLTG and ACPHHS, 2005). The strategy responded to a need expressed by the federal/provincial and territorial health ministers to develop a collaborative and cooperative strategy to tackle the underlying risk factors and social conditions underlying chronic diseases (IHLN, HLTG and ACPHHS, 2005). It is interesting to note that Québec chose to opt out of the Canada-wide strategy although it shared its general goals. The strategy had specific targets with respect to the increase in the proportion of physically active Canadians and those who adopt a healthy diet and have healthy weights. However, it set no targets related to corporate practices (IHLN, HLTG and ACPHHS, 2005). Objectives of national plans and strategies seem to focus on individual behavioral targets with no "behavioral" targets set for corporate entities. This provides evidence that the actual policy context has prioritized corporate benefits over individual health. Individual freedom of choice is to be respected in the context where social practices promote health and well-being which is obviously not the case.

Still in 2016, one of the most pressing promising interventions Le Bodo et al. (2016), authors of the book *Comment faire mieux,* recommend is to invest in the surveillance and monitoring of the nutritional quality of foods and beverages to enable the reformulation of processed foods in Québec (Le Bodo et al., 2016, p.227). The development and monitoring of environmental indicators related to healthy lifestyles was also recommended following the GAP evaluation after it came to an end (MSSS, 2015). Moreover, a tax on sugar-sweetened beverages was also recommended at the provincial level (Le Bodo et al., 2016) as well as at the federal level (Dietitians of Canada, 2016). Lately, the most populous municipality in Quebec, Montreal, banned the sale of sugar-sweetened beverages in its municipal facilities (Remiorz, 2017). This is to demonstrate that despite the GAP shortcomings related to regulation of corporate behavior, advocacy efforts are still ongoing. They are likely to persist a while longer; at least as long as social practices fall short on promoting health and wellbeing.

Third, other policy subsystems affected the inaction with respect to corporate practices. On one hand, not any Canadian province had initiated actions against corporate practices promoting unhealthy diets; precedents in other Canadian obesity prevention policy subsystems were lacking. On the other hand, the rates of overweight and obesity, although high in Quebec, were better than the rest of Canada except for British Columbia (Mongeau, Audet, Aubin and Baraldi, 2005). Although opportunities of learning from the Anti-Tobacco advocacy and the enactment of the 1998 Anti-tobacco Law in Québec were at hand, yet, public health actors were still in the experimental learning phase of the anti-tobacco experiment. Unhealthy diets seemed like the next tobacco, yet had manifold differences that mandated an adjustment in strategies actors were trying to familiarise with.

Fourth, policy actors lacked resources and guidance on health advocacy because of the lack of the body of evidence on the effectiveness of health advocacy in altering corporate behavior. In fact, health advocacy aiming to change corporate practices had received little attention of researchers at the time and had lacked systematic investigation across strategies or industries (Freudenberg et al., 2009). Fifth, no strategy to counter the GAP was used by corporate actors. This is expected as the GAP represented no threat to these actors given that it only required voluntary modification of corporate behavior. In such a context, one would not expect the industry to mobilize resources against prospective government action.

Another GAP shortcoming is that it fell short on actions targeting the reduction of social inequalities in health. With its well integrated public health action platform, Québec has always been a pioneer in promoting actions on the social determinants of health as compared to other Canadian provinces (Bernier, 2006). The GAP in fact reflected a *gap* in addressing the vulnerable populations as no specific actions targeted healthy diets'/physically active lifestyles' interventions in socially disadvantaged groups. This increases the risk of widening social health inequalities between the lower and the higher socio-economic groups. For instance, the GAP offered little to add to the existing actions on the social determinants, namely on food security as it relates to poverty. It is worth noting that both the National Program of Public Health and the Perrault Working Group recommendations contrasted with the GAP on this aspect (MSSS, 2003; Perrault working group, 2005).

Although the GAP stated food security as a main premise for action and defined it eloquently within the document, no explicit actions were adopted. Instead some *examples* of actions were vaguely proposed, among others, a nutritious food basket. However, the GAP did not enforce surveillance, monitoring and/or communication of the prices of the food items included in the nutritious food basket to better inform the population on cost-effective food choices. Conversely, the only GAP action on food security concerned the continuation and reinforcement of existing actions promoting access to healthy foods in disadvantaged communities. It is noteworthy that no role for the Ministry of Agriculture was foreseen under this action (MSSS, 2006). In light of the CAPA's recommendation on an integrated policy on food security (CAPA, 2004), the recent *Act to Combat Poverty and Social Exclusion* (2002) and the data on the marked socio-economic differences in obesity prevalence (MSSS, 2006), there was a window of opportunity for the GAP to act on food security. In addition, Canada, similarly to the United States, does not have explicit constitutional guarantee or specific provisions for the right to food, contrary to Finland, Denmark, Sweden and Norway (FAO, 2017). Being a leader in social policy within Canada, Québec could have felt more compelled to act on food security. The GAP could have been considered a leverage to achieve improvement in food security issues but was not used as such by policy actors, Moreover, the old 1977 nutrition policy that was supposed to be updated in Québec (MSSS, 2003), has never been updated up until now, despite all the time and effort stakeholders invested in it. The Ministry of Health and Social Services was entitled to work on the updated nutrition policy. Said policy was expected to address food security issues as a main component (MESS, 2004). Accordingly, there was a missed opportunity in the GAP to develop and enhance food security actions. Drawing from our framework, we can provide a dual explanation. First, the coordination between opposing coalitions was in an emerging phase. The Agri-Food Coalition was a relatively new actor in the obesity prevention policy subsystem. Its interest in health-related matters apart from food safety was quite recent. The necessity to include other governmental and non-governmental actors implied that the constraints to advancing the policy process were quite high. In addition, time constraints were high in a context where political priority was directed to prevention and reducing healthcare costs.

Similarly, soft and blurred recommendations regarding the promotion of local foods were also issued under the GAP. Promoting the procurement of local foods within government contracted food services was less welcomed by some policy actors mainly because of their perceived financial impact. Probably policy proponents to such recommendations, namely the Agri-Food Coalition, would have been more vocal and would have provided stronger support to such interventions had they been in the actual policy making context. With the rising protectionism and the related commercial pressures nowadays, policy actors would probably be more prone to support such policy actions. Other policy subsystems' effects namely climate change and sustainable development are both important incentives to an increased desirability and support to these interventions equally by government and civil society actors. In its prospective food policy to be issued in 2018, the government of Québec stated its support to local food supply to government provided food services (Reddy, 2017). The issue seems to have finally made its way to the decision agenda.

The strength of this study lies in the development of an innovative framework combining a policy process framework, the ACF, with a political analysis model. Through our empirical analysis, we were able to show that shared belief systems are not enough to explain how and why heterogeneous actors form coalitions and maintain coordination to achieve their policy goals. Therefore, the analysis of self-interests and goals complements an ACF-based analysis. As such, we have replied to the calls of various scholars (Breton and De Leeuw, 2010; Clarke et al. 2016) to enhance existing frameworks and have contributed to the existing body of knowledge on theories and frameworks of the policy process. Another strength is in the identification of four advocacy coalitions interacting in the policy subsystem, indicating a breadth of policy stakeholders that need to be considered. Most previous studies have reported the presence of two coalitions, a public health led coalition and an industry led coalition. We were able to identify a less usual policy actor in obesity prevention policy, a philanthropic organization. The role of its president was analyzed through a policy entrepreneurship's lens.

The diverse strategies of these coalitions, disagreement or mitigated agreement on policy solutions are rooted in values that are entrenched in their belief systems. Said values somehow mirror the dichotomies that have long plagued the action on obesity prevention.

Another strength of this study is in explaining how obesity prevention has emerged on the policy agenda. The thorough analysis and comparison of policy decisions based on Sabatier's (1998) belief structure is also quite unique in apprehending policy change. We also contributed to the understanding and analysis of policy inaction in obesity prevention. Mostly concerned with the lack of regulatory interventions targeting corporate behavior, this phenomenon has been observed in various contexts world wide. Our study also reveals the importance and influence of other policy subsystems that are related to the obesity prevention policy subsystem, such as agriculture, food and food security, physically active life styles, public health, prevention and tobacco among others. Another contribution of this article is the analysis of external events and policy decisions that contributed to policy change over a period exceeding ten years. Rather than examining the *what*, we analyzed the *how* and *why* over time and as such provided an in-depth understanding of policy change that can help policy actors identify levers to challenge or change the current status quo.

The thorough and rich explanation of contextual factors in Québec and an analysis of actors' strategic behavior in relation to that context provides us with important insights on the policy process. It also helps us capture beyond what is specific to Québec and enhance the transferability of our findings. What was of significance to Québec was its favourable public health context on one hand and the change in the systemic governing coalition triggering a chain of events on the other hand. The change in the systemic governing coalition is an interesting window of opportunity policy actors, and more importantly policy entrepreneurs, can use to increase political attention on the policy issue, gain more resources, increase their power and push for their policy solutions. Building a timeline of major policy-related events and highlighting the contribution of each, particularly that of focusing events helped identify opportunities and constraints related to those events and how they impacted the policy process. From an ongoing advocacy evaluation perspective, current policy advocates involved in obesity prevention must be aware of concomitant contextual events that can create opportunities for action.

We also gained a lot of insights on the importance of knowledge and experience gained form other policy subsystems. Policy precedents and spill over effects from other policy subsystems, whether dealing with the same policy problem or a different one, are

distinguished levers for policy actors to utilize. The importance of both the tobacco policy subsystem, and the international obesity policy subsystem to modify and advance advocacy strategies is particularly compelling.

A national working group on the policy issue with a clear mandate specified by the Premier is a remarkable window of opportunity. Characterized with a diverse stakeholder participation, the group was relatively autonomous and was even able to change part of its mandate to fit policy objectives. In similar contexts where much of the content of the upcoming policy is negotiated inside such forums, policy actors must attempt to participate in these venues and influence the policy process from within. We also gained insights from the pitfalls that we have observed in our case study. It is crucial for policy actors currently participating in obesity prevention policy action to know the missions of every organization, the mandates of every policy actor or member of a coalition sitting with them on the same negotiation table. Being aware of their concerns and understanding their political interests may favor a more collaborative approach rather than an authoritative one and may possibly reduce resistance and conflicts allowing for negotiated agreements between coalitions.

Our study had many limitations. First, participants reported events that occurred in the past. There is a considerable potential for recall bias to occur. Hence, the omission of some events or strategies might have happened. We used various strategies to try to minimize this recall bias. Prior to each interview, we reviewed and searched contributions of the key informant to the GAP through documentary and/or interviews' analysis. The various contributions were noted. They were brought about during the discussion with the key informant. Second, the reporting of the participants on the events and strategies might reflect their actual beliefs instead of their beliefs prior to the GAP elaboration period. To compensate for this limitation, we asked specific questions emphasizing differences in beliefs and asking participants to state their views on those differences. Third, it was not possible to interview all policy participants from all participating ministries and institutions for various reasons including retirement, change of job or refusal to participate. However, we made sure that almost all the key GAP policy participants were interviewed. We believe that through our pool of participants we were able to accurately explain the GAP adoption and that any missing data would not change our results nor conclusions. Fourth, it was possible for us to identify four

coalitions that were involved in the GAP policy process. This does not exclude the possibility of the presence of other coalitions in the obesity prevention policy subsystem in Quebec. Based on our interviews, it was possible for us to identify other actors with policy core beliefs that are more focused on the clinical approaches of obesity prevention and treatment. However, our data did not reveal any coordination channels or activities among these actors. This leads us to hypothesize that these actors did not feel threatened in their core beliefs by the GAP and thus did not sense a need to coalesce to try to influence the policy.

Conclusion

Policy process theories are powerful tools to study the complexity of decision-making, explain policy change as well as inaction on policy issues. Using policy process theories provides us with valuable insights that go well beyond the description of events, opportunities, constraints and even policy content to explaining the causal mechanisms leading to policy decisions. The application of the ACF to obesity prevention policy in Québec helped explain policy change after a period of relative stability. Our study showed that the ACF can benefit from the integration of a political analysis model to explain policy actors' strategies. Not only they are compatible but also complementary, given that their mutual use acknowledges the importance of political interests in coalition building, policy debates and analysis. This should lead to a richer analysis of the policy process that is valuable to many policy scholars.

Our research provided a rigorous explanation on the emergence of obesity prevention on the policy agenda. With a thorough analysis of actors, events, actors' strategic behaviour and policy decisions that contributed to policy change over a period exceeding ten years, we provided policy actors in obesity prevention an in-depth understanding of policy change that can help them identify levers to challenge or change the current status quo. The identification of a less usual policy actor representing a philanthropic organization, and the major role he played in the policy process leading to a public-private agreement introduces a new leverage point for policy actors to use. A national working group on prevention mandated by the Premier was key in advancing the policy process and reaching a negotiated agreement on an obesity prevention policy between advocacy coalitions.

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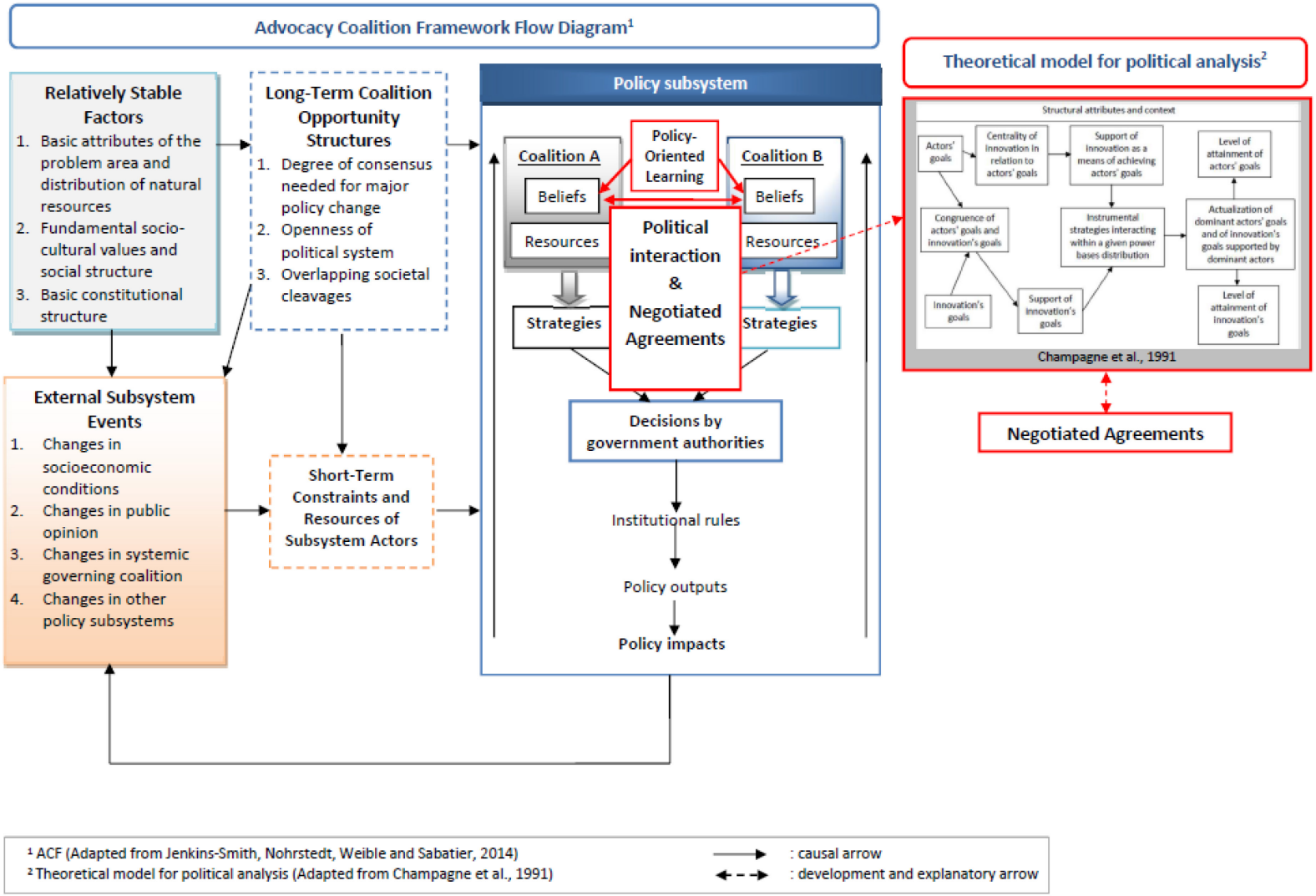
Appendix 1 – Conceptual Framework



Appendix II - Key Informants' Demographics

i. Key informants by profession*:

Profession	Number of participants
Agriculture engineer	**1**
Dietitian	**8**
Engineer	**1**
Administration/management	**2**
Medical doctor	**4**
Public figure/Media chronicler	**1**
Physical educator	**6**
School educator	**1**
Sociologist	**2**

ii. Key informants by organizational or ministerial affiliation*:

Organization/ministry	Number of participants
Academic Institution	**2**
Association of public health directors	**1**
Association of Public Health of Québec	**3**
Institute of Nutrition and Functional foods	**1**
Media	**1**
Ministry of Agriculture, Fisheries and Food	**1**
Ministry of Education, Leisure and Sports	**6**
Ministry of Health and Social services	**5**
Ministry of Transportation	**1**
National Institute of Public Health	**4**
NGO (EquiLibre & Québec council on weight and Health)	**3**
Private sector (health services and sport facility)	**1**
Professional Order of Dietitians	**1**
Québec en forme	**3**
Regional public health agency	**1**
Sports Quebec	**1**

Some key informants are members of more than one organization - affiliations during GAP elaboration

iii. By workgroup memberships*:

Working group	Number of participants
GTPPP - Provincial working group on weight-related issues	
Members	**7**
Perrault Working Group	
Members	**3**
Direction, collaboration and support	**6**
GAP - Governmental action plan on weight-related problems	
GAP authors	**2**
GAP writing directors	**2**
GAP collaborators	**8**

Some key informants are members of more than one working group

iv. Key informants by position*:

Key informants by position	Number
Assistant deputy minister of health and social services & national public health director	**1**
Associate professor	**1**
Board member or chair NGO	**9**
Communication consultant	**1**
Director NGO	**1**
Director private sector	**1**
Director/manager and/or assistant deputy minister representative	**5**
Media (radio chronicler)	**1**
Medical assistant to the national public health director	**1**
President professional order	**1**
Professional	**8**
Regional public health director	**1**
Scientific consultant	**2**
Masters student	**1**

Some key informants have more than one position - positions during GAP elaboration

v. Key informants by education level:

Highest Education level	Number of participants
Bachelor's degree	**6**
Master's degree	**12**
Medical doctor	**4**
PhD	**3**

*: Total numbers by characteristic may exceed the number of key informants because some characteristics are not mutually exclusive

Appendix III – Variables and Data Sources

Variable	Data sources
Policy subsystem	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations
	• Documents of the National Assembly
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Advocacy coalition members	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Published journal articles on obesity prevention policies in Québec
	• Unpublished documents provided by key informants
	• Government reports and other grey literature
Beliefs and goals	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Strategy and resources	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
External events	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• WHO, OECD documents and reports
	• Published journal articles on obesity prevention policies and other related policy subsystems

Relatively Stable Parameters	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports and strategic plans
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• Documents and reports of the WHO, OECD, Canadian Institute of Health Research, Statistics Canada, Institut de la Statistique du Québec
	• Published journal articles on obesity prevention policies in Québec
Long-term coalition opportunity structure	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Portail Québec
	• Published journal articles on obesity prevention policies in Québec
Short-term constraints and resources of subsystem actors	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans,
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Policy-oriented learning	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Negotiated agreements	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec

Policy decisions	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec and other related policy subsystems

CHAPTER 5 – Article 2 - Dietitians as Policy Advocates: The Case of Obesity Prevention in Québec

Introduction

One of the core functions of the public health nutrition workforce is advocacy, be it advocacy for government support to promote and to protect health or advocacy for food and nutrition policies (Cullerton et al., 2015). Health advocacy is also at the core of the prerequisites for health improvement (WHO, 2018). Advocacy occurs in dynamic and complex socio-political environments that are highly contextualized. It necessitates a continuous readjustment of tactics and strategies that takes into consideration modifications occurring in the environment or in actors' reactions. With this scope, advocacy may be regarded as an art more than a science (Pelletier et al., 2013).

Advocacy practices would benefit from a better understanding of the policy-making process (Cullerton et al., 2015; Clarke et al, 2016). Advocacy is in fact only one component of the complex policy-making process. While other fields have benefited from thorough, decades-old, policy process research and analysis based on theoretical frameworks, the public health nutrition field has lagged somehow behind (Cullerton et al., 2015). With an improved understanding of the policy-making process, advocates can better identify leverage points and influence key actors (Cullerton et al., 2015; Clarke et al, 2016). While the political science field has benefited from a systematic study of the policy-making process as early as the 1950s, it was not until recently that such analysis set off in public health nutrition (Cullerton et al., 2015) and in obesity prevention specifically (Clarke et al., 2016).

A robust scientific evidence base is also an important asset for advocacy practices (Pelletier et al, 2013). Scientific evidence is one important component of the policy making process, yet, it can not be the single most platform for policy change. The broader influence of the political dimensions of policy making, such as the institutions, political ideologies and vested interests in selecting the adequate scientific evidence should be considered as well. Failing to understand these political dimensions and keeping the focus on the scientific evidence will limit the understanding of public health nutrition professionals and researchers of why desired policy decisions fail to see light, mostly why nutrition policies many times do not go beyond influencing the individual

behavior to more upstream actions namely population level policies (Cullerton et al., 2015). Often, nutrition researchers and practitioners embrace advocacy in policy making with the belief that the provision of needed scientific evidence is all what it takes to influence the policy decision. This underestimates the political nature of policy making environments and might explain the limited progress, if any, in policy action. Public policy action to address nutrition has in fact achieved limited progress and is still inconsistent across high-income democratic countries (Cullerton et al., 2015).

Research has indicated that the current public health nutrition work force is disengaged and unprepared for advocacy (Cullerton et al., 2015). Advocating for structural and political responses to improve macro-level environmental factors influencing what people eat is quite challenging (Cullerton et al., 2015). The complexity of the policy issue, the diversity of actors, the entrenched beliefs' dichotomies and food industry lobbying among others pave the policy process with difficulties (Roberto et al., 2015). Unless many actors are involved, policy initiatives are doomed to failure. Moreover, it takes highly motivated individuals with strong entrepreneurial flare or teams to build coalitions and advance innovative solutions to achieve policy change (Mintrom and Norman, 2009).

In addition, professionals, whether individually, in groups or in organizations are institutionally expected to accomplish a given role as a unit of a social system (Ben-David, 1958). Tacit knowledge and experience-based advocacy practices (Figueroa et al. 2002 in Pelletier et al., 2013), might conflict with the more prescriptive evidence-based approach such as the one adopted in treating disease (Pelletier et al., 2013). This may give rise to role conflict and role ambiguity that professionals might experience when practising advocacy. Such role conflict is not new to the realm of professional practise. As early as the 1950s, there was a scholarly interest in analyzing role conflicts that physicians experience in various practice and institutional settings (Ben David, 1958). While their institutionalized role is highly valued as an integral part of the society's occupational system, its connection to two subordinate systems is also important. These systems, the professional system and the service-oriented system, are structural in the sense that they are fundamental to the role of the professional rather than incidental to it (Ben David, 1958). Being structural means that participation in both systems follows from a widely accepted definition of the professional's role: the professional system, through the professional's education and training

and the scientific standards of their practice and the service-oriented system, through the contact established with the professional's patients and how they judge the professional's personal quality, loyalty and success as a healer (Ben David, 1958).

In Québec, a dual scope of practice is conferred upon dietitians through the provisions of Bill 90: clinical nutrition aiming to adapt the individual's diet to maintain or restore health and public nutrition that targets families and the community (OPDQ, 2017a). Furthermore, the practice of public health nutrition is backed with a strong public health infrastructure. Both the Law on Public Health (MSSS, 2001) and the National program of Public Health (MSSS, 2003) are the provincial legislative and programmatic levers respectively that form the backbone of the organization of public health in Québec. When it comes to roles and functions of public health dietitians, it was not until 2017 that professional competencies were released by the Professional Order of Dietitians in Québec (Ordre professionnel des diététistes du Québec, OPDQ - OPDQ, 2017b).

Based on the Guide to Professional Competencies, dietitians practising in public health nutrition are called upon to participate in the policy process. They have a role in the development of public policies promoting a healthy diet and health at all levels, organizational, municipal, regional, national and pan-Canadian (OPDQ, 2017b). As such they are asked to seize all opportunities to increase the awareness of key actors of the bio-food chain and actors in other major sectors. They are requested to advocate for healthy eating and wellness policies at all levels of intervention (organizational, municipal, regional, national and pan-Canadian). The importance of going beyond the expert role to a full engagement with actors on policy issues is emphasized under the new Guide (OPDQ, 2017b).

In 2006, the Ministry of Health and Social Services (Ministère de la santé et des services sociaux, MSSS) in the province of Québec issued the Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012, Invest in the Future (GAP), with a time frame of six years (MSSS, 2006). Interventions to improve environments, promote healthy lifestyles, reduce obesity prevalence and prevent weight-related problems and their impacts on the individual and on the society at large were included under the plan (MSSS, 2006). The GAP consisted of five intervention axes: (i) promote a healthy diet; (ii) promote a physically active lifestyle; (iii) promote enabling social norms; (iv) improve services

for people with weight problems and (v) promote research and Knowledge transfer (MSSS, 2006). Dietitians' contribution to the GAP's development, elaboration and adoption was significant. Their advocacy practices throughout the course of the GAP development have largely impacted the policy-making process.

While guidance on public health nutrition practice with a specific focus on the GAP interventions was made available during the plan's implementation (Hamelin et al., 2010), it was less so prior to the GAP; dietitians practising in public health in Québec lacked guidance on their professional practice. As a matter of fact, calls to enhance the training, continuous education and ultimately the basic curriculum of dietitians in public health were voiced by many dietitians prior to the GAP (Mongeau, 2004a). Later, the OPDQ launched a Public Health Nutrition Competence Enhancement Project (OPDQ, 2013) that led to the First *University Nutrition Certification Program in Public Health* in the province in 2015 (OPDQ, 2015).

Dietitians' advocacy for the 2006 governmental plan occurred in a context where competencies, roles and functions of public health dietitians and their relation to other relevant public health disciplines were blurred (Fox et al., 2008). In parallel, scholars were trying to establish public nutrition as a unified field in nutrition practice addressing nutrition-related conditions at the population level instead of the individual level (Beaudry, Hamelin and Delisle, 2004). This context might exacerbate role conflict and ambiguity. We would expect role conflict and ambiguity to arise between the technical science-based practice versus the tacit, experience-based advocacy and the institutionalized professional's role versus the incidental roles or a combination of these components. In addition, the scarcity of scientific evidence made uncertainty higher. On one hand, little research and few publications on the nutrition policy process using policy process theories was available for dietitians at the time to help inform the policy process (Cullerton et al., 2015; Clarke et al., 2016). On the other hand, the empirical database on policy and environmental approaches to promote a healthy diet was also limited (Brownson et al., 2006).

With almost 23% of members working in public health nutrition and community nutrition in Québec (OPDQ, 2017b), this study will highlight a successful advocacy experience practised by dietitians in Québec in relation to obesity prevention, specifically in the case of the GAP. The importance of this research is in its capacity to inform the current body of knowledge on advocacy practices of dietitians in the case of a governmental action plan. Analyzing and sharing advocacy

experiences and practices in a given context will help build capacity and strengthen advocacy understanding and practices. Such research will hopefully inform stakeholders concerned with capacity building and strategic workforce development. Up to our knowledge, this is the first research that analyzes dietitians' role in advocacy for a governmental plan to prevent obesity from an advocacy coalition perspective.

We will first start illustrating the context and the actors' landscape within which dietitians' advocacy occurred. We will then report on findings regarding dietitians' advocacy strategies and tactics through the multiple advocacy channels they have built or reinforced. Enablers for and barriers to advocacy practices will be highlighted with a focus on role ambiguity and conflict dietitians' advocates experienced and the influence of their personal goals and interests. In the discussion we will draw from the findings of our study and build a deeper analysis around them. We will conclude with recommendations for future advocacy efforts carried out by dietitians' advocates.

Methodology

The research design that was used to answer the research questions consists of a case study. The case is the adoption of the *Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012, Invest in the Future (GAP)* by the province of Québec in Canada. The plan was adopted in 2006 with a time frame of six years (MSSS, 2006). It places the promotion of enabling environments at the vanguard of government action in obesity prevention (MSSS, 2006). The question we seek to answer is: "*What was the role of dietitians in the agenda-setting for obesity prevention policy in Québec, namely the GAP, and how did their advocacy practices affect the policy process?*". We also seek to identify barriers to and enablers of dietitians' advocacy actions.

We developed a conceptual framework combining the Advocacy Coalition Framework, ACF (Sabatier & Weible, 2007 in Jenkins-Smith et al., 2014) with a political analysis model (Champagne et al., 1991) to build explanation on the GAP adoption (Appendix I). The ACF advances that there are competing coalitions within a policy subsystem that marshal resources and behave strategically to have their own policy options adopted. Actors within a given coalition share the same core beliefs and coordinate in a substantial way. The policy subsystem is embedded in a

larger context and accordingly is influenced by contextual factors that favor or constrain actors' strategies. Those factors can be relatively stable or more dynamic in nature (Jenkins-Smith et al., 2014). The political model was integrated to the ACF to analyze the political interests and goals of policy actors, which is less emphasized in the ACF. The model stipulates that actors' goals and political interests are fundamental in understanding actors' strategies. Actors are motivated to behave based on their political interests and goals (Champagne et al., 1991). The ACF recommends adopting a long-term perspective, at least a decade, in order to understand contextual events, actors' strategic behavior and patterns and logic of policy change (Jenkins-Smith et al., 2014). Therefore, the time boundary of the study was delineated to 1992, the year when the Government of Québec adopted its first Health and Well-Being policy with a time frame of ten years (*Politique de la santé et du bien-être*, *PSBE* - MSSS, 1998).

To identify advocacy practices, we used the advocacy model developed by Alive & Thrive, A&T (Alive & Thrive, 2016). Alive and Thrive is an initiative to prevent illness, save lives and ensure healthy growth and development as a result of improving practices related to breastfeeding and complementary feeding (A&T, n.d.). A guide for public health advocacy actions has been developed by A&T based on infant and young child feeding advocacy experiences in Southeast Asia (A&T, 2016). Advocacy actions follow a four-part *Process for Policy Change*: (i) establish and sustain partnerships (ii) develop the evidence-base, (iii) develop messages and materials and (iv) build consensus. Other public health advocacy efforts can benefit from the lessons and results of these initiatives (Alive & Thrive, 2016). Therefore, the A&T Process for Policy Change can be helpful in identifying dietitians' advocacy strategies in the case of the GAP.

The data that was collected initially for the case study were used to build explanation around the GAP adoption. Data sources for the case study included semi-structured interviews and documents. Variables and data sources are available in Appendix II. An interview guide was developed based on the concepts under the ACF and the political analysis model. The interview guide was adjusted based on the contribution of the key informants to the GAP. The policy change hypothesis (Weible and Nohrstedt (2012, 133) in Jenkins-Smith et al., 2014 p.203) of the Advocacy Coalition Framework was tested by comparing case study findings against the change hypotheses in an iterative way. The political analysis model (Champagne et al., 1991) supplemented the ACF based analysis to explain policy change (Appendix I).

Key informants were selected based on their GAP contribution through a snowball sampling technique. A principal policy actor who was member of the think tank GTPPP and became later the national GAP coordinator (2007-2012), validated the actors' list we had developed. Semi-structured interviews were conducted with key informants (n=25) who contributed to the GAP through advocacy, elaboration, development and implementation. Among the 25 key informants, eight (32%) were dietitians practising in public health in various settings at the provincial, regional and local levels. Some of these dietitians participated fully and actively in the complete policy cycle, from the agenda-setting to evaluation and termination of the policy (n=2), including the national GAP coordinator (2007-2012). The majority (n=5) were members of the Provincial working group on weight-related issues in Québec (*Groupe de travail provincial sur la problématique du poids*, *GTPPP*). The GTPPP was created by the Public Health Association of Québec (*Association de la santé publique du Québec, ASPQ*) in the year 2000 as a think tank and advocacy group on weight related-problems in Québec. Two of the interviewed dietitians were GAP authors. Appendix III presents the demographics of dietitian key informants by institution, affiliation, profession, position and level of studies.

Documents were the second data source. A document database was built for our initial case study using three sources: (i) organizational and ministerial documents; (ii) briefs, bills, committee reports and other documents of Québec National Assembly; (iii) unpublished documents such as reports, meeting minutes and other documents provided by key informants. A list of institutions engaged in obesity prevention in Québec we had developed earlier helped orient document identification and retrieval. Websites of the identified institutions were consulted. These included governmental and non-governmental organizations, Québec National Assembly, professional regulatory bodies, academic institutions and private sector organizations. We reviewed all position papers, policies, guidelines, press releases, scientific opinions on obesity prevention of concerned ministries and organizations. For the purpose of data triangulation, we reviewed other documents, such as annual reports and strategic plans, when needed. Some key informants were asked to express their comments on a draft version of this article. Selection of key informants was based on diversity and representativeness.

Data Analysis

The main researcher transcribed the interviews using Dragon software. We used NVivo 11 Pro to analyze verbatims. The main researcher analyzed the verbatims. A coding guide was developed based on the case study conceptual framework. We used thematic codes corresponding to the variables of interest to analyze actors' beliefs, resources, goals, strategies, opportunities and constraints including conflicts. The thematic codes pertaining to dietitian key informants were extracted from the coding pool of key informants and reanalyzed. Accordingly, thematic codes related to Sabatier's three-tiered belief structure, resources, strategies, constraints and opportunities were reanalyzed. Conflicts, a subtheme under constraints was reanalyzed to code for role conflicts experienced by dietitians. Ben-David's (1958) definition of the concepts of role and role expectations were utilized in our analysis. A thorough definition of concepts related to role and role conflict is presented later in this section. We also reanalyzed external and internal events looking for events or windows of opportunity that affected dietitians' advocacy. Variables related to the policy issue were also reanalyzed to be able to identify the internal policy framing within the restricted policy community of dietitians. The semantic structure that was created earlier to analyze actors' political and belief-oriented strategies and their contribution to policy change was reanalyzed for dietitians' policy actors.

Within the concrete social structure, three systems of role expectations mutually interact and connect to the professional's role: (i) the society's general occupational system that integrates the institutionalized role; (ii) the professional system that integrates the education and training of the professional as well as the scientific standards of their work and (iii) the service-oriented system that integrates the general qualities of the professional. A professional might be connected to other systems, however participation in those systems is not structural, in the sense that it does not derive from the professional's accepted role definition; participation is rather incidental (Ben-David, 1958).

Ben David (1958) defines the role as the functional position of a unit, be it an individual or a group, in a social system (Ben-David, 1958 p.272). Expectations related to a role depend on the institutional definition of this role and are determined by it. They are inclusive of most systems to which the role relates. For instance, for the professional, institutional expectations of the role

include “science”, and “service”. They may also include expectations that are incidental to the role from the standpoint of the institutional definition (Ben-David, 1958).

Findings

The following section presents our findings concerning the role of a group of policy actors, specifically dietitians, in the policy process related to the GAP. The questions we seek to answer are of the descriptive type (i) What are the belief systems and networks of dietitians? (ii) What are the advocacy strategies of dietitians? In this article, we also seek to answer two explanatory questions: (i) How did dietitians’ advocacy influence the elaboration and the adoption of the GAP? (ii) How did enablers and barriers to dietitians’ advocacy influence the GAP elaboration and adoption?

Context

Earlier findings revealed that political attention to obesity increased in the early 2000s. After a period of low political attention prior to the year 2000, increased political attention reached a peak between 2004 and 2007 and culminated with the adoption of the GAP in 2006 and the Act to establish the fund for the promotion of a healthy lifestyle in 2007. Although there was an increase in political attention around the year 2000, this did not necessarily translate into a common definition of the problem and an agreement on a vision around its effective solutions among various policy actors. Around the year 2005, data on the steep rise in obesity prevalence was alarming. In parallel, the civil society was in favor for increased government preventive approaches (ASPQ, 2004c). At the international level, health authorities requested governments for urgent action to address the so-called obesity epidemic (WHO, 1998; WHO, 2000; WHO, 2004). These factors mandated an equal reaction from policy elites. At the time, however, obesity was mostly regarded as an individual, clinical problem with which the individual should deal by improving their control over their diet and physical activity level (GTPPP, 2005). This perception prevailed among policy makers as well (Bernier, 2011). The influence of environments in promoting weight gain and obesity was emphasized in the 1990s (Tremblay, 1998; Gill, 1997; Cohen et al., 2000; in Schaefer & Mongeau, 2000). A thorough model for understanding and analyzing obesogenic environments emerged in 1999 (Swinburn et al., 1999). Such model was proposed to assist in improved need identification and priority settings for interventions. Cohen et

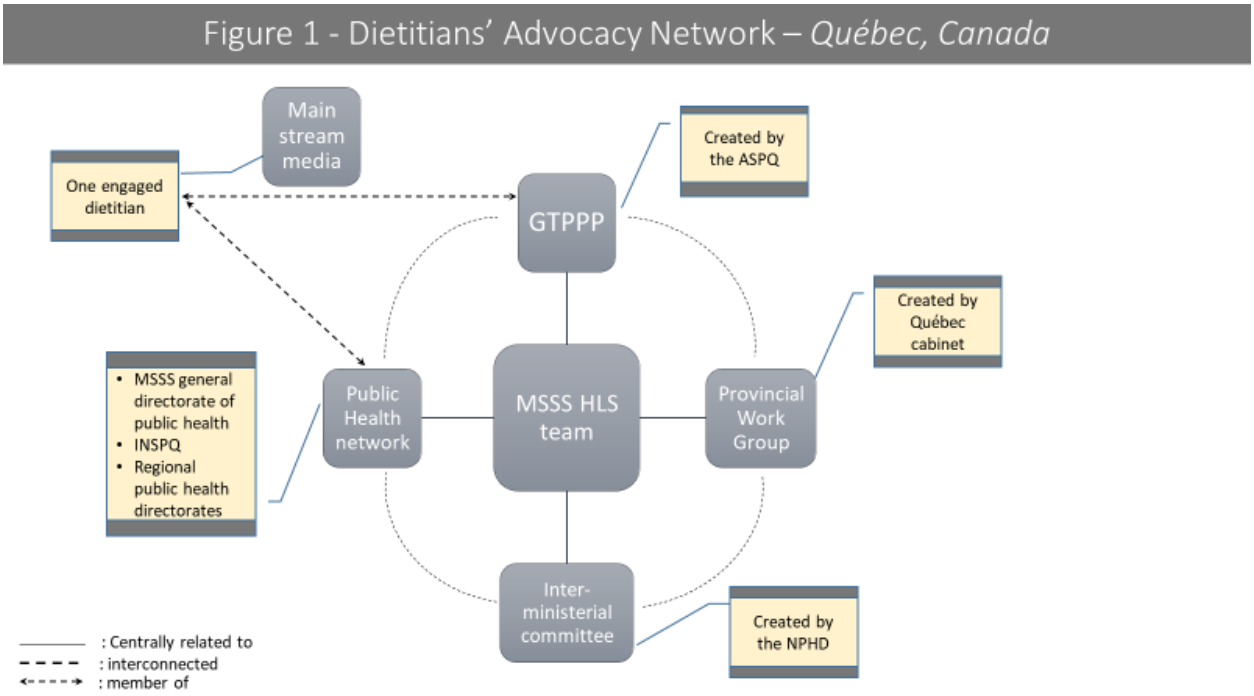
al. (2000) model emerged as well as a structural model for health behavior. The model stipulates that there are structural factors that interventions need to target so that high-risk behaviors are reduced or not adopted all together. Collective responsibility for obesity and the concepts of obesogenic and enabling environments were significantly emphasised in the documents produced by the GTPPP (GTPPP, 2003). The concept of enabling food and physical activity environments was new and innovative in the sense that many actors whether in the health or non-health sectors were less familiar with it. It was far from being integrated into most policy actors' beliefs, let alone their interventions and plans.

> *"it was in 98, I began to be interested in public health issues and I was like looking for something there, something to hang on to, to follow my belief and at that time here in Québec and almost everywhere there was no public health perspective on obesity, there was none because it was a problem that can be described as orphan, meaning that in public health we do not care about it. We care about tobacco, we deal with road accidents, we take care of anything, HIV, but we do not care about obesity as a public health problem. Obesity is a clinical problem that physicians are interested in, dietitians or kinesiologists, but especially a problem that has a very bad perception because we have the impression that we are not able to do anything about it. The treatments are not effective there is nothing to do, people have no will and then that's it."*
>
> *Government Consultant (2016)*

Dietitians were major actors in the obesity prevention policy subsystem in Québec. The shared core beliefs of dietitians regarding weight problems in Québec guided dietitians' advocacy strategies. Earlier findings analyzing policy actors' beliefs from an Advocacy Coalition perspective (Sabatier, 1987) have in fact demonstrated that dietitians advocating for the GAP adoption were part of a larger advocacy coalition, the Enabling Environments Advocacy Coalition (*EEAC*). This coalition believes that obesity is an epidemic that is likely to erode the government's budgets if the status quo is maintained. The problem lies in the increase in the population mean weight. At the same time, the problem is two-folded. Obesity is only one facet of the weight problems that also include excessive concern with weight. The main cause are obesogenic environments and those environments promoting extreme thinness and a unique beauty model typical of extremely thin women or muscled men. Even though population strategies to modify social norms and increase awareness are still to be maintained, however they have proven insufficient. Accordingly changing environments through the adoption of public policies is the line of conduct governments should follow to curb obesity at the population level and to all population

groups. Governments, under the leadership of the health sector, must adopt public policies in support of enabling environments so that healthy choices are made the easy choices. The EEAC was a highly structured coalition with coordination channels well established among its various constituents. These channels are illustrated in figure 1.

Figure 7. Article 2 - Figure 1 Dietitians' Advocacy Network – *Québec, Canada*



At least five channels of dietitians' advocacy networks through the EEAC were identified (Figure 1). One advocacy channel was through the healthy lifestyles unit (*HLS*) of the general directorate of public health of the MSSS and its network. The other channel was through the think tank GTPPP. The third was through a provincial working group created by Québec cabinet to address prevention in youth, the *Perrault Working Group*. The fourth channel was through an inter-ministerial working group that the national public health director (*NPHD*) convened for the GAP elaboration and the fifth was through the main stream media. Central to those channels was the healthy lifestyles unit at the general directorate of public health at the MSSS. In fact, the HLS was the hub for the interaction of almost all groups and committees involved in the policy issue.

Three other coalitions with variable coordination mechanisms were present in the landscape of dietitians' advocacy. An Agri-Food Advocacy coalition (*AFAC*) who believed that

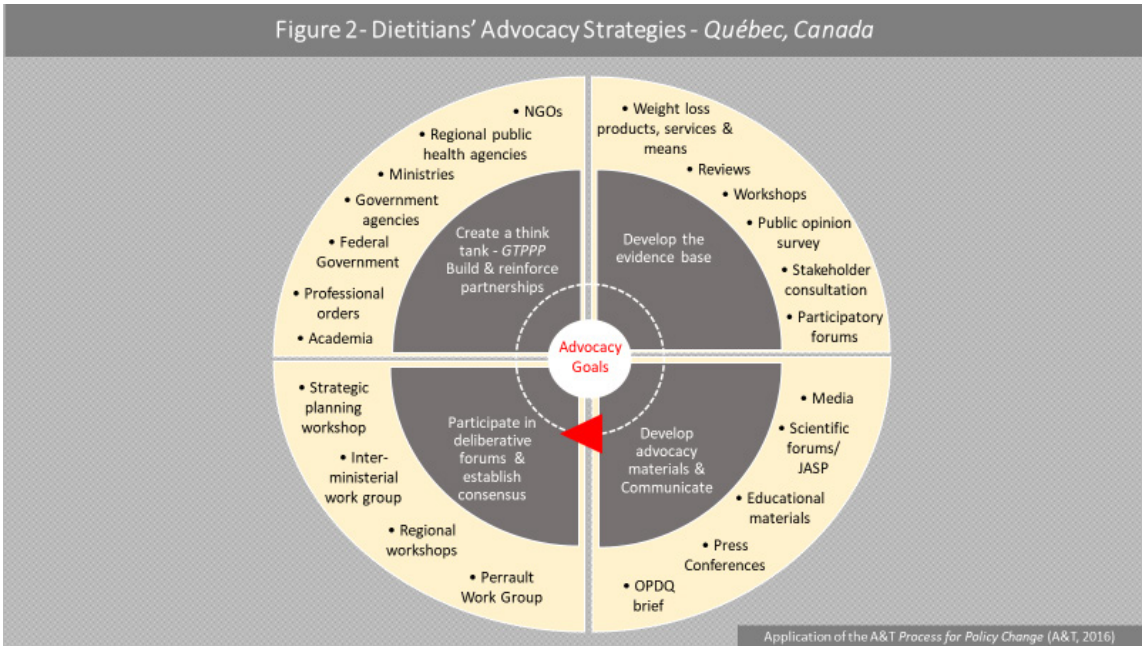
unhealthy lifestyles are the leading cause of obesity. Accordingly, the solution lies in improving one's diet and physical activity levels. Solutions are borne to individuals regarding their choice of diet and physical activity level. Another coalition was the Community Development Advocacy Coalition (*CDAC*). This coalition believed that unhealthy and sedentary lifestyles have devastating health effects, including obesity. They should be an early prevention target. Causes are variable and depend on the diagnosis in the local community. Accordingly, solutions would follow, and they should aim to empower the local community. Among the proposed solutions are approaches to promote the practice of physical activity among children in disadvantaged settings. The fourth coalition was the Healthy Lifestyles Promoting Advocacy Coalition (*HLPAC*). This coalition believed that obesity is the result of unhealthy lifestyles. The solution lies in promoting healthy lifestyles, children being the priority target group. Healthy lifestyles should be promoted for general health and well-being, not specifically or solely for obesity prevention. Healthy lifestyles, and specifically physical activity, are important to prevent many social and health ailments, not only obesity. The driving force for the desired behavior change should be intrinsic motivation rather than the fear of becoming obese or developing chronic diseases. This message can be reinforced through social marketing campaigns to improve social norms, namely people's attitudes towards healthy lifestyles.

Strategies

In all the coordination channels identified earlier, dietitians identified key actors, leverage points, built collaboration networks and partnerships, advanced advocacy strategies and tactics and communicated their findings and recommendations to stakeholders. It is worth noting that using either channel was not mutually exclusive. Some dietitians made even use of the five channels altogether for their advocacy activities. This has fostered communication, coordination, cohesion and alignment of goals among dietitians' advocates. It has also generated a common understanding of weight issues among dietitian advocates and accordingly reduced problems associated with collective action. Through their advocacy strategies, dietitians aimed to build and communicate a public health perspective and understanding of the obesity epidemic, draw political and public attention to it, so that a governmental plan is developed based on this perspective. The prospective plan ought to focus on promoting enabling environments as a priority policy option to prevent obesity. Advocacy strategies of dietitians developed through an iterative and comprehensive

process, similarly to the A&T *Process for Policy Change*, that included four components: (i) create a think tank, the GTPPP, build and reinforce partnerships; (ii) develop the evidence base; (iii) develop advocacy materials and communicate and (iv) participate in deliberative forums and establish consensus (Figure 2). The main strategies under each component are described under the following section.

Figure 8. Article 2 – Figure 2 Dietitians' Advocacy Strategies – *Québec, Canada*



Create a Think Tank - GTPPP - Build and Reinforce Partnerships

In the year 2000, engaged and motivated dietitians working on obesity prevention joined efforts and created a cohesive and organized core group of actors. The *Provincial working group on weight-related issues in Québec* (*Groupe de travail provincial sur la problématique du poids*, *GTPPP*) was created by the Public Health Association of Québec (ASPQ) in response to the rising obesity rates in Québec (GTPPP, 2003; GTPPP, 2005). Dedicated dietitians from the group worked on networking, recruiting group members and building partnerships. The initial core group of dietitians enlarged to a community of actors of various disciplines, institutional affiliations, experience and expertise. The GTPPP was a pioneer in the obesity prevention landscape in Québec. Its works have contributed substantially to the GAP.

The concept of enabling environments for health was at the core of the GTPPP works. However, not all GTPPP members came from public health background and for some, the concept was new. Nevertheless, the less familiar concept was perceived as innovative and was quickly adopted by recruited members. The GTPPP rapidly reached a consensus among its members on a common perception of the problem and vision for its solutions. Obesogenic environments and other environments promoting unique beauty models were the fundamental cause of weight-related problems. Thus, enabling environments would be at the core of the solutions.

> *"…There has been a journey through the GTPPP, it still lasted several years […], then, in the end there was a real cohesion […] the first condition […] was first to share this vision very strongly inside the group and then throughout the years it happened"*
>
> *Government consultant (2016)*

Members of the GTPPP were recruited through various channels, some owing to previously established networks and partnerships among dietitian advocates and their partners. Central to those channels was a core policy actor: a public health dietitian practising at the HLS unit at the MSSS. This actor also behaved as a policy mediator at various times and could be considered a policy broker while at the same time being a policy advocate. A policy broker is an actor in a policy subsystem whose role is to reduce the level of conflict by helping coalitions reach reasonable compromise (Sabatier, 1987). The HLS was the hub for the interaction of almost all the groups and committees involved in the policy issue. It was represented in the GTPPP by its public health dietitian. Some professionals from regional public health directorates sat on the GTPPP as well.

Some of the roots of the GTPPP networks are decades old and date back to as early as 1982. Historically, efforts to change the status quo in weight management started in 1982 with the creation of the program "About Losing Weight" (*Choisir de maigrir?*), establishing a new weight paradigm. The program, developed by two dietitians, promotes a holistic approach of self acceptance, a more realistic perception of weight and discourages resorting to traditional weight-loss methods that promote potentially harmful quick-fixes (EquiLibre, n.d.a). The program "About Losing Weight" was later integrated to the GAP as a local health services intervention (MSSS, 2006) after a newer version of the program emerged in 2003 following evaluation and improvement of the first edition (EquiLibre, n.d.a).

While sowing the seeds for action started as of 1982, it was not until 1991 that the sporadic actors were able to structure their collaboration under the auspices of a newly created organism. In 1991, dietitians, along with other health professionals who were dissatisfied with the clinical management of obesity, joined efforts and created what was called: Collective Alternative Action on Obesity (*Collectif action alternative en obesité, CAAO*). Convening as of 1986 to change the weight loss approach, the group gathered multidisciplinary members from almost ten organisms and many community health centers, all of whom were trying to intervene on obesity prevention through a global approach, an approach that takes into consideration mental and physical health. The group was incorporated under the name *EquiLibre* in 2004 (EquiLibre, n.d.a). Some members of EquiLibre participated to founding the GTPPP and inevitably found themselves at the GTPPP work table and members of the new think tank.

In addition to EquiLibre, other organizations, ministries and government agencies participated to the GTPPP. Two government agencies, the National Institute of Public Health (*INSPQ*) and the Sport and Leisure Secretariat through its Kino-Québec members participated to the GTPPP. Kino-Québec was a program run jointly by the MSSS, the regional directorates of public health and the Sport and Leisure Secretariat of the Ministry of Municipal Affairs, Sports and Recreation (Kino-Québec, 2000). In addition to dietitian members from the INSPQ, the GTPPP benefited from the expertise of another INSPQ participant who provided a public health perspective of population strategies, coordinated approaches in addition to knowledge and experience in tobacco control policies. The Heart and Stroke Foundation of Québec (HSF) had a dietitian member sit at the GTPPP. A pre-existing collaboration between the MSSS with the HSF on obesity prevention through a working committee and the interest of the HSF to have a grassroots group work on obesity favored their cooperation.

The GTPPP also collaborated with Professional regulatory bodies, whether through its members' professional or institutional affiliations or through its own projects. The GTPPP had identified some professional regulatory bodies that are directly concerned with weight problems as main stakeholders (GTPPP, 2005). The GTPPP emphasized their responsibility in defining the roles and the contribution of their members to weight-related problems (GTPPP, 2005). Whether through the basic curriculum or training of their members, definition of competencies and scope of practice, promotion of interdisciplinary practice, developing guidelines and best practices,

endorsing others, lobbying the government to ensure resources are adequate or requesting industry regulation all were avenues for professional regulatory bodies to act on the policy issue according to the GTPPP (GTPPP, 2005).

The GTPPP also sought to recruit actors with research expertise in body image, physical activity and clinical management of obesity. Accordingly, researchers from various Québec universities were recruited. The GTPPP also engaged policy champions from the tobacco policy to provide support in the agenda-setting of weight-related problems. Those champions could draw from their tobacco experience and contribute with their knowledge and experience. The GTPPP collaborated with federal agencies to request funding for its projects. The group requested funding from Health Canada within the Prevention and Promotion Program of the *Canadian Diabetes Strategy*. The GTPPP formed the backbone of the Enabling Environments Advocacy Coalition, EEAC, the dominant coalition that advocated for the GAP. Besides, its members had an influence and could lobby in their own organizations. As such, they were the delegates and potential change agents for the adoption of the new enabling environments paradigm. The GTPPP was mostly composed of dietitians' members.

Develop the Evidence-Base

Dietitians' advocates worked to develop the evidence base on weight related problems, defining them, their causal factors and proposing solutions to address them. Developing evidence was a continuous and iterative process from the starting point of situation mapping and analysis to furthering policy recommendations. Situation mapping and analysis was an ongoing process; parameters and surveillance data related to weight problems were constantly monitored, evaluated and updated (GTPPP, 2003; GTPPP, 2005). The evidence dietitians' advocates developed fell in two categories: (i) original research conducted in Québec and (ii) review of existing scientific evidence base including international and national recommendations. In the following section, we will highlight the major milestones and contributions of dietitians to the development of evidence on weight-related problems. From early evidence development, to GTPPP and ASPQ projects, to concomitant activities carried out by the public health network, engaged dietitians helped develop and consolidate the evidence base on weight-related problems in Québec.

Early Evidence Development

Dietitians' advocates first started reviewing and consolidating the state of knowledge on obesity and excessive concern with weight. Their aim was to improve the understanding of the problem and increase the awareness of various policy actors including policy makers so that they take action (Schaefer and Mongeau, 2000). Their first comprehensive review was entitled "L'obésité et la préoccupation excessive à l'égard du poids" and was published in the year 2000 (Schaefer and Mongeau, 2000). The new weight management paradigm was introduced in the review and was compared to the traditional weight loss paradigm. The authors also reviewed an evaluation of the application of the new weight management paradigm worldwide. National strategies from around the world were reviewed as well, along with the WHO recommendations. The Ottawa Charter was proposed as a framework for action together with the obesity management spectrum of the WHO. A major recommendation following the review was the call for a governmental plan on weight issues. Another major recommendation was the request to create a working group on weight issues with the mandate to elaborate the governmental plan (Schaefer and Mongeau, 2000). This review represented a comprehensive situation analysis that helped identify advocacy needs. It laid the foundational stone for the GTPPP development and works that followed.

GTPPP Reviews and Projects

Created in the year 2000 by the ASPQ, the GTPPP had the dual mandate of developing a common vision around weight-related problems and proposing an action plan to address them (GTPPP, 2003). The GTPPP's contribution to improving the understanding of weight-related problems and setting the grounds for action in Québec was remarkable. Through research and review, the GTPPP defined the problem and its causal factors, identified policy stakeholders and their roles, prioritized actions and set conditions for their success. The GTPPP pulled the alarm trigger indicating it was high time to act on environments in Québec and any inaction would send a wrong signal that the status quo was a viable option. The GTPPP defined the conditions that are crucial for success, most importantly the political and social will power so that needed human, material and financial resources are deployed (GTPPP, 2003). The GTPPP works represented valuable tools that they made available to various audiences including public health professionals and decision-makers.

With respect to the problem definition, the GTPPP pointed out to two important weight related issues that were relevant in the context of Québec. Whereas excess weight was one side of the problem, the desire for extreme thinness was the other side of the medal (GTPPP, 2003). Another annoying phenomenon in Québec was the increase in the use of weight loss means, products and services, with all their associated risks and serious health consequences. In addition, they lead consumers into the vicious circle of dieting, characterized by a rapid weight loss followed by weight gain, driving them to gain weight in an escalated manner (GTPPP, 2003).

With respect to causes, the GTPPP identified the social change that had occurred during the previous thirty years to be the perpetrator of the changes in the population's lifestyle. The GTPPP adapted the obesity causal map developed by Ritenbaugh et al. (1999 in GTPPP, 2003); the map shows that obesity is in fact due to an interplay of biological and environmental factors, the latter being the contributors to the actual obesity epidemic (GTPPP, 2003). Food consumption and energy expenditure, the determinants of energy balance, are affected by macro, meso and micro environmental factors corresponding to the international and national, the community and the individual levels respectively (GTPPP, 2003). Changing the environment is the solution the GTPPP advanced. This meant that healthy choices should be easier to make whereas unhealthy ones should be harder (GTPPP, 2003).

In order to identify concerned sectors and propose viable solutions, between 2002 and 2005 the GTPPP launched a large project of review and consultations: *Analysis and Identification of Strategies aiming at the establishment of enabling environments for the prevention and reduction of weight related problems*. Data collection and a thorough analysis of weight problems in Québec were performed under this project (GTPPP, 2005). The project's aim was to identify those environmental actions with the highest potential for prevention and reduction of weight related problems, and in all sectors (Mongeau, 2004b). The project's objectives were firstly to conduct a thorough analysis on every concerned sector so that barriers and facilitators to actions are identified; secondly, to review and validate the actions with the largest potential impact and thirdly to document every step of the process so that it can be replicated (Mongeau, 2004b). The three concerned sectors with weight-related problems were identified as (i) *the agri-food* including agriculture, food processing, distribution and marketing, catering businesses and cafeterias etc.; (ii) *the socio-cultural* sector including the fashion industry, the media, publicity, body industry

and the reconciliation of work and family etc.; (iii) *the built environment* including urban planning, land management, transportation planning and architecture etc. (GTPPP, 2003; GTPPP, 2005).

The framework for action according to the GTPPP should be the *Ottawa Charter for Health promotion*. The Group recognized that the five synergistic axes namely enacting public policies, creating enabling environments for health, reinforcing community action, individual capacity building and reinforcing health services form the basis for public health practice in Québec. Yet these axes were not equally utilized. Much more emphasis was placed on capacity building as compared to the other axis leaving a subpar utilization of the public policies and enabling environments axes (GTPPP, 2003).

The Group called for complementary actions and shared responsibility among the individual, the community and the government to achieve changes in environments. The Group proposed actions for each of the three sectors identified earlier based on the five axes of the Ottawa Charter. The Group also called for the integration of actions targeting weight problems in the public health action plans of each of the three levels of government the local, regional and national (GTPPP, 2003). Those plans would draw their principles and scope from the National Public Health Program in Québec 2003-2012.

Primary research was conducted by the GTPPP as part of its enabling environments project. Four studies were conducted: (i) analysis of the sectors concerned with weight problems; (ii) a public opinion survey; (iii) a stakeholder consultation and (iv) participatory forums. The analysis resulted in the identification of the most promising interventions that were later validated with the public, with key actors from the three sectors and with other concerned community actors (GTPPP, 2005). The public opinion survey on obesity perception was conducted in 2005. The survey inquired on the public's perception of obesity and its solutions (GTPPP, 2005). Stakeholders' opinions of the three sectors: the *agri-food*, the *socio-cultural* and the *built environment* took place between 2003 and 2004. The GTPPP conducted two group discussions with these stakeholders. The discussions included actors from the public and private sectors and aimed at developing a vision of the collective responsibility in preventing weight-related problems. The discussions also sought to validate the actions that were inventoried earlier following the sectoral analysis (GTPPP, 2005). Lastly and under the same project, local and regional socio-economic actors were solicited. Five participatory forums took place in various regions in Québec between 2004 and 2005, many

of them coordinated by the regional public health directorates. The forums gathered almost 200 participants from various sectors: education, transportation, agri-food, public health, healthcare services, municipal, associative and business sectors (GTPPP, 2005).

The GTPPP put forward various policy actions to be borne by several sectors. Its recommendations for action encompassed the following sectors: the ministry of health and social services along with its network, the public health network, professional regulatory bodies, schools and childcare settings, work and municipal settings, the agri-food, sociocultural and research sectors and the associative community. The Government should be leading and coordinating the activities in all sectors (GTPPP, 2005). Still, GTPPP members were compelled to recommend priority actions, mainly to guide actors in setting their priorities and provide them with a starting point. "There was so much pressure to try to steer people towards more precise actions to the extent that in 'The call to action' we committed ourselves […] We said here are 5 priorities" - Government consultant (2016)

Accordingly, the GTPPP prioritized five interventions: (i) implement food policies at schools and childcare settings; (ii) intensify the actions aiming at modifying the social and physical environment to promote a more active lifestyle; (iii) review the regulations on marketing to children; (iv) establish regulation on the services, products and weight-loss means; (v) establish new rules for financing research on weight related problems (GTPPP, 2005). The GTPPP recommended an action plan that should be managed by an independent authority such as a government agency (GTPPP, 2005). This way it would protect the plan from political interests and would still allow to exert pressure on elected officials.

ASPQ-INSPQ Project

In parallel to the GTPPP works, the ASPQ, in partnership with the INSPQ led a project of "Education for healthy weight control practices as a strategy to promote a healthy lifestyle". Under this project and in collaboration with the INSPQ, the ASPQ conducted a market analysis on weight loss products services and means in Québec (*Produits, services et moyens amaigrissants, PSMA*) (Mongeau, Vennes and Sauriol, 2005). The inventoried products were compared to safety and security criteria established following a literature review and validation by a committee of experts. A dietitian advocate co-authored the study. She was also a member of the expert committee along

with another GTPPP dietitian (Mongeau et al., 2005). Less than 1% of inventoried PSMA was based on a comprehensive approach of weight management (Mongeau et al., 2005). This finding along with the increased accessibility of the highly mediatized PSMA and the safety and health risks associated to them confirmed the relevance of the development of educational tools on PSMA.

> *"Ultimately our intention was to try to get some regulation on that [in reference to PSMA]. There is very little experience in the whole world about the control of weight loss products, services and means, very little. There are some articles that have been identified and some countries that have tried to regulate. It is very difficult, the lobby of private companies, and very powerful. Then the problem, the consequences, it seems like derisory, you know, you can not have a few women who get sick, it interests whom? You know? […] But our goal, we could not present the project with this agenda because it had to be educational. We intended to use the program, to do the educational program […] and then after that to try to find ways to put lawyers […] on the development of a bill, that was our intention. Meanwhile, we produced guides for doctors, we made a guide for women, the public, we did a little comic book for young people, we produced a lot of very interesting things and of a very good quality"*
>
> *Government consultant (2016)*

Public Health Network

Concomitantly, the public health network was highly mobilized. The HLS unit of the general directorate of public health at the MSSS launched workshops with their network, namely the regional public health directorates and the National Institute of Public Health. The aim of the workshops was to develop a consensus on recommendations for effective interventions related to clinical preventive practices (2005a), physical activity environments (2005b), food environments (MSSS, 2005c), social norms and media (2005d) among others. These axes were the precursors of the GAP axes. Dietitians participated to every workshop. Namely INSPQ/GTPPP dietitians and HLS unit dietitians at the MSSS actively participated in the workshops (MSSS, 2005a; 2005b; 2005c; 2005d). The workshops generated a mapping of the actual food and physical activity environments as well as interventions. Recommendations for future action were also issued (MSSS, 2005a; 2005b; 2005c; 2005d).

> *"We were very much inspired by the determinants and then the work done in other countries, the recommendations of the WHO and of course the Call to Action […] So, we held the workshops which gathered around fifteen people*

from the public health network to come up with recommendations […] So, we did not start from a blank page when the command arrived."

Government professional (2016)

Concurrently, and in support to the HLS unit at the MSSS, a literature review on national plans addressing obesity in countries of similar contexts across the globe was being produced. A INSPQ/GTPPP dietitian co-authored the review (Jalbert and Mongeau, 2006). The MSSS HLS unit and its network defined the framework of a future governmental action plan. Ongoing works on an integrated model of chronic disease management and prevention led them to identify and adapt the Cohen framework of action (Cohen et al., 2000 in MSSS, 2006) after a thorough review of frameworks for action. This model was also aligned with what the GTPPP was proposing at the time and with the scholarly recommendations of scientific bodies that promoted working on structural factors to facilitate healthy choices. Cohen conceptual framework guided the GAP proposed interventions (MSSS, 2006).

Dietitians' advocates shared common core beliefs on weight-related problems. Through diverse networks and collaboration channels they were able to cooperate to influence the policy process. As such, along with their allies, they defined the Enabling Environments Advocacy Coalition, the dominant coalition in the obesity prevention policy subsystem in Québec. We were able to identify their core beliefs and to map them based on the advocacy coalition framework belief structure (Sabatier 1998). Table 1 summarizes the core policy beliefs of dietitians within the EEAC.

The year 2005 was a busy year for dietitians' advocacy. Whether within the GTPPP, the ASPQ or the HLS unit of the MSSS along with its public health network, dietitians performed the research and documentation work and generated the evidence on weight related problems in Québec. As such, they set the grounds and the scientific evidence for the works that were to be led by the provincial group created by Québec cabinet to work on prevention in the youth, the *Perrault Working Group*.

Tableau I.Article 2 - Enabling Environments' Advocacy Coalition Beliefs

Table 1 - Enabling Environments' Advocacy Coalition Beliefs *Dominant Advocacy Coalition, Obesity Prevention Policy Subsystem - Québec, Canada*		
Policy core belief components (as related to weight problems and healthy lifestyles)*		Enabling Environments' Advocacy Coalition Beliefs
Seriousness of the problem	Obesity is a public health problem, an epidemic	●●●
	Unhealthy lifestyles are a public health problem	●●●
	Weight problems include: obesity & excessive concern with weight	●●●
	Urgent action is needed	●●●
Basic causes	Biologic / individual causes	●
	Behavioral causes	●
	Environmental causes	●●●
Respon sibility	Individual responsibility for action	●
	Collective responsibility for action	●●●
Value priority	Social justice, reduction in health inequalities	●
Priority group	Priority to disadvantaged / vulnerable populations	●
	Priority to children and youth	●
	Priority to children, youth & families	●
	Priority to population as a whole	●●●
Policy preferences	Health services solution	●□
	Behavioral solutions	●
	Physical environment solutions	●●●
	Social environment solutions	●●●
	Political environment solutions (public policy)	●●●
	Economic environment solutions (e.g. taxation and subsidies)	●●●
Distribution of authority	Authority distributed between national, regional and local levels	●●●
	Authority given mostly to local level	□
	Inter sectoral collaboration	●●●
	Private sector role	Compulsory
	Whole of government	●

*: healthy lifestyles only include a healthy diet and a physically active lifestyle; weight problems include overweight, obesity and excessive concern with weight

●: Belief component explicitely stated; number depends on frequency/intensity

□: Against

Develop Advocacy Materials and Communicate

Dietitians' advocates created various advocacy materials addressed to diverse audience. From educational flyers, brochures, booklets and strip cartoons targeting the general public as primary audience to guide books, conferences, workshops and thematic days' advocacy materials and documents targeting a more specialized public health audience, the GTPPP voiced their

concerns in several forums and platforms. They also performed, organized or collaborated to numerous scientific communications in various professional forums. In short, the insights gained through the research and review work of dietitians' advocates helped them communicate their findings, develop advocacy materials and convey those tools to various audiences.

First Document

Diffusing the first comprehensive document on weight-related problems was among the first major communication strategies put forward. Through the careful selection of a document review committee and the launching of the document during the annual public health days in Québec (*Journées annuelles de santé publique*, *JASP*), the dietitian co-author aimed to increase awareness on the policy issue, engage new actors and seek allies. Stated differently, she was contributing to the agenda-setting of the policy issue. In addition, a press conference was organized for the event.

> *"… We wrote it [the document] to sensitize public health decision-makers we know, to start with, to have friends with us, to be able to move forward and at the time, I did not know it but I was in […] the agenda setting […] first, it takes a reading committee […] on the reading committee you choose the people, very important, the list of people who will read the document, and these people, you are likely to convince them of something, sensitize them and then allow them to be open to new problems…"*
>
> *Government Consultant (2016)*

A Call for Mobilization - A Call for Action

Later, the GTPPP was created and the Group took the lead. The Group issued two documents corresponding to its dual mandate of developing a common vision on weight-related problems and proposing an action plan to address them (GTPPP, 2003). The first document « A call for mobilization » (*"Les problèmes reliés au poids au Québec : un appel à la mobilization"* - GTPPP, 2003) and the second, « A call for action », (*Les Problèmes reliés au poids au Québec : un appel à l'action)* were published in 2003 and 2005 respectively. The "A call for action" was launched during the JASP in the presence of the directors of the regional public health directorates and the national public health director (NPHD). The event garnered a large media coverage and benefited from a press conference. In addition, one key informant had to give out multiple interviews in the press and other media on this document.

"… In fact, the last one [GTPPP document] was launched during the annual public health days with the presence of […] assistant deputy minister at the time and several directors of public health as well; we saw at that time that we started to have a lot of interest; there was a nice press coverage, then there was beyond the press coverage, the interest of the public health directorates, public health directors also…"

Government professional (2016)

Guidebook and Educational Materials – PSMA

Under the ASPQ project "Education for healthy weight control practices as a strategy to promote a healthy lifestyle", a *Guidebook on the principles of healthy weight management and on a critical analysis of weight-loss products and services* was developed with health professionals as main audience (Mongeau et al., 2005). This Guide was meant to be a source of accurate, up-to-date and relevant information and a reference to health professionals. It would enable them to inform and guide their clients so that they make informed choices (Mongeau et al., 2005). The Guidebook was endorsed by six professional regulatory bodies in Québec (the Ordre professionnel des diététistes du Québec, the Ordre des psychologues du Québec, the Ordre des infirmières et infirmiers du Québec, the Collège des médecins, the Ordre des pharmaciens du Québec, and the Ordre professionnel des travailleurs sociaux du Québec) along with a professional federation (the Fédération des kinésiologues du Québec). The professional regulatory bodies, college and federation committed to diffusing the document to their respective members (GTPPP, 2005).

Under the same ASPQ project, two educational guides were produced. The first one "What's up Jennifer?" (*«Ça va, Sabine? »* - ASPQ, 2004a) was addressed to adolescent girls and the second one "Losing weight… or be yourself?" (*«Maigrir… ou être comme je suis ?»* - ASPQ, 2004b) was addressed to adult women. These two guides were first distributed in 2004 to Women's magazines. Later in the same year, the MSSS carried out another distribution of the educational guide targeting adolescent girls in the network of local community service centres (*Centres locaux de services communautaires, CLSC*) and in Québec public health directorates. (Mongeau et al., 2005).

JASP - Annual Public Health Days

One important venue for public health professionals and other related professions is the JASP "Journées annuelles de santé publique" or Annual public health days. It is a two to four-day

professional forum that gathers all those interested in public health from all regions in Québec. It is organized by the National Institute of Public Health. Since 1997, this event has marked the calendars of public health professionals in Québec and has greatly contributed to training and knowledge transfer in public health in Québec. An analysis was done of the JASP programs between 2001 and 2006 looking for scientific communications related to lifestyles, weight problems and body image, namely thematic days, conferences, workshops and plenary sessions. The analysis revealed that weight problems were tackled at every single JASP program. Moreover, since 2003, more and more time was dedicated to the issue through thematic days addressing various components of the issue, whether causal factors, policy action, target population etc.

> *"We never missed training days at the annual public health days, because there was a lot of work to be done, it was necessary that all public health actors understand precisely, to create this movement […] everyone in their region must be convinced, master this new paradigm to be able later to disseminate and convince decision-makers and actors in their region. So, we used the annual public health days to do this and then, from year to year, we progressed..."*
>
> *Government consultant (2016)*

The year 2006, the year that marked the adoption of the GAP, was characterized by a thematic day on national obesity prevention plans. Whether collaborators or speakers, many of the GTPPP dietitians' advocates were omnipresent and had a marked contribution to the JASP. The annual public health days witnessed the launching of the GAP in October 2006 (MSSS, 2009).

OPDQ Brief

One major strategic communication carried out by the professional order of dietitians (OPDQ) was the brief they submitted to the National Assembly following the consultation on the access to healthcare and social services the newly elected government had launched in 2004 (OPDQ, 2006). The OPDQ reaffirmed its commitment to prevention as a fundamental intervention means. The OPDQ perceived it as the first avenue to ensure health system sustainability in Québec. The OPDQ voiced its concern regarding the absence or lack of emphasis on essential avenues for prevention in the consultation document. Accordingly, the OPDQ proposed complementary actions. Among others, three more avenues were proposed: (i) promoting enabling environments for health, (ii) fighting social inequalities and poverty by means of improving food security among others, and (iii) expanding the national food and nutrition policy the government intended to adopt in schools to all the settings and to the population at large. Most importantly, the OPDQ bill echoed

the recommendations of the Perrault Working Group, the provincial working group on prevention, and requested the government to implement them immediately. In fact, the Perrault Working Group recommendations were appended to the OPDQ bill (OPDQ, 2006).

Media

The high visibility of weight related problems attracted the media and the press. One dietitian was regularly interviewed and had many public appearances. This helped increase stakeholders' awareness, foster policy-oriented learning and mobilize the actors around this issue. The main stream media was highly involved in matters related to weight problems (GTPPP, 2003). One dietitian advocate, who was also a member of or collaborator to the working groups and networks identified earlier, had a lot of media interventions. With her high availability and accessibility, coupled with a solid research and knowledge base and remarked eloquence, she became a reference for the media. "How many hours I spent talking to reporters to help them prepare their research papers; I spent hours and hours…" - Government consultant (2016).

Her media interventions and the contributions of her research to understanding the policy issue and defining it as a fundamental public health problem contributed to her selection as the Scientist of the Year in 2006 (Radio Canada, 2007). Besides, she was perceived by most of the case study participants as one of the policy champions due to her remarkable commitment and contribution to advancing the policy issue over time.

Participate in Deliberative Forums and Establish Consensus

Dietitians' advocates had a major role in establishing consensus among stakeholders and policy actors. First, there was a need to establish consensus within the dietitians' community on the internal framing of weight-related issues. The GTPPP was the main forum that allowed for a unified voice regarding weight-related problems. The challenge then, was to engage other actors from other sectors, disciplines and decision-making levels. Argumentation using evidence, variable policy issue external framing depending on the partner, economic and development incentives, sustainability of health care system etc. were used among others to favor dietitians' advocates policy position.

In addition, dietitians' advocates engaged a key decision-maker in public health, the national public health director who rallied around the cause. As a matter of fact, the NPHD shared

their beliefs regarding the framing of the problem, its causal factors and solutions. In most deliberative forums, the national public health director was either a co-chair (Perrault Working Group), a chair (inter-ministerial working group), a collaborator (Strategic planning workshop) or a senior hierarchical authority (MSSS workshops with their network). Many of the case study participants perceived the NPHD as a policy champion given his commitment and his capacity to build and lead teams and accordingly advance the policy issue. The four deliberative fora mentioned earlier contributed highly to advance the policy issue. This does not however underestimate nor exclude the contribution of informal meetings, briefings and consultations depending on opportunities and settings.

MSSS Workshops

Around the year 2004 -2005, the HLS unit of the MSSS started a consultation process with the public health network. Dietitians advocates participated in these workshops in various capacity: workshop responsible, participant or author. They networked with their partners, collaborated on generating or reviewing evidence, mapped the actual situation, identified potential partnerships and issued a final report with recommendations. The consultation of the public health network, mainly regional partners, recognized the value of the regional contribution to the policy issue and as such, respected the hierarchical public health structure in Québec. Thus, it helped mitigate potential conflict or resistance that might have aroused had it not occurred. Besides, it sent an important message to the regions, namely that they were main stakeholders not only in the implementation of the future plan, but also in its elaboration. Moreover, communicating summaries of the workshop reports to ministerial partners at the inter-ministerial committee gave more weight to the regional contribution while strengthening the MSSS argument.

Strategic Planning Workshop

Around the year 2004, after the National Program of Public Health, PNSP 2003-2012, was adopted with few policies and interventions to promote enabling environments and little focus on body image, some policy actors felt compelled to pre-emptively organize a strategic planning workshop, before things get to an impasse. Various policy actors participated to the workshop including dietitians from the GTPPP. The noteworthy strategy was the recruitment of a strategist as a moderator at the workshop. Inspired of the tobacco experience, the strategist made

recommendations for a Québec intervention model, similarly to that of the tobacco. A consensus was established among participants on how strategies should be organized under an intervention model that has been baptized the Québec model.

Inspired of the tobacco experience, the Québec model included five strategies: (i) create a provincial coalition to put forward a socio-political action of lobbying for the prevention of weight-related problems; (ii) create a provincial health promotion organization to promote the enabling environments vision; (iii) recruit a multidisciplinary team of experts to generate and transfer knowledge on weight-related problems at the INSPQ; (iv) support regional public health directorates through staffing them with dietitians; (v) develop a governmental plan. The plan would require a funding of 3.5 mio dollars. Among other policy actors, dietitians' advocates proposed the plan to the NPHD. The plan received the requested funds. In 2005, the organisms Québec Council for Weight and Health (*Conseil Québecois sur le poids et la santé, CQPS*) and the Québec Coalition on Weight-Related Problems (*Coalition Québecoise sur la problématique du poids, CQPP*) were created. Dietitians participated to the development of the CQPS and the CQPP bylaws and were also board members. A team of experts was also recruited at the INSPQ. With the multi-disciplinary team, the scope and reach of future actions would go well beyond the traditional public health sphere.

Perrault Working Group

The Perrault Working Group was created by Québec cabinet in December 2004. The Cabinet selected the Perrault Working Group participants based on the recommendation of the health minister in office. Dietitians participated at the Perrault Working Group in various capacities: members, collaborators, invited speakers. Around the Perrault table, there was the president of the Professional Order of Dietitians, collaborators from the HLS unit team at the MSSS and speakers from the HLS unit team and from the INSPQ. Dietitians' advocacy at the Perrault Working Group was three folded: (i) provide the scientific evidence basis for participants and act as a resource for issues related to the policy problem; (ii) ensure that public health dietitians working in obesity prevention do not address the problem from a clinical perspective; (iii) promote food safety matters as public health issues of interest and advance the importance of educating food handlers and the general public.

There was a concern that the Perrault Working Group members adopt the enabling environments paradigm and that the Group's recommendations and report would align with this paradigm. Accordingly, a GTPPP/INSPQ dietitian presented to the Group members on enabling environments and obesity. There was also a concern that the regulatory interventions proposed by the Group would indeed target or improve food quality and environments. From a public protection perspective, the professional competence in public health nutrition was to be taken into consideration as well.

The HLS unit team at the MSSS was in charge of organizing the Perrault Working Group meetings and providing participants with support. They invited ministerial partners to participate in the Perrault Working Group and attend meetings in back venture. The strategic choice of inviting ministerial partners to attend was a brilliant one. It fostered policy-oriented learning and favored consensus with their ministerial counterparts. The Perrault report that was endorsed by all members was well aligned with the GTPPP recommendations except for the authority that should have the mandate to oversee the governmental plan. While the Perrault committee recommended an official authority composed of the two financial partners, the government and the Lucie and André Chagnon Foundation (Perrault, 2005), the GTPPP recommended an independent authority and governance such as a government agency to oversee the implementation and the coordination of the plan (GTPPP, 2005).

Inter-Ministerial Committee

This committee, created by the national public health director, started convening quite before the GAP adoption and in preparation for it. Policy actors' collaboration on this committee was mitigated. This necessitated a continuous adjustment in the advocacy strategies of dietitians. Most ministerial partners were not fully engaged in the policy issue and some did not think they even had a role or a possible contribution to it. This left the HLS unit at the general directorate of public health at the MSSS with the challenge of maintaining their interest and collaboration.

> *"There has been a lot of bilateral work with the ministries; a lot of work also, I would say even to convince that something had to be done"*
>
> *Government professional (2016)*

Tactics such as providing their partners with evidence, using alarming narratives around the policy issue, promoting inter-sectoral collaboration, giving them real life examples and

reviewing their partners' existing actions related to health promotion were put forward. When the command for writing the plan was made by the Premier, it was an opportunity the MSSS HLS unit team capitalized on. They knew that their ministerial partners' readiness to collaborate would be at its highest.

Dietitians members of the HLS unit team requested their ministerial partners to propose their ministry's potential GAP actions. They were in charge of the GAP writing, and accordingly sought their partners' plans to integrate to the GAP. Besides, they had to influence ministerial partners to include new ministerial interventions under the GAP and to find incentives so that they release new budgets for those interventions. While the HLS team at the MSSS was much better equipped with knowledge and tools, some of their ministerial partners were starting from scratch.

> *"We must not underestimate the work we did to present the problem and present the solutions we proposed with the scientific rational and very concrete illustrations, because the environments did not speak much to people out there; it was necessary to popularize it, a lot. It was necessary to bring very concrete proposals too; create supportive environments for healthy eating, what do you mean? What are you talking to me about? we took very concrete illustrations […] and we also had to prepare presentations […] to present the theoretical concept"*
>
> *Government professional (2016)*

The negotiation process was lengthy and strenuous: they had to deliver in a short-time period on one hand and, on the other hand, ministerial missions' do not necessarily align with health and may be perceived as opposing at certain times. Not withstanding the implication of diverging missions, ministerial policy actors had divergent beliefs as well and sometimes opposing to those of the HLS unit team of the MSSS.

> *"… the famous perception that it is an individual responsibility was still very much rooted there […] at the level of our inter-ministerial partners, a lot, a lot; it's a question of individual responsibility: you choose what you eat, you choose to move or not, it's a matter of education, it came back a lot, a lot…"*
>
> *Government professional (2016)*

> *"The challenge we had in developing the government's action plan was to build on the knowledge […] that had been generated and developed rigorously in public health, with our network, sit down with other ministers and then say: 'first, we have a command, you must'; well there was also the command, because it was a government plan, each minister was asked to delegate; so, we definitely had delegated people, but at the same time people who are not necessarily aware of the problem, who have their own program, […] that is to say that they are a little bit closed to see anything but what they were working on and worried […] that public*

health decides on actions to put in place; it was not the dynamics we wanted neither. The intersectoral inter-ministerial work must be in real collaboration it's not: 'I know, and I tell you what to do', it's not the approach"

Government professional (2016)

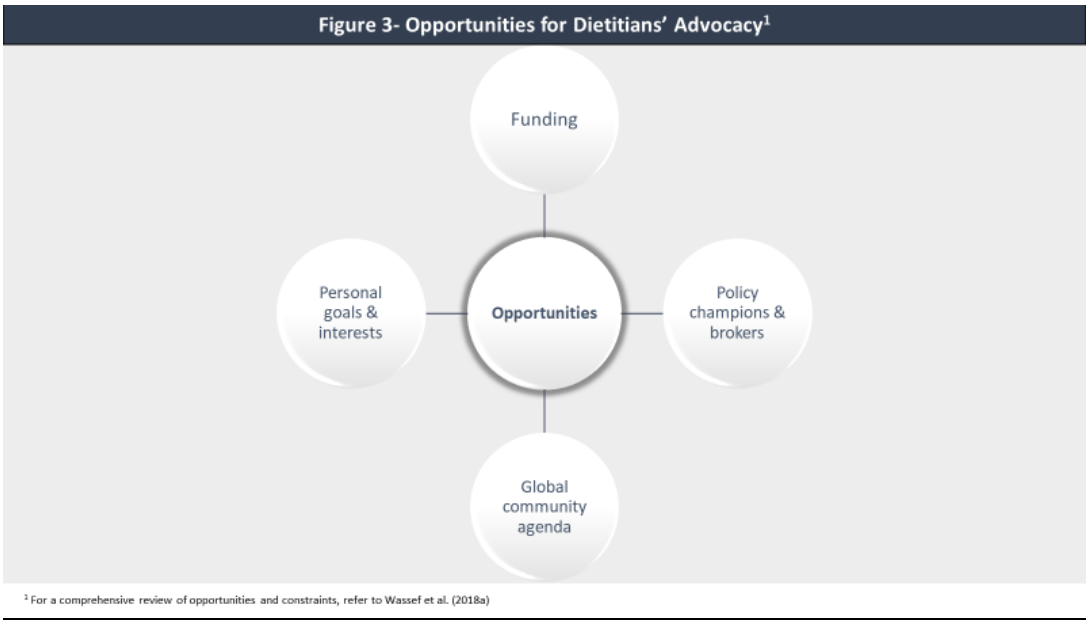
Nevertheless, the HLS team had to draft the plan and validate it with them. The first drafts of the plan were not necessarily welcomed. New rounds of negotiations and adjustment in advocacy strategies were necessary until a negotiated agreement and a consensus on the actions included under the plan was reached and various ministerial partners subscribed to it.

Opportunities and Constraints

Opportunities

The GAP was adopted following a series of political and contextual catalytic events that opened multiple windows of opportunity. Most importantly, the election of a new government, a favourable public opinion towards prevention leading to the creation of a provincial working group and changes in public health structure in Québec empowered policy actors and favored policy change. Other enablers were the pre-existing agreements and partnerships, and fundamentally, the Premier's request to elaborate the plan. Of specific concern to dietitians' advocates we identified funding, common global agenda, and personal goals and interests of policy actors in the policy issue. In addition, the contribution of policy champions and brokers to advancing the policy process has been substantial (Figure 3).

Figure 9. Article 2 - Figure 3 Opportunities for Dietitians' Advocacy



Funding

Dietitians were able to mobilize resources for their advocacy actions. They identified potential funding opportunities from various sources. Applying for funding and receiving endowments for planned dietitians' projects was key in advancing the policy issue. Without the financial support provided to well-founded projects, progress wouldn't have been achieved, given that one project led to the other.

The document "Préoccupation par rapport au poids, éléments de réflexion » co-authored by a dietitian received funding from the general directorate of public health of the MSSS. After the document was launched, the need for a project manager was eminent. Writing project proposals was the following step, so that the policy issue moves forward. Another proposal was made to the general directorate of public health of the MSSS so that a project manager could be hired. Shortly after, the GTPPP identified a funding opportunity through the Prevention and Promotion Program of the *Canadian Diabetes Strategy* of Health Canada. Even though health is of provincial responsibility, the federal level has some responsibilities, specifically in health promotion. The project proposal *Analysis and Identification of Strategies aiming at the establishment of enabling environments for the prevention and reduction of weight related problems* received funding from Health Canada (Mongeau, 2004b; GTPPP, 2005). The general directorate of public health at the

MSSS in Québec also contributed to funding this project (GTPPP, 2005). The GTPPP also advocated for funding the newly designed structure for the prevention of weight-related problems, the Québec model, and succeeded in garnering those funds.

Health Canada, within the Canadian Diabetes Strategy, provided financial contribution to the development of the *Guidebook on the principles of healthy weight management and on a critical analysis of weight-loss products and services* (GTPPP, 2005). Even though Health Canada provided funding for the GTPPPP project, there were strings attached: the project must be educational. Actors had to deliver the educational part before they work on the regulation part.

Global Community Mobilization

Global community mobilization converged on a common agenda promoting obesity prevention as a priority issue for national governments. It was a remarkable opportunity for dietitians' advocates to voice their concern for the issue. In fact, one of the first documents produced by the WHO, was key to launching action in Québec by concerned dietitians. In the WHO consultation on the obesity problem, *Preventing and Managing the Global Epidemic,* the WHO warned of the increased obesity prevalence worldwide calling it an epidemic and requesting governments for an urgent response (WHO, 1998; WHO, 2000).

> *"…Somewhere in 98 […] I started to be interested in the aspects of public health, and then, I was like looking for something there, something to hang on to, to follow my belief, and at that time here in Québec and almost everywhere there was no public health perspective on obesity, there was none […] in the sense that we do not deal with obesity as a public health problem. Obesity is a clinical problem that physicians are interested in, dietitians or kinesiologists […] And the public health perspective is absent. In 98, wow, here comes the document! […] I told myself it is necessary to let this be known in Québec…"*
>
> *Government consultant (2016)*

The series of documents, strategies and frameworks that were produced by the WHO later and namely *The Global Strategy on Diet, Physical Activity and Health (DPAS)* shared the same vision. It was essential to curb the obesity epidemic. Governments must issue governmental plans to prevent obesity (WHO, 1998; WHO, 2000; WHO, 2004). Such plans ought to prioritize interventions aiming at promoting enabling environments and ensure governments are held accountable for their leadership in overseeing the plans (WHO, 1998; WHO, 2000; WHO, 2004).

Policy Champions and Brokers

Dietitians' advocacy was possible because of the leadership exercised at the organizational and workforce levels. Experienced and engaged dietitians mobilized individuals from the civil society to create a think tank and secure funding for its mandate. They worked on harmonizing the think tank vision. They ensured sustained mobilization of public health actors through their communication strategies including scientific communication and advocacy materials. They also had communication strategies to influence the public opinion, most importantly through numerous media interventions and educational materials. They solicited broader public health engagement through the recruitment of key public health opinion leaders in Québec. They engaged senior officials, government and non-government actors. They sustained negotiations no matter how disengaged their counterparts were. Dietitians' advocacy benefited from the leadership of a dietitian that was identified by most case study participants as a policy champion for the GAP. This dietitian had a remarkable role in defining the policy problem in Québec, building teams, sustaining interest in the policy issue and influencing the public opinion. She was later in charge of the GAP coordination. Another facilitator was the presence of a policy broker at the HLS unit of the MSSS. With an extensive experience, seniority, versatility and credibility, this dietitian contributed to establishing and maintaining connections and partnerships, mediating and decreasing the level of conflict among policy actors.

Personal Goals and Interests

While advocacy strategies were aligned with the innovative enabling environments-focused policy actions, the personal interests and goals of dietitians were not alien to some tactics and strategies. Scientific consultants advanced strategies that fostered their credibility and neutrality and increased the legitimacy of their status. The interest in widening the breadth and scope of research and exploring new research avenues was alluring to those involved in research. Besides, establishing and reinforcing networks and partnerships was appealing to all dietitians' advocates and was perceived as a source of power that won't do anything less but provide more support to their cause.

The dietitians' team at the HLS unit of the MSSS was also cognisant of the importance of pushing the obesity problem onto the government agenda so that it gets the sought-after action priority. They backed the funding requests made by partner organizations. Many dietitians' advocates working in these organizations participated to writing the proposals the funds were

sought for. The aim of the team was to ensure there is an active and credible think tank that is constantly working on the policy issue, a goal that aligns with the MSSS HLS team's goals. The advantage of having an external think tank advocating for the policy issue is to protect the integrity of the proposals and activities of the HLS team at the MSSS so that they are not perceived as lobbyists.

> *"… advocacy, in the government apparatus, we are not well positioned to practise it, but we can work with partners so that advocacy can develop, and so that's how the GTPPP was born…"*
>
> *Government professional (2016)*

Besides it aligns with their goal of increasing the overall government funding earmarked for prevention, 2% instead of 5%, which was less than what was recommended by experts and international organizations (GTPPP, 2005).

The team also influenced the selection of the Perrault Working Group participants. They suggested group members to the health minister in office. By strategically choosing potential policy participants with well-known interests in prevention, cohesion is expected to be higher as well as achieving consensus on actions that are aligned with their goals.

> *"…On the other hand, I think that public health had already prepared the ground with important documents and which served as the basis of the exchanges that we had [in reference to Perrault Working Group]. Then, honestly, I'll tell you there might have been, I'm saying that retrospectively, but there might have been some bias in the composition of the working group, and I'm not saying that necessarily negatively […] They recruited actors who were for prevention, who were, who already had a positive perception of prevention and who had a vision of what prevention could be. So, they gathered around the table people from different sectors, which is perfect, but people who had already identified prevention as a priority [...] I think the people around the table had been carefully chosen for the contribution they could make to this discourse that is to be created on prevention […] So, around the table we only had people who could get along…"*
>
> *Anonymous (2016)*

They also provided guidance and materials to the Group on enabling environments to influence the outcomes, namely the recommendations of the Working group. The aim was to avoid having educational strategies come out as the sole recommendation of the Working group. It is not surprising then to see the representative of the Fruit and Vegetable Association as the only representative of the agri-food sector at the Perrault Working Group table. In fact, they had earlier

collaborations with the Fruit and Vegetable Association namely through the healthy life styles provincial campaign "Vas-y" (Government of Québec, n.d.). Dietitians were able to identify the mercantile interest of the Association in selling local products, and to promote local agriculture and local markets. Such interests aligned with their own interests of promoting fruit and vegetable consumption. Accordingly, the Association was invited to participate in the Perrault Working Group.

The presence of the president of the Professional Order of Dietitians in a provincial Working group created by Québec Cabinet was valuable. It would increase the public visibility of the profession, promote its role and that of its members, foster their potential contribution and guarantee a future role in the implementation, follow up and evaluation of the plan by future dietitians. In addition, a three-folded goal would be achieved: (i) ensure the protection of the public, (ii) re-establish the trust of the public in the OPDQ and the credibility of the profession (iii) re-affirm the neutrality of the OPDQ vis-à-vis corporate interests. This way, the OPDQ representation would ensure the main mission of the Order which is protecting the public is well accounted for in discussions, negotiations and recommendations. Participation in such a forum meant that the Order had obliged to be a main stakeholder in the policy process related to prevention of weight-related problems and promotion of healthy lifestyles. The likelihood of maintaining the status of an essential partner and to be invited for contribution in other related plans would be high. Such participation also fosters the legitimacy of dietitians as mandate holders with respect to weight problems and healthy lifestyles. The OPDQ had affirmed its firm support to obesity prevention and to a governmental plan on nutrition earlier in 2004 (Duhamel, 2004). It is worth noting that the only health profession that was represented at the Perrault Working Group by its president was the dietitians.

Constraints

Constraints and barriers reported by participants to the case study have been described in earlier findings. Issue characteristics, ministerial structures and bureaucracy, conflicting agendas and priorities, the lack of budgets for ministerial actions and the lack of an intrinsic government priority to address obesity were among the constraints we identified earlier. Of specific concern to dietitians' advocates, we identified the insufficient understanding of other ministries' roles and

missions, role conflict and ambiguity, competing interests and priorities and issue characteristics (Figure 4).

Figure 10. Article 2 - Figure 4 Constraints to Dietitians' Avocacy

Lack of Understanding of Ministerial Missions

Although the presence of a policy broker who was familiar with ministerial missions helped in this regard, however not every dietitian involved in the policy issue was cognisant of other ministry's missions. They couldn't assess where their policy solutions would stand with respect to ministerial missions. Moreover, they had little knowledge on existing ministerial actions that were aligned with the promotion of enabling environments. In a context where ministerial counterparts were less ready to grasp the concept of enabling environments, the advocacy task would get more complicated. Building an argumentation that would help overcome the resistance would be more difficult. *"what we did not have was the fine understanding of what each of the ministries was already doing on promotion in relation to lifestyles." - Government professional (2016)*

Issue Characteristics

In addition to the limited scientific evidence on policy and environmental approaches addressing obesity described in earlier findings, some other policy issue characteristics constituted a constraint as well. Body image was not perceived as pertaining to healthy lifestyles. Dietitians'

advocates could not include problems related to body image under the healthy lifestyles and chronic diseases domain of the National Public Health Program. They were faced with resistance given that body image problems were not perceived as part of the healthy lifestyles domain. In addition, when the problem concerns a relatively limited number of individuals such as the harmful effects of PSMA, the issue gets little interest of policy makers. Another issue characteristic that constituted a constraint was the public opinion about obesity. The public's perception of the problem was that of an individual problem which was opposite to the perception that dietitians were advocating for (GTPPP, 2005). This opinion was also shared with decision-makers in Québec at the time (Bernier, 2011).

Competing Interests and Priorities

Competing interests and priorities constrained dietitians' advocacy. if weight-related problems should stand out as a policy priority, this meant that less emphasis is given to other nutrition problems, public health topics, health topics and health and social problems at large. Advocates were aware that many issues would compete on the policy makers' agenda and a lot of energy and effort should be invested in keeping the issue on the agenda.

> *"The risk in all this is well known in public policy is to move to the next call, what will be the next priority? that's the risk too, there's going to be a next topic that's going to be more popular"*
>
> *Government consultant (2016)*

Political attention and funding earmarked to health promotion within the general directorate of public health of the MSSS can raise concerns of other public health sectors and even competition among them.

> *"Because in the general directorate of public health, it is not necessarily everyone, yes, officially we will be pleased about it, that a public health issue takes the place, but whether you want it or not, it takes the place much to the detriment of other public health issues and of course, there are people who are less happy."*
>
> *Government professional (2016)*

In addition, while investments in prevention are immediately needed, the return on investment could take years to materialize. Within limited government budgets and investment capacity, and from a policy-maker's perspective, funds allocated for public health will shrink the budgets available for health services. Metaphorically stated by one of the case study participants,

if depriving an individual of their legitimate rights for essential health services would draw media attention and coverage, it wouldn't be the same if an obese person was left on their own to develop a chronic disease. Resources are allocated based on political influence. Within the health sector, health services have a higher political influence than public health. Policy makers are much more sensitive to health services scarcity issues than public health services, specifically those related to prevention and promotion. Elected officials are attracted to such *visible* benefits. Even if public health investments do pay off on the long run, they are less likely to interest the legislator given the relatively short election cycle.

Role Conflict and Ambiguity

Role ambiguity

The dietitians' role in public health practice was unclear in the opinion of many public health professionals. Some were not even aware that dietitians could possibly have a role in public health. Their role was perceived as being confined to clinical practice mostly. This could explain the severe shortage in public health nutritionists at the central and regional levels. Dietitians' staffing ratios compared less favourably to other resources that were made available in the public health network in Québec.

> *"…there were people in physical activity in all regions […], because of the agreements with Kino, […] whereas we did not have in nutrition because they had to release their own budgets for that, because they did not see the relevance of engaging nutritionists. Therefore, they didn't see the relevance of hiring dietitians because they said they had nothing to do for a nutritionist, anyone or just anyone did nutrition"*
>
> *Government professional (2016)*

Accordingly, dietitians were faced with the challenge of reasserting the role of public health nutritionists at a time when roles and functions of dietitians were being defined. In fact, they were more defined for dietitians practising in the clinical settings rather than public health settings. Nevertheless, and with the lack of a specific public health training, many dietitians with clinical practice backgrounds could have public health related practice, but with a clinical perspective.

> *"The perspective of the training of our nutritionists or dietitians is very clinical, is very individual, while the public nutrition perspective how we influence the diet of a population, it is not very present in the courses I think"*

NPHD (2016)

> *"… even within the dietetic community, it's not true that all dietitians can talk about nutrition from a public health perspective, that's not true. A clinician has a very, very, specific vision of what nutrition is and how nutrition is applied which is often, I do not mean at the opposite, but at the inverse of a public health person; we do not talk about the same kind of intervention; so, for me it's important that this distinction be recognized and that the competency that should go to public health or that should be in support of what was to be created, are people who have a public nutrition profile, a kind of global population profile…"*
>
> *Anonymous (2016)*

Such role ambiguity has not been fully resolved so far. The clinical, individual-focused message, versus the public health, population-focused message still carries a lot of ambiguity that dietitians are trying to resolve. Such ambiguity that finds itself a niche between both obesity management approaches is yet to be resolved. Perhaps the following citation best shows that there is still some work to be done to fine tune the understanding and the differences between both paradigms.

> *"Clinicians when they hear about food policy in schools, 'you are not going to talk about forbidden food, we will not start defending fried potatoes in schools; it will create the obsession with thinness!'. I tell them you're wrong; that was the clinical message of EquiLibre. When people are already concerned with their weight, we need to liberalize the diet, that's the clinical message. When you work in public health, you must put public policies in place; if you serve French fries everyday, people understand that you can eat French fries every day. There is no contradiction in this, we must find a way to harmonize the two messages and that is not done yet! it's not done yet! […] there are still paradigmatic clashes…"*
>
> *Government consultant (2016)*

Role conflicts

Role conflicts were identified between the institutional role and the incidental role of the dietitian, between the institutional role and the service-oriented role and between the professional and institutional role. This last role conflict was most obvious during the preparatory works leading to the adoption of the National Public Health Program (PNSP). Dietitians were faced with the rigid framework of the evidence-based intervention approach adopted by the designers of PNSP at the MSSS.

> *"when we developed the public health program, earlier on the network, the regions were doing what they wanted or almost in public health. What the program did is that it aligned what the network did in six specific domains*

including chronic diseases and lifestyles. So, we were able to say: 'OK we agree to work on the same things and then to have a provincial strike force'. Lifestyles were more difficult because people were doing pretty much anything, so, […] the people responsible for the national program said we would ask for evidence, based on the literature. Unless we have such evidence, interventions will not be included in the National Public Health Program […] and we will ask for accountability on each of the actions in the program […] It was the whole scientific committee that was at the head of the national program. It was a decision from the minister and others […] So, that's why we were not able to put a lot of things into the national program but the people in the GTPPP had worked very hard to try to put forward, to suggest actions for the National Public Health Program"

Government professional (2016)

Accordingly, they could not introduce interventions whose effectiveness has been confirmed based on research approaches utilized in public health. On one hand, they acknowledged the need to align interventions on science-based criteria, which was highly needed when the PNSP was being developed. However, the evidence-based approach utilized in clinical settings could not be appropriate for policies and environmental interventions on the other hand.

"…it was at the time of the evidence-based, 2001, before 2001, evidence-based. In public health, do we agree that it does not work? We were a couple of people, including myself, wanting to sow a bit of doubt and then to say that we have to be careful because if we just rely on randomized studies, it will not take us far. Maybe it works for vaccination, but randomized studies for the diet and then physical activity, not at all, not at all; public policies, you do not evaluate this with randomized studies, you know? So, there were clashes..."

Government consultant (2016)

The membership of a dietitian in a working group adds to her roles one additional layer: an incidental role. An incidental role refers to a role that is not within the institutional role expectations of the professional (Ben-David, 1958). If the incidental role aligns with the institutional expectations of her role, role conflicts are less likely to arise. However, role conflicts might still result from potential resource attribution between the different roles. Specifically, time and other resources allocated to the incidental role can conflict with expectations of her institutional role. Institutional role expectations stipulate that the dietitian prioritizes her institutional role to her incidental role, and in case of conflict she would prioritize her institutional role, letting go of her incidental role. Many institutions are wary to having their professional members contribute to advocacy or be members of advocacy groups because of the potential conflicts of interest that might rise. However, when the dietitians perceived their incidental role as

strongly aligned with the service-oriented and professional systems, favoring their institutional role expectations was less likely.

In addition, the inherent nature of advocacy that requires readjustment of tactics and strategies based on contextual factors and other factors related to the policy actors, imposes an adjustment to the incidental role, sometimes, even a re-definition. Another possible way the incidental role might have interfered with the institutional role relates to institutional lines of authority. While within the institutional role, there is a hierarchical structure to follow, the incidental role allows to go past those lines and establish lines of communication that are not necessarily aligned with the traditional lines of authority. This may lead to tensions while performing the institutional role.

Moreover, interacting with the media when the dietitian is part of a governmental institution can be quite challenging, because of the institutional expectations related to her role. A role-status disequilibrium may result if the dietitian perceives that within her institutional role, there is little emphasis on the service norm with a strong emphasis on science. Tension might rise if there is a demand, from the entities the dietitian provides services to, for her to provide such service. The *how* to provide this service is also important. Maintaining a neutral knowledge transfer role is the line of conduct. Caution must be exercised on when and how knowledge is transferred so that it is not seen as an attempt to impose an orientation on the government. This may lead to tension in performing her role and even to moral conflict.

A perceived potential role conflict between the professional and service-oriented role might have prevented dietitians from collaborating with the private sector. Advocacy activities and strategies targeting the private sector were quasi absent. Collaborations with this sector were badly perceived. The perception of the private sector among dietitians was not very positive; the perceived eagerness of this sector to grow and increase its profits even at the expense of people's health was at its highest. It is worth noting that the Professional Order of Dietitians in Québec went through a phase of criticism because of its connections with the private industry at this time. Such connections were less perceived to protect the public or to serve the public's interest (Deglise, 2001). Such a context might not be as inviting for dietitians to put forward advocacy strategies targeting the private sector.

Discussion

When practising in public health, dietitians are entitled to participate in public policy making and to collaborate on policy issues. All public policy problems are wicked problems and need political argumentation (Rittel and Weber, 1973). They are ill-defined, involve various actors and a diversity of decision-makers. In addition, they can not be "solved". Argumentation has been described as possibly the only way to tame such wicked problems (Rith and Dubberly 2007 in Crowley and Head, 2017). Advocacy is an adaptive and continuous process of collecting and analyzing information to help inform and formulate arguments to influence decision-makers (UNICEF 2005 in Pelletier et al., 2013). As such argumentation is at the core of the advocacy functions and accordingly, helps tame wicked policy problems. In addition, effective advocacy increases one's power through an enhanced control over resources and/or actors (Cullerton et al., 2015). Increasing one's power comes hand in hand with a higher influence on the policy process (Cullerton et al., 2015). Given that public policies reflect the interests and values of powerful groups or individuals, dietitians would benefit of seeing their values and interests mirrored in public policies through effective advocacy.

Dietitians were adroit and skillful at organizing their behavior and coalescing to put forward influential strategies. In a context where a person suffering of excess weight would be blamed for their gluttony and sloth, at least from a public opinion perspective, they worked hard to reverse the rhetoric to condemning living conditions and environments. Dietitians did not condone what they considered unacceptable or morally wrong. They did not agree to business as usual solutions nor did they accept the status quo. The cogency and logic of their arguments were convincing and reached for their various audiences in deliberative forums and professional ones.

Dietitians' strategies were characterized with congruity and appropriateness. Multiple previous works to which dietitians contributed converged all together in the GAP. While various contextual catalytic factors were key to advancing the policy process, it is the presence of policy brokers, super connectors and champions who would seize and create opportunities that helped move the process forward. Through their communication strategies, nutrition professionals created catalytic events and venues to advance the policy process. As such they benefited from various opportunities to advance their agenda and focus the attention on weight-related problems.

Engaged dietitians' advocacy led to a remarkable readiness to elaborate a governmental plan. Based on the advocacy strategies presented in this study, and to better assess the effectiveness of dietitians' advocacy, we can envision the counter-factual. Accordingly, we would ask the following question: in the absence of the dietitians' advocacy would the GAP have been adopted and would weight-related problems have received this much attention? Though the certainty around the answer is limited, however, and based on our empirical analysis, we can provide a two-folded reasonable answer. Firstly, the GAP would have been adopted irrespective of the dietitians' advocacy. The GAP was in fact adopted following a series of political and contextual catalytic events that mandated a provincial group to develop a governmental plan on prevention and promotion of healthy lifestyles in youth. However, and based on our findings, we can strongly argue that dietitians' advocacy influenced the behavior of the actors participating in the policy process, their beliefs and their strategies. It also raised attention to weight-related problems beyond what would have been reasonably expected in its absence. It also helped accelerate the policy process. It influenced the GAP formulation and content, especially with respect to the focus on enabling environments, the inclusion of adults under the plan, and the provision of services to affected individuals based on the new weight paradigm. In the absence of the dietitians' advocacy, we can envision a governmental policy with a different content, and we can also reasonably assume that the think tank GTPPP is still active in the obesity prevention policy subsystem.

In this section, we will highlight some of the main findings of our research, providing a deeper analysis and pointing to levers in the policy process and to potential areas to reinforce and develop capacity of the public health nutrition workforce. We would also provide some key messages that emerged from our findings and analysis. Even though each issue is addressed under a separate paragraph, however, one issue can not be perceived independently of the other as they are all are inter-related.

Issue Characteristics

With respect to the policy issue tractability, evidence on policy and environmental solutions was limited. Dietitians' advocacy was not backed with a strong evidence base on the effectiveness of interventions promoting enabling environments. Around the time the GAP was elaborated, not much evidence was available on the effect of policy and environmental interventions to tackle obesity (Brownson et al., 2006). Québec dietitians' scholars called for the

development of new knowledge on effective programs and policies targeting diet-related behaviors and the environmental conditions that shape them (Beaudry et al., 2004). From an advocacy perspective, a supportive evidence base on the consequences of a policy problem and the effective interventions to address it is an important asset, given its capacity to mobilize civil society and policy makers (Pelletier et al., 2013).

Dietitians' advocacy occurred in a policy environment that can best be described as policy cacophony, where a discordant mixture of obesity prevention policy approaches was either being promoted or implemented (Lang and Rayner, 2007). It was not until recently that more evidence has become available to support the need for upstream population approaches targeting the wider environments and conditions that have produced and shaped the adverse health behaviors (Gortmaker et al., 2011; Cullerton et al., 2015). The dubious impact of interventions and uncertainty around their effectiveness constrained dietitians' advocacy. Moreover, policy-makers are not highly motivated nor mobilized to adopt interventions whose effectiveness remain to be proven. Better stated by Kersh and Morone (2005, p.848) "policy makers typically begin by following the path of least political resistance". Besides, Québec policy-makers concerned with GAP elaboration and adoption were themselves less convinced with the obesogenic environments' paradigm. They perceived healthy lifestyles and weight problems as being more associated with individual choices rather than influenced by the surrounding environment (Bernier, 2011).

With respect to the state of knowledge on dietitians' advocacy experiences, little systematic analysis of nutrition advocacy experiences had been performed (Pelletier et al., 2013). Besides, the research on the policy process on nutrition related policies including obesity prevention policies was scarce. In fact, little research and few publications on the nutrition policy process using policy process theories was available to help inform and improve the policy process (Cullerton et al., 2015). It was not until recently that the obesity prevention policy process started attracting scholars (Clarke et al., 2016; Cullerton et al., 2015). In such a context with little published research on advocacy initiatives and nutrition policy process, capacity issues might be limited, constraining as such dietitians' advocacy.

Dietitians focused on the technical and scientific aspects of the policy problem in their advocacy strategies. They were able to influence the technical and scientific aspects of decision-making and to a lesser extent the political component of decision-making. Advocacy efforts of

dietitians seem to have failed to target policy makers at the time. Whereas influencing policy elites is a must to influence the policy process, Québec policy makers were less familiar with the importance of environments in shaping individual choices when the GAP was elaborated (Bernier, 2011). Influencing policy elites is a process that must take into consideration the change in governance which is subjected to a 4-year cycle in Québec. Accordingly, the turn-over of politicians mandates a constant advocacy to people in office to promote the role of environments in shaping food choices and maintain the interest and engagement of the elected official.

Internal and External Policy Framing

Framing reflects how a policy issue is portrayed and understood. Different frames resonate differently according to the audience (Shiffman and Smith, 2007). The internal policy framing of a policy issue reflects the understanding and portrayal of the policy issue by the policy community (Shiffman and Smith, 2007). Dietitians built a shared understanding on an internal policy frame within their policy community, the GTPPP and its allies. The internal frame of obesity within the policy community portrayed obesity as a problem caused by obesogenic environments. Preventing obesity was possible through the creation of enabling environments. Besides, their problem framing was innovative in the sense that they defined the problem as a double faceted problem including overweight and obesity on one hand and excessive concern with weight on the other hand. Rarely had such a frame been used according to the study participants. The policy community was highly cohesive when it comes to defining the problem, its causes and solutions. The high cohesion was key in influencing the agenda-setting and the policy formulation. It ensured commitment to the policy issue and the sustainability of advocacy efforts.

In parallel, the public discourse focused on prevention as a policy issue at the time. The newly elected government had just completed public consultations and held a provincial forum, the Generations' Forum, that revealed a need for prevention starting with children and youth (ASPQ, 2004c). Prevention was in fact the watchword that resonated well not only within the policy community but also with the civil society, and more importantly policy makers. Not only prevention was the key, it had to address children and youth as a priority. Weight-related problems and healthy lifestyles were addressed under the prevention discourse. Dietitians made use of such a framing to portray obesity prevention as a public health emergency that must be tackled before it eroded governments' budgets.

However, dietitians subscribed less to the obesity frame portraying children and youth as the affected group. Framing of obesity as a threat to children and youth development was used by other coalitions. It was helpful in the sense that it attracted politicians' attention. Even though the frame resonated well with the politicians and the public, dietitians were less supportive of such a frame. Not that they didn't believe that obesity was a very serious problem in children, but they rather worried that this discourse might leave out adults behind. Their main concern was three-folded. Firstly, they didn't want to exclude adults from the target population, secondly, one can not target children leaving out their parents, thirdly policy interventions addressing environments will eventually target all the population improving as such health outcomes at the level of the population at large. Nevertheless, portraying children and youth as the affected group was a compelling frame that could have been used for political argumentation. Children and youth are rather regarded as victims of obesogenic environments and not considered responsible for obesity. This is a situation that inspires sympathy for the affected group and leads to more mobilization of actors around the policy issue (Schneider and Ingram 1993 in Shiffman et al., 2015). Dietitian advocates must be active at developing and identifying issue frames that work, reframing the policy issue as need be. When compelling issue frames that resonate well with policy elites are available, they should rather make use of them to influence the policy process, engage powerful policy actors, affect public opinion and advance their agenda.

Inclusiveness of the Working Group

The legitimacy of the working group dietitians created and participated in drew from its members' expertise, as well as the attention and knowledge it raised regarding weight-related problems. While the well-founded cause for which the GTPPP saw light might seem a sufficient justification of its emergence, some other legitimacy dimensions, specifically inclusiveness, need to be addressed. How inclusive civil society organizations are, and the significant representation of marginalized populations have been argued to be important legitimacy dimensions (Atack 1999 and Avant et al., 2010 in Shiffman et al., 2016). Democratic theorists warn from taking legitimacy for granted. They distinguish between input legitimacy and output legitimacy. While it is the output legitimacy or the performance of civil society groups that confers upon them the right to exert power, the input legitimacy should not be taken lightly. The input legitimacy refers to transparency, inclusive deliberation and fair process (Dahl, 1971, Daniels 2000, and Schmidt, 2013

in Shiffman et al., 2016). In the following, we will address inclusiveness aspects, specifically the participation of non-public health stakeholders and marginalized populations in the policy process.

The GTPPP launched a stakeholder consultation a couple of years after the GTPPP was created. Following the stakeholder consultation, there was a momentum for action, however, no partnerships were established to pursue a common goal. Above and beyond, the dissemination of the analysis of the determinants of the policy problem and its potential solutions was mostly done to public health actors, leaving out non-public health actors in Québec. Ministries that were called upon for participation in the GAP deliberative working groups later knew nothing or almost of the GTPPP works. This explains in part the lack of empowerment felt by various stakeholders and their mitigated engagement in the GAP. Despite leading the learning process and the change in perceptions and strategic actions, much of the GTPPP communication strategies were restricted to the public health community. Food and nutrition related policies need a wider array of actors (Cullerton et al., 2015). Nevertheless, the coalition dietitians built didn't go beyond their traditional base, namely that of the health sector. The high cohesion that characterized their policy community was faced with a fragmented collaboration of their ministerial counter-parts, which was best described as a passive resistance.

The GTPPP inclusiveness fell short on marginalized populations, specifically the First Nations. In general, the GAP policy process failed to be inclusive of the First Nations communities in Québec. In contrast, other health policies adopted earlier in Québec had actions that took those communities' welfare into consideration. Whether the Health and Well-being Policy (MSSS, 1998) or the National Public Health Priorities 1997-2002 (MSSS, 1997), both policies had health preventive actions targeting First Nations (MSSS, 1997; MSSS, 1998). The National Public Health Priorities 1997-2002 for instance maintained that a modified version of the program *Oui j'arrête* (*Yes, I will stop*) shall be tailored to the First Nations communities (MSSS, 1997). The program was a smoking cessation program for the adult population first designed and implemented in the public health directorate of Montréal-Centre. Moreover, the newly elected government committed through its electoral platform to foster economic and social development of First Nations (Premier, 2004). Last but not least, the National Public Health Program 2003-2012 had diabetes reduction targets specifically tailored to First Nations "Reduce by 30% the incidence of diabetes (by 40% in Native communities") (MSSS, 2003 p.45). Yet, working groups that attended to the GAP policy

process did not include members of First Nations communities. First Nations weight-problems were not taken into consideration in the Perrault Working Group activities nor in the GAP. Not that the First Nations did not participate in the Generations' Forum, but rather that the committees this Forum created seem to have selectively addressed First Nations health and social problems. It is interesting to note that the food and nutrition policy that was negotiated during the GAP implementation phase was concerned about First Nations' well fare. There was in fact a working group that was created specifically to address food and diet issues of First Nations communities (Government director, 2016).

The partnerships the GTPPP built didn't extend to non-traditional alliances or to less committed people. It can be argued that widening the breadth of political interests and perceptions on the same table might prevent or delay reaching a consensus on the type of interventions. Heterogeneity may reduce cohesion and increase the prospect of disagreement on objectives (Shiffman et al., 2015). Conversely, diverse groups generate better outcomes as compared to uniform ones, because of an improved understanding and problem solving (Page 2007 in Shiffman et al., 2015). One must acknowledge that disagreement on the type of interventions is rather universal in the nutrition policy process (Pelletier et al., 2011). At all times, contentions occur; yet, they result from divergent organizational interest and perspectives at the level of mid-level actors rather than well-founded scientific debates (Pelletier et al., 2011). The GTPPP membership or partnership could have reflected better the sectoral and community diversity in Québec. If dietitians thought they could avoid political interactions through the limited inclusiveness of their working group, they were sorely mistaken.

Private Sector Role under Neoliberal Governance

Dietitians were advocating for policies to influence food systems and food environments, among others. Advocacy to improve macro-level environmental factors that influence people' s diet is quite challenging (Cullerton et al., 2015). Such factors include but are not limited to food production, distribution and marketing, agricultural policies, price structures and social norms, all of them are outside the health sector. These factors also voice the concerns of various interest groups, making public health nutrition advocacy more and more complex (Cullerton et al., 2015). On one hand, making food choices is necessary and on the other hand, the healthfulness of a given food is open to interpretation and debate (Cullerton et al, 2015). Unlike other health damaging

behaviors, such as smoking, food abstinence can not be recommended. Moreover, opponents of tobacco control advocates are well identified: the powerful tobacco industry. Whereas in food and nutrition, the dynamic is different; some food industry actors may seek to partner with health advocates and even become allies (Shiffman et al., 2015). Examples of food industry alliances have emerged worldwide to promote healthy food environments, though evidence on their effectiveness is lacking (Kraak et al., 2014). Accordingly, the challenge emerges of not only assessing the potential resistance but also of estimating a combination of possible adverse and beneficial effects (Shiffman et al., 2015).

The neoliberal governance model embraced by many Western democracies promotes de-regulation and public-private partnerships to resolve complex societal issues, delegating as such government responsibility to NGOs or the private sector (Kraak et al., 2014). In Québec, the GAP was adopted under a liberal party governance (ASSNAT, 2014). Among the underlying values that represent the foundation of the proposed actions of the newly elected party was first individual freedom that goes hand in hand with individual responsibility and entrepreneurship spirit (Premier, 2004). The resulting governance gap coupled with the increase in power of food industry stakeholders allow the latter to influence the political agenda and the government regulatory decisions. Besides, the privileged access to policymakers many large food industry stakeholders enjoy allows for political and financial lobbying. Such corporate lobbying promotes the food industry's interests over those of public health and is one reason why voluntary food industry partnerships and alliances are looked at with distrust (Kraak et al., 2014).

Besides, confronting non-health sectors with a health promotion agenda may not set the most favourable conditions for collaboration (Hawe et al., 1998), especially when no clear and transparent accountability structure exists, and when the economic argument rhetoric is brought to the forefront to promote voluntary practises (Kraak et al., 2014). In the context of what has been described as "corporate capture of public health" (Mindell et al., 2012 in Kraak et al., 2014), advocacy efforts are likely to be more challenging for public health dietitians. Dietitians' policy advocates were reluctant to collaborate with the private sector, which such a context clearly legitimizes; government legislation and regulation are considered a must to mitigate the commercial practices of the food industry.

While acknowledging the strenuous effort needed to protect public policy from vested interests, Kraak et al. (2014) have developed an accountability framework that lays the foundation for an independent and transparent accountability structure (Kraak et al., 2014). The framework proposes an empowered body to define objectives, a governance process and standards of performance to be met by all stakeholders. The framework provides support to governments, food industry and health advocates to help restore the power balance, improve credibility and build trust (Kraak et al, 2014). The framework may be a foundational stone in what future government-private sector partnerships might look like at the heart of a government-led strategy. However, it still needs empirical testing to enhance partnership credibility and ensure engagement and impact on food environments (Kraak et al., 2014). With a transparent and clear accountability structure, sanctioning power is improved. Holding all stakeholders accountable is possible, not only the food industry when it opposes government regulation but also governments when they fail to regulate.

A successful experience with the Québec industry is the example of a pioneering and innovative partnership the NGO *EquiLibre* established with the industry, specifically the media, advertising and fashion industries. The NGO developed a prize called *IMAGE/in* to praise Québec industry actors that promote a healthy and diverse body image (EquiLibre, n.d.b). This approach is perceived as a more positive win-win approach that rewards excellence and leadership instead of sanctioning bad performance. Such an approach was successful in terms of influencing industry practices and developing a collaboration network with the industry. Collaboration should start with the premise that industry stakeholders are not alien to society's concerns (Director NGO, 2016). As such, they are concerned with the same health and social problems the public is concerned with. Besides, similarly to health advocates, they want to safeguard their health and that of their children. Accordingly, they would be willing to collaborate on health promotion projects as long as this collaboration won't bring harm to their own businesses (Director NGO, 2016).

In 2013, the WHO called for broad inter-sectoral collaboration between the government, the private sector and the civil society to reduce by 25% the mortality due to Noncommunicable diseases (NCDs) by 2025 (WHO, 2013). State and non-state actors should collaborate effectively; they should acknowledge and manage any potential, real or perceived conflict of interest (WHO, 2013). In 2017, the OPDQ released a *Guide to Professional Competencies* and recommended that dietitians seize all opportunities to increase the awareness of key actors of the bio-food chain and

actors in other major sectors (OPDQ, 2017b). Indeed, if one wishes to address a problem perceived by many as a societal problem, it is inevitable to include all societal sectors in the solution. Exploring new avenues and partnerships may bring positive spinoffs to dietitians' advocacy. Within clear, transparent and reinforced accountability structure and performance criteria, there might be more gains from rethinking the contribution of the private sector to obesity prevention than potential losses.

Role Conflict and Ambiguity

Public health nutrition practice didn't emerge as a separate paradigm from the well-established clinical nutrition paradigm until the late 1990s (Scrimshaw, 1995; Hughes, 2003; Beaudry et al., 2004). Attempts to define the field have been ongoing since then. In fact, the works leading to the adoption of the GAP has put to the fore front the need to develop and build capacity of the public health nutrition work force in Québec. It is not quite surprising to see that dietitians advocates experienced role ambiguity. Ambiguity could be attributed to two factors. The first is the relatively new practice field for nutritionists with few defined core functions in public health nutrition, if any. The field itself was still being defined (Beaudry et al., 2004), let alone the functions related to the field which emerged much later (Hamelin et al., 2010; Jonsdottir et al., 2012; Fitzgerald et al., 2013; Raine, 2014; OPDQ, 2017b). The second is the uncertainty regarding the *policy-related* roles of dietitians within said core functions. In fact, policy-related roles of public health nutritionists have failed to achieve consensus even recently. A consensus study in 18 European countries was able to identify several core functions of public health nutrition (Jonsdottir et al., 2012). While the analytical and interventionist functions significantly achieved consensus among study participants, the core function "review, formulate and promote health legislation" failed to achieve a similar consensus among study participants. It is worth noting that the study reached for two groups of public health nutrition experts: academic and employers, the latter referring to those working in organizations concerned with public health. This clearly shows that until recently, core functions in public health nutrition, in addition to being highly contextual, are not entirely consensual amid concerned parties (Jonsdottir et al., 2012).

Drawing from Ben-David study (1958), the professional role implies professionals should abide by the scientific standards of their profession in relation to their institutionalized role. The scientific standards related to effectiveness of interventions in clinical settings differ from that of

population-level interventions in environmental settings. The type of evidence necessary to inform decisions cannot be limited to evidence generated following research methods used in medical research only, such as evidence-based medicine. Research methods should extend to those used for studying population-based problems (Kumanyika et al, 2012). In fact, there are certain instances where research methods such as randomized controlled trials may not be feasible in some obesity prevention interventions such as a policy, particularly because exposure may not be randomly assigned (Kumanyika et al, 2012). The example of dietitians' advocacy for the PNSP is an instance of disagreement on effectiveness criteria between clinical interventions and population-level environmental interventions. Nevertheless, dietitians accepted what the PNSP offered believing it could be a starting point for better future interventions.

Drawing from Ben-David study (1958), the norms of service professionals should abide by implies that they ought to help the person or group of persons they serve irrespective of rewards. A public health dietitian practitioner is expected to have a practice that is coherent with the institutional expectations of their role. To be able to participate actively in a think tank and other working groups, dietitians went beyond the institutional expectations of their roles. We can look at their participation in those groups as a sign of commitment and engagement for a cause that materializes with concrete steps made by the professional, namely attending to the working group needs, dynamics and mandates on a voluntary basis. Pelletier et al. (2011, p. S65) recommends that policy advocates "work outside and beyond official mandates and job descriptions to get the job done". Moreover, highly motivated individuals or teams are needed to build coalitions and advance pioneering solutions to achieve policy change (Mintrom and Norman, 2009). The presence of effective leaders may be the catalyst for a policy network to emerge and reach its objectives (Shiffman et al., 2015).

Further insights can be gained by looking at this dynamic from a policy entrepreneurship model. Mintrom and Vergari (1996) argue that the ACF benefits from acknowledging the policy entrepreneurship (PE) model in explaining a policy event. The importance of the PE is that it suggests a possible approach of explaining how coalitions form and overcome collective action problems (Mintrom and Vergari, 1996). It also helps explain how innovative ideas find themselves on the political and legislative agendas (Mintrom and Vergari, 1996). Three functions are common to policy entrepreneurs: (i) identifying unfulfilled needs and proposing innovative solutions to

address them; (ii) assuming the risks they may encounter in pursuing actions with high uncertainty around the consequences and (iii) overcoming collective action problems through ensuring an effective coordination of networks of organizations and individuals that have the resources or talents to contribute to the policy issue (Mintrom and Vergari, 1996). These functions are consistent with Kingdon's (1984) attributes of a policy entrepreneur. Policy entrepreneurs have a legitimate claim to a hearing. This legitimacy draws from their expertise and leadership among others. They are persistent, tenacious and politically savvy; they have good negotiating skills and political connections (Kingdon, 1984).

In this sense, we can argue that participation of dietitians to think tanks and working groups beyond their institutional role expectations was important from a policy advocacy and entrepreneurship perspectives. Among the risks policy entrepreneurs are willing to take, role conflicts might emerge. A positive approach is to be aware of such risks and to proactively try to mitigate them.

The strength of this study is in analyzing the contribution of a specific group of policy actors, dietitians, to the policy process. Most of these dietitians were members of a think tank that was created by the public health led coalition. In fact, many of them were founding members of the think tank. The experience of Québec in preventing obesity showed that it took more than ten years of organized advocacy activity of a public health led coalition to start reaping the benefits of such advocacy. Although there might be some sporadic actions that started early on and a few 'successes', coordination of efforts through organized networks necessitated funding and took longer time to materialize and mature. Whether or not a think tank reaches its advocacy goal would depend on the context and on the specific policy issue.

The advocacy activities of a think tank depend largely on the resources it has and the expertise of its members. Compared to other contexts, Québec has a favorable context with respect to expertise in public health. Québec also offers some interesting avenues to fund activities related to public health advocacy. For instance, health and social services programs of the MSSS such as the Community Organization Support Program (*Programme de soutien aux organismes communautaires*) provide funding possibilities. Other avenues can be through non-governmental associations working in public health. In addition, the tractability of the policy issue can influence the advocacy practices of policy actors. In general, a policy issue's intractability would limit the

resources of policy actors and restrain them in their advocacy strategies. Think tanks are particularly vulnerable to the uncertainty around the effectiveness of interventions targeting policy problems. Blurred or non-conclusive evidence on the effectiveness of interventions on a policy issue, or its lack altogether, becomes the argument of choice masking any other argument behind inaction.

Therefore, cohesiveness of a think tank is significant in influencing the agenda-setting and policy formulation; it ensures commitment to the policy issue and sustainability of advocacy efforts. Besides cohesiveness, the input and output legitimacy dimensions of think tanks especially those concerned with food and nutrition policies is another crucial aspect. With a wide array of policy actors including marginalized populations and non-traditional policy actors, input legitimacy is fostered, resistance reduced, collaboration and engagement increased. Other key characteristics of think-tanks are determination, consistency, persistence, expertise, persuasiveness and good argumentation skills. Their political connections and the presence of members with authoritative decision-making skills is important as well.

A successful advocacy strategy should rely on a compelling policy narrative that is supported with evidence such as surveillance data, national surveys, scientific opinions produced by national centers of expertise or international health organizations. Successful advocacy strategies necessitate a careful analysis of contextual factors including the political environment. Among other elements, policy advocates must pay specific attention to election cycles, policy cycle, political parties' ideology and programs. Should advocates from think tanks perform such an analysis, they would possibly influence the policy elites instead of limiting themselves to mid-level actors. As such, and with the proper policy actors, think tanks can influence the political component of policy making. In addition, the analysis of the political context can help advocates identify compelling policy issue framing to use in political argumentation. Advocates must actively seek to identify and use policy issue frames or reframe policy issues when need be, so that their frame reaches the policy elites, engages powerful actors and affects public opinion.

With the growing role of public health actors in advocacy for public health policies, there is a universal need to equip the public health workforce with an understanding of advocacy practices. Empowering the public health workforce with the necessary knowledge and resources to develop competencies related to advocacy practices is key to achieving change in public health policies that is significant in terms of changing populations' health. Professional regulatory bodies should work on setting the competencies their professionals ought to develop to influence the public health policy making process. These competencies should be regularly reviewed to allow for promising professional practices in public health advocacy to emerge. Public health professionals currently involved in policy making will see themselves less constrained from practise limitations related to role conflict and ambiguity. Such capacity building will empower the workforce members so that they exercise more leadership and develop innovative practices.

Our study had some limitations. We only interviewed dietitians practising in public health in ministerial agencies, ministries and NGOs. Up to our knowledge, there were no dietitian policy actors from other ministries that contributed to the GAP. However, we can safely argue that the number, practice and institutional diversity of the interviewed dietitians allowed us to catch most of the advocacy practices that led to the elaboration and adoption of the governmental plan. To the extent it was possible, advocacy of dietitians was associated to the working group, think tank or committee to which she belonged, rather than the dietitian herself. Strategies were attributed to the group to protect the identify of key informants on one hand and on the other hand because advocacy activities were mainly carried out in groups of actors or teams of which dietitians were members. Recall bias might have occurred as dietitians were reporting on past events, beliefs and strategies. To overcome recall bias, we provided dietitians when needed with support documents, such as printed copies of the plan itself, ministerial reports, lists of participants to deliberative forums etc.

Conclusion

This study presents findings of dietitians' advocacy experience for a governmental plan for the promotion of healthy lifestyles and prevention of weight-related problems. It is the first research that analyzes dietitians' role in advocacy for a governmental plan to prevent obesity from

an advocacy coalition perspective. Dietitians were able to affirm their leadership across various levels of public health function, less so at the political level. Their advocacy did not reach to policy elites, except through proxies, it was rather addressed to mid-level actors. They were able to advance the policy process through various advocacy strategies including building partnerships, creating working groups, developing evidence and building consensus. They positioned themselves as experts in the policy issue and were regarded as such. Nevertheless, their advocacy strategies and tactics went beyond the expert role to a full engagement in the policy process. This study can bring empirical insights to inform dietitians' advocates and help them better understand and influence the policy process. The importance of this research is in its capacity to inform the current body of knowledge on advocacy practices and experiences of dietitians. We hope this will help build capacity and strengthen current and future advocacy understanding and practices. We also hope it will interest scholars to strengthen research in nutrition advocacy, going beyond understanding advocacy practices to monitoring and evaluating them.

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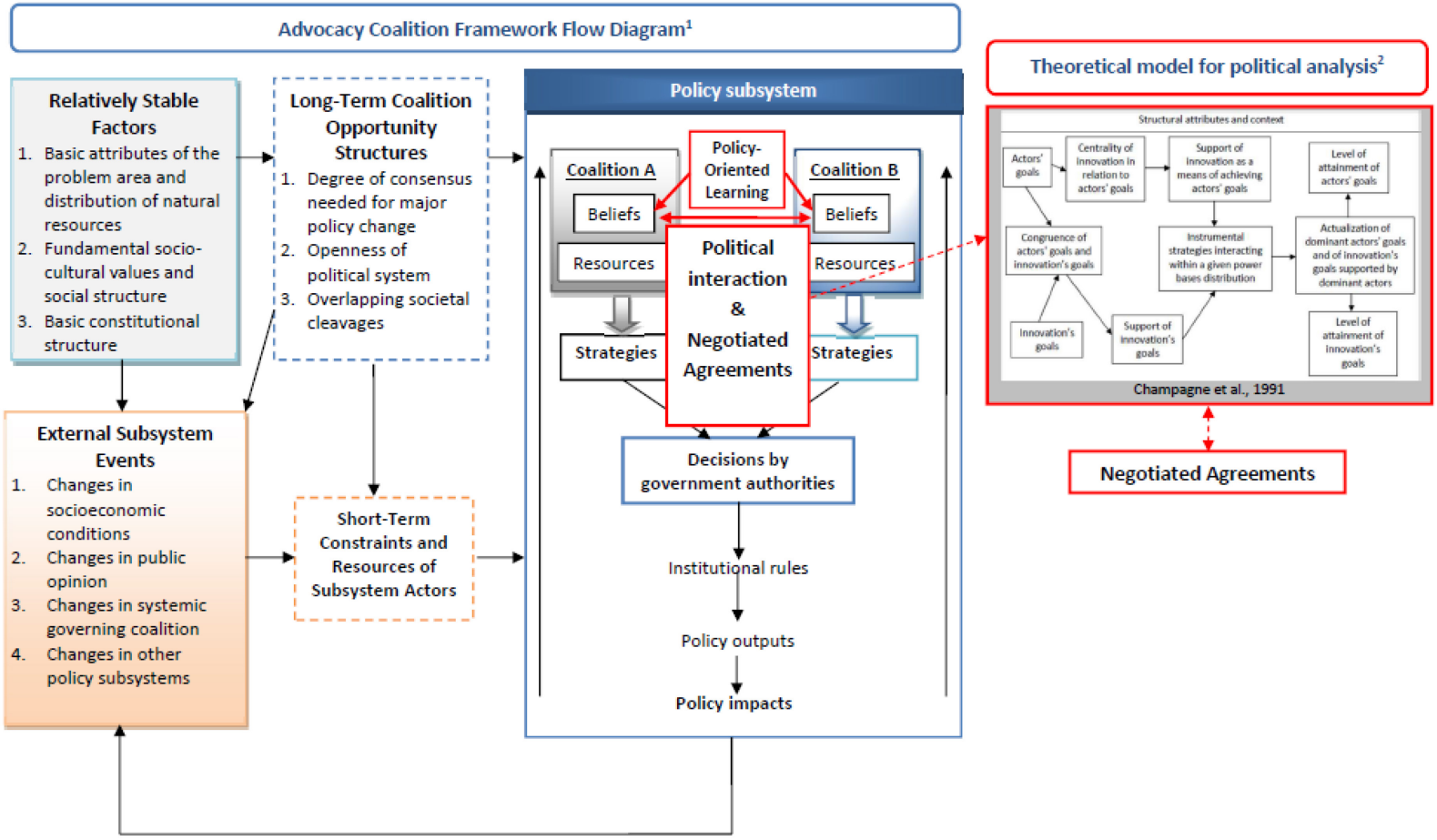
Appendix I - Conceptual Framework



Appendix II – Variables and Data Sources

Variable	Data sources
Policy subsystem	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations
	• Documents of the National Assembly
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Advocacy coalition members	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Published journal articles on obesity prevention policies in Québec
	• Unpublished documents provided by key informants
	• Government reports and other grey literature
Beliefs and goals	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Strategy and resources	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
External events	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• WHO, OECD documents and reports
	• Published journal articles on obesity prevention policies and other related policy subsystems

Relatively Stable Parameters	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports and strategic plans
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• Documents and reports of the WHO, OECD, Canadian Institute of Health Research, Statistics Canada, Institut de la Statistique du Québec
	• Published journal articles on obesity prevention policies in Québec
Long-term coalition opportunity structure	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Portail Québec
	• Published journal articles on obesity prevention policies in Québec
Short-term constraints and resources of subsystem actors	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans,
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Policy-oriented learning	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Negotiated agreements	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec

Policy decisions	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec and other related policy subsystems

Appendix III – Dietitians' Demographics

i. Dietitians by organizational affiliation*:

Organization/ministry	Number of participants
Academic Institution (University)	**2**
Association of Public Health of Québec	**2**
Institute of Nutrition and Functional foods	**1**
Ministry of Health and Social services	**2**
National Institute of Public Health	**2**
NGO (EquiLibre & Québec council on weight and Health)	**2**
Professional Order of Dietitians	**1**

*: some key informants are affiliated to more than one organization - affiliations during GAP advocacy

ii. Dietitians by working group

Working group	Number
GTPPP - Provincial working group on weight-related issues	
Members	**5**
Perrault Working Group	
Perrault committee members	**1**
Perrault committee collaboration and support	**2**
GAP - Governmental action plan on weight-related problems	
GAP authors	**2**
GAP collaborators	**1**

*: some dietitians are members of more than one working group

iii. Dietitians' education

Education level	Number of participants
Bachelor's	**1**
Masters	**4**
PhD	**3**
Total	**8**

CHAPTER 6 – Article 3 Taming Policy Cacophony: The Case of Obesity Prevention in Québec

Introduction

The realm of public policy making is increasingly challenged with solving complex policy matters. Among other features, complex policy problems are characterized with a lack of agreement on a solution for a definable problem. Some policy issues are however so complex that they lack agreement on both the problem definition and solutions. Such problems are called wicked problems and require a whole lot of rethinking the traditional *modus operandi* of solving policy issues (Rittel and Webber, 1973; Kickbusch & Buckett, 2010; APSC, 2012; NCCHPP, 2013).

Recognizing that a policy issue is wicked in nature is at the core of addressing wicked problems. Wicked problems are multi-causal, have no definitive formulation, entail conflicting goals and are socially complex (Rittel and Webber, 1973; APSC, 2012). Successfully addressing them calls for a comprehensive understanding of the broad range of causal factors underlying them and their complex interactions. This requires that actors can see the big picture and propose innovative, comprehensive and collaborative approaches (APSC, 2012). Otherwise, they will just be attempting to cure symptoms (Rittel and Webber, 1973). Quite often, each stakeholder's definition of the problem or the solution to it has an element of truth, however it is not complete, nor verifiable. This results in disagreement among stakeholders, and a debate that doesn't end with the "correct" policy solution, rather a "good enough", better or worse solution. In fact, and quite often, the debate ends based on deadlines constraints and other resources limitations that dictate the end of problem-solving (Rittel and Webber, 1973; APSC, 2012).

Wicked problems draw the interest of many actors who might be equally equipped to assess the solutions, however none has the authority to establish decision rules required to determine the accuracy of the solution. Actors might think of a host of possible solutions while unintentionally overlooking a great many other solutions (Rittel and Webber, 1973). Over and above, wicked problems are constantly evolving making it hard for policy makers and other actors to keep up with a moving target. For instance, the scientific evidence needed to understand a wicked problem is evolving alongside attempts to address it (APSC, 2012). In addition, each stakeholder's story

has normative elements that confer upon them some immunity to enlightenment by scientific evidence (APSC, 2012). There is a marked discrepancy in judgment on the appropriateness of the solution among concerned actors based on differences in values, personal interests and ideological predilections (Rittel and Webber, 1973). Nevertheless, these solutions, if implemented, are irreversible and leave permanent traces over an unlimited time span (Rittel and Webber, 1973).

Given what has been presented earlier, the management of wicked problems poses a lot of challenges to actors as to what approaches and skill sets they must develop, making of it an evolving art. The unfortunate truth that one needs to admit is that many wicked policy problems have been plagued with decades of policy failure; one example is indigenous disadvantage (APSC, 2012). Many public policy problems are in fact wicked problems. Other examples include street crime reduction, modification of school curricula, poverty, air pollution, (Rittel and Webber, 1973), health inequalities (NCCHPP, 2013), climate change and obesity (APSC, 2012).

Obesity is a wicked problem characterized with a long-standing stakeholders' disagreement and debate on its nature and possible solutions (APSC, 2012; Johnston, Matteson and Finegood, 2014; Roberto et al., 2015). Despite undeniable efforts, obesity rates are still escalating in many countries. So far not any government has been able to reverse the obesity epidemic (Roberto et al., 2015; Clarke et al., 2016; OECD, 2017). Obesity has been a concern for multiple stakeholders at all levels of government across the globe. It is a complex phenomenon that is the result of multiple interlinked causal factors; thus, its solutions call for multi-component, comprehensive and integrated strategies across multiple levels and sectors (WHO, 2000; Kumanyika, 2007; WHO, 2009; Gortmaker et al., 2011; Roberto et al., 2015; WHO, 2017).

Nevertheless, obesity policy is currently in a situation described as "policy cacophony" which poses a great challenge to policy makers as to which policy solution to consider and champion (Lang and Rayner, 2007 p.166). Policy solutions to obesity are built around attributable causes to obesity that are themselves, associated with ideological discrepancies. The resulting portfolio of policies reflects a gap between policy recommendations and the prevailing policy environment (Lang and Rayner, 2007; Roberto et al., 2015; Huang et al., 2015). In such a policy situation with an ill-defined problem, actors tend to seek an explanation that is consistent with their intentions and goals and that align best with action-prospects within their reach (Rittel and Webber,

1973). The choice of their explanation of the discrepancy between what there is and what ought to be determines the nature of the resolution they favor and thus are likely to put forward (Rittel and Webber, 1973).

The obesity prevention policy situation described earlier as policy cacophony is an impediment to policy makers' actions. If no coherent direction is identified, policy makers are reluctant to act out of the fear of not being able to deliver. The constant search for perfect evidence further accentuates the delays in action. Facing competing solutions reflecting various interest and values, policy makers are becoming more and more wary of the type of evidence presented to them and are demanding better quality of evidence (Lang & Rayner, 2007).

In fact, the heated debate around obesity prevention policy frequently revolves around values and morals that are in fact hard to reconcile. Examples include limitations on individual freedom, the appropriate balance between societal benefits and individual fairness, beneficence and autonomy. Instead, the debate gets deferred to assessing the quality of the evidence, avoiding as such the value-laden debate (Richardson, Williams, Fontaine and Allison, 2017). This brings about another disagreement concerning the strength of the evidence and how supportive it is to a given policy position. Some questions such as what kind of evidence is needed for a given situation, how can it be produced and whether evidence is needed all together to justify the adoption or the refusal of policy proposals find their way onto the political actors' negotiation agenda (Richardson et al., 2017).

In light of the surge of globesity despite the call for evidence-based policies on one hand and the rise of a populist dialogue mistrusting the role of scientific evidence and questioning some well founded scientific facts such as climate change on the other hand, it is interesting to draw a closer look on how political actors utilize evidence in the policy making process. In 2006, two years after the WHO launched its Global Strategy on Diet and Physical Activity (WHO, 2004), the Government of Québec succeeded in adopting a Governmental Action Plan to prevent obesity and other weight-related problems, and to promote healthy lifestyles (MSSS, 2006). Several stakeholders across the government and the civil society participated directly or indirectly to the elaboration of the plan (MSSS, 2006; Perrault, 2005). In a policy environment described as policy cacophony, various deliberative forums occurred and were followed with the announcement of the plan in 2006 (MSSS, 2006). The plan included more than 70 actions necessitating the participation

of seven ministries and three governmental organizations (MSSS, 2006). An unprecedented partnership between the government of Québec and a philanthropic organization was announced at the same time to provide funding for the plan (MSSS, 2006). So how did various actors reconcile the use of scientific evidence with their personal and institutional interests leading to what was perceived as a break-through in obesity prevention in Québec?

This research aims to answer questions about the formulation and adoption of the Governmental Action Plan 2006-2012 for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems: Invest in the Future (GAP). Using the Advocacy Coalition Framework (Sabatier & Weible, 2007) and a political analysis model (Champagne, Denis, Pineault and Contandriopoulos, 1991), we seek to identify the advocacy coalitions that were involved in the policy process. We will perform a thorough dissection and description of the beliefs of advocacy coalitions based on Sabatier's three-tiered belief system (Sabatier, 1998) and identify the types of obesity prevention policies promoted by every coalition. We will explain how actors of various advocacy coalitions have mobilized knowledge in pursuing their goals. Our aim is to explain whether actors within and across advocacy coalitions experienced policy-oriented learning and what fostered such learning. We also seek to explain how policy-oriented learning influenced the GAP elaboration and adoption. The aim is to understand the role of knowledge utilization and policy-oriented learning in policy elaboration and change, and whether positive non-zero-sum policies can find their way onto the decision agenda.

Conceptual Framework

We propose to use the Advocacy Coalition Framework thereafter called ACF, to answer our research questions (Appendix I – Conceptual Framework). The framework shows two coalitions with different belief systems and various resources that are active within a policy subsystem, in this case the obesity prevention policy subsystem (Jenkins-Smith et al., 2014). Defining the subsystem boundary necessitates the identification of the set of actors who are involved in that subsystem at a specific point in time. Equally important is the identification of potential or latent actors. In fact, subsystem participants are not limited to previously active participants. There are other actors who become active in the subsystem once provided with the appropriate information. These actors can alter the power balance between subsystem coalitions (Sabatier, 1987).

Rather than grouping actors based on their organizational affiliation, the ACF organizes them based on their shared beliefs and coordination strategies (Jenkins-Smith et al., 2014). Actors of the same coalition share a common belief system that includes problem perception, causal assumptions, policy preferences and some basic values. They also have a non-trivial degree of coordination over time (Sabatier, 1987; Jenkins-Smith et al., 2014). These coalitions might be stable over time (Sabatier and Brasher 1993 in Jenkins-Smith et al., 2014) and are instrumental in comprehending policy change (Nohrstedt 2010 in Jenkins-Smith et al., 2014).

While quiescent subsystems may only have one coalition, most subsystems will have quite a small number of advocacy coalitions of political significance (Sabatier, 1987). In all cases, the number of coalitions is contingent to the variety of factors that drive actors to coalesce so that they form a significant coalition (Sabatier, 1987). In general, the number of important coalitions will mostly range between two and four in a policy subsystem (Sabatier, 1987). Coalition strategies may be altered if belief systems are revised following the rise of new information or perceptions related to the impacts of governmental decisions (Sabatier, 1987).

Making use of diverse strategies, coalitions compete to put pressure on government authorities so that they affect their decisions. Their aim is to influence the institutional rules, the policy outputs and ultimately the policy impacts. A feedback loop would in turn lead those decisions to affect not only the coalitions but also the external subsystem events. This category of variables comprises events that are dynamic or subject to change and that are external to the policy subsystem. Unlike external subsystem events, the relatively stable factors are another category of variables that include contextual stable factors such as the basic constitutional structure where the policy subsystem is rooted, the fundamental social structure and socio-cultural values and basic attributes of the problem area (Jenkins-Smith et al., 2014).

Two sets of variables emanate of the broader external variables' categories: the long-term coalition opportunity structures and the short-term constraints and opportunities of the subsystem actors. Both represent key by-products of the relatively stable parameters and the external subsystem events respectively. They refer to the opportunities actors may exploit or to the constraints these variables may inflict on actors' actions and how they affect the policy subsystem in return (Jenkins-Smith et al., 2014).

Two additional concepts are also highlighted. Policy-oriented learning and policy change are the theoretical foci of the ACF of interest to this study. Learning results in changes in belief systems and may be experienced not only at the level of each coalition but also between competing coalitions or what is known as cross-coalition learning. Four categories of factors have been proposed to explain learning: (i) the level of conflict; (ii) the attribute of stimuli; (iii) the attribute of the individual and (iv) the attribute of the forum that prompts learning (Jenkins-Smith et al., 2014; Weible and Nohrstedt, 2012). The second concept, policy change, has four possible paths as per the ACF: (i) policy-oriented learning, (ii) external events, (iii) internal events and (iv) negotiated agreements between coalitions (Jenkins-Smith et al., 2014; Weible and Nohrstedt, 2012). The change in policy is a translation of a change in policy core beliefs (Jenkins-Smith et al., 2014).

Belief Systems

Central to the ACF are belief systems of advocacy coalitions (Jenkins-Smith and Sabatier, 1993; Jenkins-Smith et al., 2014). It is the belief system of coalition members that guide them in priority setting, focusing on specific causal factors, seeking allies and trying to influence governmental institutions to achieve their policy goals (Jenkins-Smith and Sabatier, 1993). Belief systems translate into policy proposals that are advanced by advocacy coalitions. Deep core beliefs, policy core beliefs and secondary beliefs make up the three-tiered structure of the belief system of the ACF (Sabatier and Jenkins-smith, 1999; Jenkins-Smith et al., 2014). While deep core beliefs span all policy subsystems, policy core beliefs relate to one entire subsystem or policy domain. They apply to every aspect of the policy subsystem and denote the fundamental policy positions regarding the strategies coalition actors need to advance to achieve the core coalition's values (Sabatier and Jenkins-smith, 1999). They are also more salient to a given policy actor as compared to deep core beliefs. In addition, they are a more efficient guide to an actors' behavior as compared to secondary beliefs; the latter apply only to a narrower range of a policy subsystem (Sabatier and Jenkins-smith, 1999). In fact, coalition actors might not be in full agreement on secondary beliefs aspects (Sabatier and Jenkins-smith, 1999).

The most critical policy core beliefs are the fundamental normative precepts, namely the orientation on basic value priorities and the identification of groups whose welfare is of utmost concern. An agreement on these two belief components across the whole policy subsystem is a

fundamental defining characteristic of a coalition (Sabatier and Jenkins-smith, 1999). Besides values and priorities, policy core beliefs include perceptions on the seriousness of the problem, causal assumptions, strategies to achieve actors' core values such as policy instruments to be utilized, levels of government qualified to deal with the problem, the desired distribution of authority between the market and government (Sabatier and Jenkins-Smith, 1999). The structure of belief systems and precepts under each type are outlined in Appendix II.

While normative precepts are difficult to change, other policy core beliefs have empirical components that may change with the accumulation of evidence over time or what Sabatier and Jenkins-Smith (1999) refer to as Weiss's "enlightenment function" (p.122). An example is the causal assumptions about a problem that are believed to shape the empirical world. (Jenkins-Smith et al., 2014). One major source of perceived causal patterns is scientific and technical information. Accordingly, a key component in understanding the policy process is to understand how scientific and technical information is integrated into belief systems or on the opposite deflect from belief systems. This is crucial to understand policy debates and negotiations (Jenkins-Smith et al., 2014).

Policy-Oriented Learning

According to the ACF, policy-oriented learning denotes the "relatively enduring alterations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives (such as advocacy coalitions)" (Jenkins-Smith & Sabatier, 1993, p.42). Learning embraces changes in belief systems that include both the understanding of the policy problem and the effective political strategies that help achieve objectives (Jenkins-Smith et al., 2014). Learning can come from a variety of sources depicted in the ACF framework. New information and knowledge of the problem of interest, its parameters or the factors that influence those parameters are one source of learning. Perceptions regarding external system dynamics and internal feedback loops also contribute to learning (Sabatier, 1987). Technical information includes the severity of the problem, its causes, its various facets and the probable impacts of alternative solutions (Sabatier and Jenkins-Smith, 1999).

Individuals within an advocacy coalition experience learning. As a result, the advocacy coalition might experience a change in its position over time, partly due to individual learning

(Sabatier, 1987). Sabatier defines learning as confirmation of previously existing beliefs or change in beliefs whether secondary or core beliefs (Sabatier, 1987). Learning can be about (i) enhancing one's understanding of the components of one's belief system or of a competing belief system, (ii) fine-tuning one's comprehension of the causal relationships inherent to one's belief system, (iii) identifying the challenges that one's belief system is faced with and responding to them (Sabatier, 1987; Sabatier and Jenkins-smith, 1999). Four categories of factors are emphasized to explain learning: (i) attributes of forums, (ii) level of conflict between coalitions, (iii) attributes of the stimuli and (iv) attributes of actors (Jenkins-Smith et al., 2014; Weible and Nohrstedt, 2012). The focus of policy-oriented learning is the integration of the new knowledge to the policy core beliefs of advocacy coalitions (Sabatier, 1987).

While learning might be the most intractable concept to examine within the ACF (Bennet and Howlett 1992 in Jenkins-Smith et al., 2014) it helps answer important questions; these questions include the components of belief system elements that change with learning, the role of policy brokers, the process of learning diffusion and the contexts that foster learning (Jenkins-Smith et al., 2014). Learning within an advocacy coalition is relatively unproblematic, given that members of a coalition are constantly seeking to enhance their understanding of causal relationships and variable states. Moreover, it is easy for them to agree on discrediting any threat to their core beliefs coming from another coalition. It is in fact when two core beliefs of opposing coalitions conflict that a "dialogue of the deaf" might persist until a change in power balance due to some external conditions occurs (Jenkins-Smith and Sabatier, 1993, p. 48). In the absence of external conditions, can a productive analytical debate between members of opposing coalitions lead to a change in core beliefs or important secondary beliefs? Jenkins-Smith and Sabatier (1993) advance that such a change is a function of three parameters: (i) the analytical tractability of the policy issue; (ii) the level of conflict between opposing coalitions and (iii) the existence of a professionalized forum.

Analytical tractability of a policy issue depends on the range of analytical disagreement on policy-relevant assertions. The narrower the range, the higher the analytical tractability and the higher the likelihood of policy-oriented learning and belief system modification. The range is narrow when there is sufficient certainty and wide agreement on valid theory, analysis and data to induce such learning. Nevertheless, certain policy issues concern complex phenomena, involve

conflicting policy objectives and have causal relationships that encompass numerous policy areas. The resulting uncertainty around such policy issues favors substantive disagreement and increases analytical intractability (Jenkins-Smith and Sabatier, 1993). Therefore, when a policy issue is analytically tractable, the range of possible analytical positions is reduced thus allowing subsystem actors to use analysis to modify opposing belief systems. Analytical tractability can change over time; the emergence and accumulation of more data and analysis on a policy issue will increase its analytical tractability enhancing as such the prospects for policy learning (Jenkins-Smith and Sabatier, 1993).

The level of conflict is a function of the degree of incompatibility of opposing coalitions' basic beliefs. When analytical claims of a coalition threaten the core precepts and values of another one, the level of conflict is expected to be higher. As the level of conflict rises, the receptivity of subsystem participants to threatening claims declines and the use of resources of both coalitions to defend their beliefs increases. At such high levels of conflict, policy analysis is mostly used as a political resource. Subsystem actors are less likely to learn when stakes are high, and their core beliefs are threatened. Conversely, when there is a moderate informed conflict between opposing coalitions the likelihood of policy-oriented learning is higher (Jenkins-Smith and Sabatier, 1993).

Analytical forums or loci of discussion are characterized with how open or closed to participation they are. Open forums accommodate a plurality of participants with a wide range of beliefs. Such forums are characterized with the absence of shared norms of scientific inquiry and resolution of conflicting empirical assertions among participants. The forum is an open arena where every subsystem actor can engage in the debate and express a different point of view. Closed forums have strictly controlled admission based on a specific screening type. Many times, screening occurs based on professional and technical proficiency resulting in a professionalized forum. However, screening can also be done for a variety of reasons such as political sensitivity of the policy issue and the need to avoid discussing it under public scrutiny, concerns for national security and conflict avoidance through exclusion of members with known opposing beliefs. Ideally, participants in professionalized forums share empirical and theoretical assumptions, as well as a commitment to scientific norms. Therefore, prospects for attainment of a consensus among participants of professionalized forums are enhanced, though sometimes at the expense of a possible bias in beliefs and values (Jenkins-Smith and Sabatier, 1993).

Based on Sabatier's belief structure, secondary beliefs are more prone to change through learning as compared to policy core beliefs and deep core beliefs. The latter are tenaciously held and thus are difficult if not impossible to change. Policy core beliefs have a normative aspect and can hardly be empirically challenged. However, they may be subject to re-examination if opponents' activities or external events force it. Therefore, learning is generally manifested in secondary aspects of belief systems (Jenkins-Smith and Sabatier, 1993). Nevertheless, changes can occur in the policy core belief aspects after evidence have accumulated for a decade or more through the "enlightenment function of policy research", a term developed by Weiss (1977, in Jenkins-Smith and Sabatier, 1993 p.44).

Knowledge Utilization

Public policymaking has benefited from the development of a substantial literature that is concerned with policy analysis utilization or the use of similar technical information. Major findings of such research revealed that its main fundamental utilization is through what has been considered an "enlightenment function" (Weiss 1977a; Weiss, 1977b in Sabatier, 1987), that denotes a gradual change in the perceptions and concepts of policymakers over time. This "conceptual use" of research rather than an "instrumental" one is particularly prevalent in the public sphere of policymaking as opposed to the private one (Deshpande, 1981; Deshpande and Zaltman, 1983 in Sabatier, 1987). A similar view by Lindblom and Cohen (1979 in Sabatier, 1987) ranks the cumulative impact of ordinary knowledge and research findings as the most influential on policy. Other utilization of policy analysis has been to justify firm intentions in a policy position (Sabatier, 1978 in Sabatier, 1987), to boost organizational credibility or simply to occupy some territory in the policy area (Rein and White, 1977 in Sabatier 1987).

Weiss (1977) discusses various types of knowledge utilization in public policy making. She identifies different uses of which five are of importance in the scope of our study: (i) the problem-solving model; (ii) the knowledge-driven model, (iii) the interactive model, (iv) the political model, and (v) the conceptualization model (Weiss, 1977). The problem solving can be illustrated by a linear model whereby a problem exists, and knowledge is generated to provide the lacking information or improve understanding so that a solution is reached (Weiss, 1977). A problem exists, and research provides the evidence for the decision-making process to solve the problem. There are two principal ways for this instrumental utilization of research. The first is

when pre-existing research, antedating the policy problem, gets drawn into the policy-making arena on need basis. The second is when research is intentionally produced to help fill a knowledge gap (Weiss, 1977). The political model of utilization occurs when policy makers have taken a stand on a given policy issue that research evidence is less likely to shake (Weiss, 1977). In such a case, it is still possible to utilize research evidence, however as a political ammunition by the party that finds its results most supportive of its predetermined position. This party wields research evidence to bolster supporters, get waverers on one's side or neutralize detractors (Weiss, 1977). The conceptual use refers to the reconceptualization of the aspects of a policy issue. This may alter the policy issue perception and the alternative solutions to consider. This usually occurs with the accumulation of knowledge and evidence over time. Its effect can lead to a radical change in how governments and people deal with the policy problem (Weiss, 1977). The interactive model is a non-linear complex search for information and knowledge from a variety of actors in a back and forth way. A pooling of talents, understandings and beliefs of various actors involved in a specific issue help improve the understanding of the problem and forge a possible solution to it. Those involved in policy making call for various actors including social scientists, politicians, interest groups, practitioners, administrators, journalists and others (Weiss, 1977). Despite the lack of unambiguous and concluding evidence, the discussions and mutual consultations actors engage into ensure progress towards identifying potential policy responses (Weiss, 1977). This model represents the typical way decision-makers get familiar with the state of knowledge and the opinions concerning a policy issue (Weiss, 1977).

In their examination of the literature on knowledge utilization models Denis, Lehoux and Champagne (2004) reviewed five models: (i) knowledge-driven, (ii) strategic, (iii) problem-solving, (iv) deliberative and (v) enlightenment (Denis, Lehoux and Champagne, 2004). The problem-solving, strategic and enlightenment utilization models correspond to the problem-solving, political and conceptual models of Weiss respectively (1977). The knowledge-driven model emphasizes the production of disinterested knowledge by the scientific community with minimal influence from exogenous factors. According to this model, knowledge will be utilized eventually once placed in the marketplace because of its value; however, no attempts are made to foster its utilization; a laissez-faire approach seems to be tolerable (Denis et al, 2004).

What can be described as the opposite balance of the knowledge-driven model is the problem-solving model. In this model practitioners express their requests and communicate them to the scientific community who responds to their demands. The value of knowledge lies in its use to solve practitioners' problems and it is not valued by itself. Improving knowledge utilization in this model lies in the capacity of practitioners to frame their problems and requests and the competence of scientists in translating their science into practical and relevant applications (Denis et al, 2004).

The enlightenment model emphasizes the importance of knowledge in understanding the world. Its use is not instrumental but rather intellectual and cognitive. Rather than being a tool to solve daily problems, knowledge helps people facing complex situations to reframe their problems and enhance their understanding. Knowledge is perceived as a cultural asset; it infiltrates society in an informal and unstructured ways altering as such world views. Accordingly, knowledge will always benefit social actors one way or the other irrespective of settings (Denis et al, 2004).

The strategic model of knowledge utilization perceives knowledge as resource. Accordingly, knowledge can be accumulated, exchanged and utilized by social actors throughout their political interplays. Therefore, its value is limited to certain contexts and its diffusion occurs as a consequence of actors' negotiations and interactions. A mild view of this model considers knowledge as a critical resource for the implementation of strategies advanced by influential actors. A more radical view perceives knowledge as a resource that can be controlled opportunistically to gain competitive advantage in specific social situations. A hybrid of the enlightenment and the strategic model is the deliberative or interactive model of knowledge utilization. Knowledge is equally perceived as a resource for actors on one hand and as the basis for understanding world views on the other hand. This model emphasizes a high level of collaboration between researchers and practitioners materializing in a co-production and co-interpretation of knowledge within a deliberative democracy framework (Denis et al., 2004).

Political Analysis Model

Both beliefs and learning affect policy choices. The ACF can explain the formation and stability of coalitions and the policy learning process. However, it does not clarify how learning and beliefs get translated into action and policy, i.e. an explanation of action and policy change

(Schlager, 1996). Moreover, the ACF puts a lot of emphasis on the role of learning in policy change. It assumes that actors are instrumentally rational and that they pursue policy-oriented goals rather than self-interests of economic or political order (Sabatier and Jenkins-smith, 1999 130:1 in Nohrstedt, 2005). Many would disagree with this ACF assumption and would believe that self-interests, or power maximization, are major drivers of political decision-making (Nohrstedt, 2005). Accordingly, we introduce a political analysis model to help us better analyze how actors utilize information and knowledge in pursuit of their personal interests and goals in addition to their policy-oriented goals (Champagne, Denis, Pineault and Contandriopoulos, 1991). The framework is inspired by Crozier and Friedberg (1977) strategic actor model. Through this model, we integrated the concept of power to our analysis. The use of power sources is a strategy that actors utilize in order to achieve their objectives (Crozier and Friedberg, 1977; Bernoux, 1985). Four sources of power are described by Crozier and Friedberg (1977): expertise; control of the relations with the environment; control of communication and of information; and knowledge of operating rules.

Methodology

The research design that is proposed to answer the questions of interest consists of a case study. The case is the adoption of the *Governmental Action Plan 2006-2012 for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems: Invest in the Future (GAP)* by the Government of Québec. The plan was adopted in 2006 with a time frame of six years (Government of Québec, 2015a). A long-term perspective, at least a decade, should be adopted to understand the contextual events, actors' strategic behavior, policy-oriented learning and other patterns and logic of policy change (Jenkins-Smith et al., 2014). Accordingly, we delineated the time boundary of the case study to include national public health policies adopted by the government or the Ministry of Health and Social Services (*Ministère de la santé et des services sociaux*, MSSS) as of 1996. In 1992, the Government of Québec issued its health and well being policy with a time-frame of ten years. Accordingly, this policy delineates the time boundary of the case study. Governmental actions prior to this year were only considered when relevant in the scope of this case study. The Institutional Review Board of the Université de Montréal reviewed and approved the study.

Data Collection

Two sources of data were used: (i) interviews and (ii) documents

Interviews

Semi-structured open-ended interviews were conducted with key informants from various ministries and organizations involved in the GAP elaboration as well as in advocacy on weight related-problems in Québec, such as the Provincial Working Group on Weight Related Issues (*Groupe de travail provincial sur la problématique du poids*, GTPPP). Following an initial document review, we developed two lists of active actors and institutions in obesity prevention in Québec. The actors' list was validated by the national GAP coordinator (2007-2012). We then developed a short-list which included the GTPPP actors and the GAP elaboration work team. Our first round of interviews included short-listed key informants. We then followed a snow balling technique to identify our remaining key informants. Along with the document review, we could identify other key informants. Those include members of the Perrault Working Group, a working group created by Québec cabinet in 2004 to address the issue of obesity prevention in youth. We also identified the main collaborators of the Perrault Working Group from all participating ministries and organizations. Sample variability based on the relevance of the key informants to the research questions guided the strategic sampling. Interviews were discontinued after we have achieved data saturation.

An interview guide was developed to help cover research questions and themes. An alignment of the queries with the information that needs to be collected under that query has also been developed (Available upon request). Adjustments to the interview guide were made based on the contribution of the key informant to the GAP. Accordingly, each interview delved into the areas of expertise of the key informant. The main researcher conducted the interviews (n=24) between May 2016 and January 2017. Most interviews (n=23) were held between May and October 2016. The initial round of interviews included the GAP authors (n=2), writing directors (n=2) and the GAP coordinator (n=1). Other interviews with national key actors in the obesity prevention policy subsystem in Québec (n=3) were conducted to help build a better understanding of the obesity prevention subsystem. Appendix III presents the demographics of our key informants by institution, affiliation, profession, position and level of studies.

Most of the contacted key informants agreed to participate except those who had retired (n=2) and those who reported they had little implication in the GAP elaboration or couldn't recall the events (n=3), or had no interest in obesity prevention rather on physical activity promotion (n=1). All interviews were recorded after the consent of the key informant. When needed, we communicated through email with the key informants to follow up on information or document provision.

Documents

Documents (n > 200) represent our second source of information. We developed a document database using three sources of documents: (1) ministerial and organizational documents; (2) bills, briefs, committee reports and other documents of Québec National Assembly; (3) unpublished documents including reports, meeting minutes and other documents of interest provided by key informants. We consulted the websites of the organizations identified earlier under the list of active institutions. These included governmental and non-governmental organizations, Québec National Assembly, professional regulatory bodies, academic institutions and private sector organizations. We reviewed all policies, guidelines, position papers, press releases, scientific opinions on obesity prevention of concerned ministries and organizations. For the purpose of data triangulation, we reviewed other documents, such as annual reports and strategic plans, when needed. Data sources and variables of interest to this study are presented in Appendix IV.

Data Analysis

The main researcher transcribed the interviews using Dragon software. We used NVivo 11 Pro to analyze verbatims. The main researcher analyzed the verbatims. We developed a coding guide based on the conceptual framework. As the analysis progressed, we integrated emergent themes related to the concepts. For this study, we used various codes to help us understand actors' beliefs and learning. We used the three-tiered belief structure of Sabatier to code actors' beliefs: (i) deep core beliefs, (ii) policy core beliefs and (iii) secondary beliefs (Appendix II). We also coded the goals of the actors whether they departed from or aligned with their beliefs.

We coded Knowledge and information as a subtheme under the actors' resources. We coded the availability of knowledge and information or the lack thereof as actors' opportunity or

constraint respectively. Another constraint we coded for was the conflicts experienced by actors. We also coded actors' strategies aimed at generating and diffusing knowledge. In addition, and to help identify influential milestones related to information and knowledge and their effect on actors' learning, we also coded internal and external events that occurred throughout the study period. Finally, and under the sources of power of actors, we also coded for the control of communication and information and actors' expertise.

To understand whether learning occurred and what belief structure it affected, we created a semantic structure for learning based on our coding scheme. The semantic structure included: (i) the actor (s) involved, (ii) the coalition the actor(s) belongs to, (iii) the type of information or knowledge, (iv) the type of utilization the actor(s) made use of the information, (v) the professional forum (meetings, discussions, committees, workshops etc.) and (vi) the pre-post beliefs of actors that were involved when possible (whether through interviews or document analysis). Drawing from Weiss' (1977) interpretation of research utilization, the utilization of technical and scientific information by actors was classified into: (i) conceptualization, (ii) problem-solving, (iii) knowledge-driven, (iv) political and (v) interactive use.

Results

The aim of this study is to identify the various advocacy coalitions involved in the GAP elaboration in Québec and to understand the role of knowledge utilization and policy-oriented learning in policy elaboration and change. We seek to answer the following descriptive questions: what are the belief systems and networks of advocacy coalition members? Do coalitions experience policy-oriented learning? What types of obesity prevention policies are formulated or promoted by coalitions? We also aim to answer the following explanatory questions: how do coalitions utilize knowledge? What fosters policy-oriented learning? What is the role of knowledge utilization policy-oriented learning in the GAP elaboration and adoption?

We will first start with a description of some milestones in the development of the obesity prevention policy in Québec and the emergence of the policy subsystem. We will describe the advocacy coalitions that were involved in the policy process and highlight their belief structure. We will then explain how various coalitions utilized knowledge to advance their policy beliefs and

whether policy-oriented learning occurred within or across coalitions contributing to policy change per se.

Development of the Case for Obesity Prevention Action in Québec

How do policy subsystems emerge? The most likely answer to this question is the dissatisfaction of some actors with the status quo, precisely with how the existing subsystem is handling a specific problem and thus they become willing to form their own subsystem (Sabatier, 1987). In the case of Québec, it was a dissatisfaction of group of public health professionals that attempted to challenge the status quo as reported by many key informants.

> *"… around the year 1998, in Québec and almost everywhere, there was no public health perspective on obesity … because it was a problem that we could qualify as orphan, in the sense that in the public health sphere no one cared about it … Obesity was not being addressed as a public health problem; obesity was a clinical problem that interests physicians, dietitians or kinesiologists, but especially a problem that was poorly perceived because we felt we could do nothing about it. Treatments were ineffective, there was nothing we could do and that was the status quo at the time."*
>
> *Government consultant (2016)*

> *"In the early 2000s, we were the only people talking about healthy lifestyles and obesity, we were the only ones!"*
>
> *Government director (2016)*

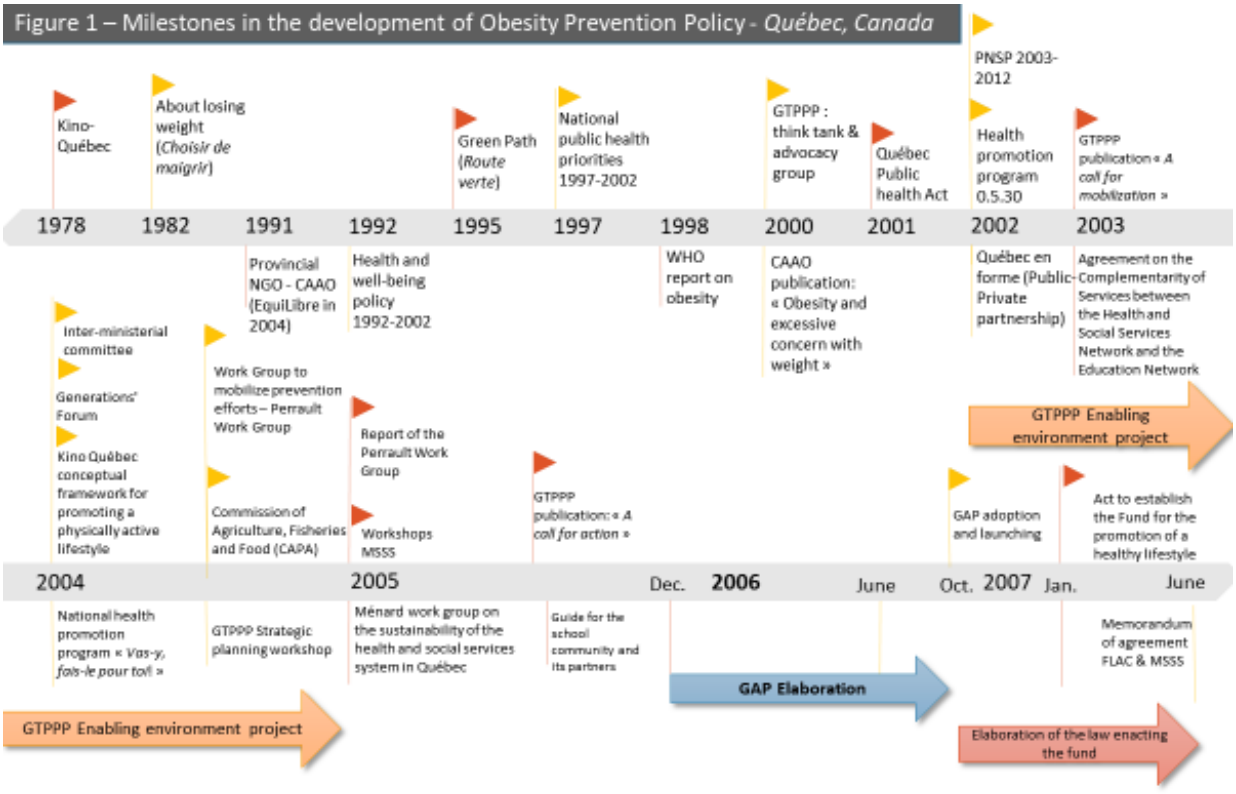
Obesity had received little attention in Québec prior to the GAP. The Health and Well-being policy 1992-2002 (MSSS, 1998) and the National Public Health Priorities 1997-2002 (MSSS, 1997) did not prioritize obesity. The National Program of Public Health 2003-2012 addressed obesity under its lifestyles and chronic diseases' domain (MSSS, 2003). However, obesity prevention actions included under this domain failed to respond to public health professionals' ambitions and objectives.

> *"when the program [National public health program] came out, the main, at least the criticism that most struck me is that the life-styles chronic diseases domain was weak as compared to others… we were a little vague…"*
>
> *Government director (2016)*

Figure 1 describes some milestones in the development of the case for obesity prevention action in Québec as reported by key informants. These milestones provide a timeline description of events that affected the policy process. They will be described throughout the results' section. For the purpose of this research, obesity prevention policy is assumed to embrace all actions aimed

at preventing obesity, whether policies, programs, interventions or action plans. Obesity prevention can be a primary or a secondary objective of said actions. Besides, these actions should address any of the two proximal determinants of obesity, namely diet and physical activity.

Figure 11. Article 3 – Figure 1 Milestones in the Development of Obesity Prevention Policy – *Québec, Canada*



The GAP

In October 2006, the government of Québec adopted the governmental action plan for the promotion of healthy life styles and prevention of weight-related problems 2006-2012, Invest in the Future, with a time frame of six years (MSSS, 2006). As part of his plan, the government has proposed measures to improve environments to promote healthy eating habits, reduce obesity prevalence and prevent weight-related problems and their impacts on the individual and on the society at large (MSSS, 2006). The GAP comprises five intervention axes that include all together

75 actions allocated as per the following: (i) promote a healthy diet (21 actions); (ii) promote a physically active lifestyle (26 actions); (iii) promote enabling social norms (10 actions); (iv) improve services for people with weight problems (10 actions); (v) promote research and transfer of Knowledge (8 actions) (MSSS, 2006). The elaboration of this plan necessitated the collaboration of numerous ministries and governmental institutions (Figure 2). These are namely the Ministry of Health and Social Services (MSSS), the Ministry of Agriculture, Fisheries and Food (MAPAQ), the Ministry of Education, Recreation and Sports (MELS), the Ministry of Families Elderly and Women's Condition (MFACF), the Ministry of Transport (MTQ), the Ministry of Municipal Affairs and Regions (MAMR), the Ministry of Employment and Social Solidarity (MESS), Secretariat for Youth (SAJ), Secretariat for Women as of 2011 (SCF), Consumer Protection Office (OPC), and the National Public Health Institute of Québec (INSPQ) (MSSS, 2006).

Figure 12. Article 3 – Figure 2 GAP Participating Ministries / Institutions – *Québec, Canada*

Figure 2: GAP participating ministries / institutions - *Québec, Canada*
(1) Ministry of Agriculture, Fisheries and Food
(2) Ministry of Education, Leisure and Sports
(3) Ministry of Family, Elderly and Women's Condition
(4) Ministry of Health and Social Services
(5) Ministry of Justice - Consumer Protection Office
(6) Ministry of Labor and Social Solidarity
(7) Ministry of Municipal Affairs and Regions
(8) Ministry of Transportation
(9) National Institute of Public Health
(10) Youth Secretariat

Obesity Prevention Policy Subsystem in Québec

The obesity prevention policy subsystem in Québec when the GAP was elaborated included a variety of actors issued from the governmental sphere, non-governmental organizations, the private sector, research centers and the media as outlined in Appendix V. Though many actors from various organizations participated indirectly to the GAP through their contribution to various

committees or working groups, the GAP was mainly elaborated under the leadership of the Ministry of Health and Social Services and the participation of several ministries (Figure 2).

Advocacy Coalitions

It was possible to delineate four active coalitions in the obesity prevention policy subsystem at the provincial level prior to the GAP elaboration. In order to do so, belief systems were identified for the coalitions' actors based on the three-tiered belief structure. Belief systems include deep core beliefs, policy core beliefs and secondary beliefs (Jenkins-Smith et al., 2014). Interviews were analyzed and belief aspects under each belief level were coded. Accordingly, actors' core beliefs aggregated under four active coalitions. Table 1 outlines the normative aspects of the policy core beliefs of the advocacy coalitions and each coalition's perception of the problem. The empirical belief aspects highlighting causes, solutions and proposed policy instruments are outlined in Table 2. Figure 3 outlines key features of coalitions' beliefs and emphasizes similarities or common beliefs as well as dissimilarities, i.e beliefs that represent the defining characteristics of each coalition.

Coalition 1 (Major Coalition) – Enabling Environments Advocacy Coalition (EEAC)

This coalition considers obesity as a serious public health problem, an obesity epidemic. It is an increase in the mean population weight and the consequential increase in the morbidly obese population that is alarming. "…The problem was…the increase in the average weight in the population…" Government director (2016)

Concurrently, concerns about body image increased making the problem more complex and two-folded. The main goal of this coalition is the prevention of obesity and weight-related problems. Members of this coalition prioritize health as a value. At the same time, they utilize the scientific evidence on the outcome of ill health caused by obesity as a convincing argument to advance their policy solutions. A fear message related to increased burden of chronic diseases and health care expenses was also at the core of their beliefs regarding the seriousness of the problem. The EEAC believes that obesogenic environments are the culprit behind the obesity epidemic. They induced unhealthy lifestyles that in turn led to an imbalance in energy intake and expenditure. Concomitantly, environments promoting extreme thinness and a unique beauty model typical of extremely thin women and muscled men are leading to excessive concern with weight. Therefore,

the EEAC does not prioritize traditional health education methods or clinical treatments of the obese. Coalition members do not believe that these approaches can help in problem-solving unless they are coupled with public policies in support of enabling environments so that healthy choices are made the easy choices. Government legislation and regulation in all sectors under the leadership of the public health sector is a must; otherwise, obesity prevalence is likely to increase. The creation of enabling environments depends on government intervention through the adoption of public policies. Legislation is also needed in all sectors to help create enabling environments. The EEAC is against the deregulation logic and market regulation because of unequal means of each party. Besides, they don't believe in voluntary auto-regulation of the industry. Some members with extreme views might propose limiting individual choice such as taxation of unhealthy foods, or modification in transformed foods to improve their nutritional value even if such an intervention was done in a blind way, i.e. without informing the consumer.

Obesity prevention interventions should not leave out any societal constituent or population segment. Actions should not solely focus on children and families. Although members of the EEAC acknowledged that focusing on children is a good political strategy that receives high public and political support, however it should not undermine the need for interventions with adults, at the workplace for instance.

> *"We, from a public health perspective, focusing exclusively on young people did not necessarily seem to us a priority, because it reproduces what has been done in tobacco for a long time…You do not transform social norms if adults do not change their behavior and if there is no societal transformation. To think that just by educating young people in an environment where everyone does the opposite, the most powerful learning among young people is social learning, they will learn and then they will live like their parents live, their grandparents live, their friends live; Therefore, to prevent obesity, modifying environments, if we want to reduce chronic diseases we must put a lot of focus on adults. It is true we must look after children, but we must also take care of the adults […]. So, we did not just want to work on environments around young people, we wanted to go to workplaces, towards active transportation, urban planning, we were broader in scope."*
>
> *Government director (2016)*

Members of this coalition are from the MSSS general directorate of public health, namely the promotion of healthy lifestyles team and the national public health director at the time; they include collaborators from the National Public Health Institute healthy lifestyles unit, from the Québec Association for Public Health of Québec (*Association pour la santé publique du Québec*,

ASPQ) and the advocacy group GTPPP. Most EEAC members belong to the public health network. Accordingly, there was a strong public health professional socio-cultural identity that inspired and guided the beliefs and strategies of its members.

The EEAC benefited from a well-organized structure and a high level of coordination. Members were coordinating through a minimum of four organized channels: the advocacy and think tank group GTPPP, the formal organizational structure of the MSSS Public Health Directorate, specifically the Promotion of Healthy Lifestyles' unit and their network, the Perrault Working Group and the GAP elaboration inter-ministerial committee. Other coalitions and mainly the HLPAC saw in the EEAC coalition strategies, namely the use of authoritative health arguments in promoting its own policy solutions, less stimulating. The HLPAC acknowledged that the sense of urgency that was called for by the WHO for governments to tackle the obesity epidemic, led to a crisis management approach advanced by the EEAC. The HLPAC could not subscribe to the EEAC approach focused on obesity prevention through a "fear" message rather than a motivational one focused on promoting healthy lifestyles and where pleasure and well-being are at the center.

Coalition 2 – Healthy Lifestyles Promotion Advocacy Coalition (HLPAC)

This coalition perceives obesity as one possible consequence of an unhealthy lifestyles problem. The problem is sedentary lifestyles (Kino-Québec, 2000a).

> *"At the time, we were very much focused on the fight against sedentary lifestyles… it is certain that […] the data was not very very good, but we were, we made a link with obesity but not so much, we were more in the logic of sedentary lifestyle… At Kino-Québec, we were very much focused on the individual factors too…"*
>
> *Government director (2016)*

Members of the HLPAC do not consider overweight or obesity a problem per se if people are physically active and have a healthy diet. This was in disagreement with EEAC members. The main goal of this coalition is to promote heathy lifestyles, namely physical activity, for general health and well-being, not specifically or solely obesity prevention. Motivation must be intrinsic, deriving from the rewarding pleasure and well-being for instance, rather than extrinsic coming from the fear of obesity or chronic diseases. In fact, they didn't want physical activity to fall in the obesity discourse of the EEAC and become a weight management promotion tool. Many HLPAC members would not naturally link obesity and physical activity; it is too narrow to claim benefits

of physical activity for just one health ailment whereas a physically active lifestyle is beneficial to the wide spectrum of psycho-social, physical and mental health in addition to education success.

> *"It is clear that physical activity is not promoted solely for the purpose of losing weight or for tackling the problem of obesity… if people are physically active even if they have excess weight, it is not so serious, it is not a problem by itself if people are active and have a healthy diet... According to the physical activity promotion network, to see it, to see the link obesity-physical activity, it is clear that initially, it is not that there was divergence, but the link was not automatic… And then as I have explained, given that there are many aspects of health that can be resolved or reduced in severity through promotion, through regular physical activity, maybe it's a little bit what I would say with respect to the misperception from the start."*
>
> *Government professional (2016)*

Promoting healthy lifestyles is the preferred policy approach according to this coalition. Because healthy lifestyles are acquired early on in life, it is important that interventions target the youth as a priority and particularly in disadvantaged settings. The HLPAC considers that obesity prevention carries a negative connotation and entails the risk of stigmatizing obese individuals, whereas promoting healthy lifestyles is a positive approach. Moreover, in the past there was a large emphasis on individual responsibility for unhealthy behaviors that resulted with inflicting stigma to obese people. Solutions will need to include a balance between approaches of the individual type to modify individual behavior, and population-based approaches including enabling environments.

> *"Solutions are education. I think it's the first solution, it' is education. But education has more than one level. You know, I think that the education of children in elementary school is an important thing but […] to reach for a primary school child, first and foremost, a teacher must be reached for. This, we forgot about it for the last 40 years. A class […] is composed of students and a teacher. This is the core and then the first ally that must be fetched is the teacher, you know he is the first ally that we must make. It's not about adding things into programs of study, it's not about adding physical education time […], it is to go and get an ally called Mrs. X or Mr. Y, and then they, themselves, are the first and foremost well convinced, well equipped on their side, it is them whom we must equip first place."*
>
> *Government director (2016)*

Members of the HLPAC are in favor of social marketing campaigns to improve social norms, namely people's attitudes towards healthy lifestyles. Members of the HLPAC acknowledge the long-standing use of the health behavior education approach with little focus, if any, on enabling environments. Accordingly, they understand the frustration felt by the EEAC and their strong advocacy for enabling environments.

"Given that the discourse on individual factors had taken a lot of place, it seems that public health actors needed to put a lot of emphasis on environmental factors, they evacuated completely individual factors: 'no no no no, people know it, we have talked enough about it!' But our discourse should include both"

Government professional (2016)

The HLPAC benefited from a well-defined structure, with coordination varying from medium to high depending on the perceived threat on their policy core beliefs. Members of the HLPAC include the MSSS ministerial partners from the Leisure and Sports Secretariat, members of the physical activity promotion network and members from the Ministry of Education, Leisure and Sports. Many of them being physical educators or educators, the socio-cultural identity that dominates their beliefs draws largely from the centrality and importance of education in health promotion policies.

HLPAC members were coordinating through five main channels: the Leisure and Sports Secretariat and the organizational structure of the program Kino-Québec[1] including its scientific committee and coordinators, the MELS, the MSSS' regional network, the Perrault Working Group, and the GAP writing inter-ministerial committee.

Coalition 3 - Agri-food Advocacy Coalition (AFAC)

This coalition considers obesity as a serious problem even though it hasn't reached the alarming rates in Québec and Canada yet as compared to the USA. The AFAC blames the change in dietary habits and lifestyles for being the culprit for the obesity problem that Québec was faced with. The AFAC acknowledges that there is, however, a consensus on the seriousness of the obesity problem and at the same time there is a concern for stereotyping, which both should be addressed. The AFAC believes that exercising and eating a healthy diet are individual choices and individual responsibilities. "…To practise physical activity or to pay attention to one's diet is an individual choice…" Government director (2016)

The role of the government and particularly the Agri-Food sector lies in ensuring comprehensive food supply, leaving it for the market rules to regulate that supply or even improve it. The AFAC does not believe in any role the state would have to limit access to unhealthy foods

[1] Launched in 1978, Kino-Québec is a provincial program designed to promote a physically active lifestyle

through taxation of unhealthy foods for instance; food is a necessity and not a choice and taxation might simply jeopardize the purchasing power of the lower socio-economic group of the population. Nor would this coalition subscribe to actions such as improving access to healthy foods through subsidizing fruits and vegetables; prices are regulated through market demand and supply rules. However, they believe that the state can have a role in creating enabling environments for the practice of physical activity to generate opportunities for energy expenditure. Nevertheless, and according to the AFAC, the creation of enabling environments is not enough for individuals to engage in physical activity. Again, they relate this to personal choice matters, given that the ultimate choice is made by the individual. "I do not think the MAPAQ has a role in regulating that (demand and supply), I do not think so. I think that as I have previously said, it is an individual choice." Government director (2016)

The policy options the AFAC advances are increasing awareness, providing information and educating the public on the importance of exercising and eating a healthy diet. Improving the nutritional profile of transformed foods and the performance of the agri-food industry is also possible through information and increase in awareness of the stakeholders of the agri-food sector. This sector is usually open to improvements suggestions, because they care about their customers' satisfaction and look for excellence in their production processes, the balance in their food supply and their products, according to the AFAC. This coalition also promotes regulation concerning quality criteria for government food services contracts namely in schools and hospitals. The regulation should address mostly the quality of food and should favor local produce. Members of this coalition believe that the family environment is important in shaping habits of young children and accordingly both children and families should be an intervention priority. Members of this coalition were coordinating in an organized way. In fact, they created the MAPAQ Working group on diet and health in December 2005, following a decision of the MAPAQ board of directors. The working group's role was to develop an action plan to be included in the GAP (Working group on diet and health, 2006).

The AFAC benefited from a well-defined structure, with coordination varying from medium to high depending on the perceived threat on their policy core beliefs. The AFAC includes members of the Working group on Diet and Health of the MAPAQ and their partners from the agri-food industry. Many of them being trained in agriculture or economics, the socio-cultural

identity that dominates their beliefs draws largely from the centrality and the importance of competitiveness, profitability and market regulation based on demand and supply rules.

Coalition 4 - Community Development Advocacy Coalition

The CDAC had been active in the policy subsystem as of the year 2000, following the selling of the telecommunications enterprise Videotron and the launching of the activities of the Fondation Lucie et André Chagnon (FLAC, 2017a). Québec en Forme, a not-for-profit organization was created in September 2002. The organization signed a memorandum of understanding through which the FLAC and the Government of Québec would contribute to financing Québec en Forme's project. Said project would contribute to improving the overall health and autonomy of children through the development and implementation of a program that integrates physical activity and sport into their lifestyles (QeF, n.d., p. 12). The project specifically targets 4 to 12-year-old children in disadvantaged areas (QeF, n.d.). Its implementation would extend from 2002 till 2006 (QeF, n.d.).

The presence of the FLAC and QeF in the obesity prevention policy subsystem in Québec is quite important. In fact, one of the major actors of the CDAC, the chairman of the Lucie and André Chagnon Foundation, was a member of the Perrault Working Group. He proposed to finance the GAP, specifically the community targeted actions aligned with the GAP, in parity with the government. Accordingly, the importance of the role of the CDAC in the GAP adoption can not be underscored. This coalition considers that the health of children is a societal issue of paramount importance. Poverty and disease in children being the main culprit of ill health, promoting healthy lifestyles are part of disease prevention whereas preventing poverty should be through education success. The CDAC also believes that individuals and communities must take responsibility for their own health. The main goal of this coalition is to work with the communities, to develop and implement interventions on healthy lifestyles based on emergent community needs and local priorities. The ultimate goal is to empower local communities. Accordingly, the CDAC believes that authority should be at the community level and not at any other level. The regional and national levels can not decide on the community's behalf, nor impose on it.

> *"The other concern, the other main concern we had all along that is, well the approach of the Foundation we did not want to impose [in quotation marks] an approach, a program, a way of doing; we try to see how we can foster innovation*

[…] If we adopt an approach, aren't we withholding local actors' capacity and imagination? […] Then compared to the vulnerable people approach […] it was also the […] the other big challenge […] it is a constant challenge, it is not because it exists that people use it, and it's not because they use it that they necessarily have all the environment and the capacities to turn it into an opportunity."

Anonymous (2017)

"Chagnon, his belief is the local then the communities will take control and then we will change the world. The Chagnon Foundation thought it would change the world with local groups. that's not how we change a society. There must be investments at the regional level, especially in Québec, where public health is regional. That's where it happens! and it takes investments nationally for national groups then public policy, you have to invest everywhere»

Government consultant (2016)

"What happens in Maria Gaspésie is not at all the same reality as Verdun here in Montreal; and the principle of community ship, it is the offer that is important, and we did not want to come up with, well, 'you should work on food deserts' when it was not at all their problem."

Anonymous (2016)

Mr. Chagnon repeatedly confirmed his willingness to co-invest with the government in promoting healthy lifestyles only for local interventions. His proposal stemmed from his acknowledgment that the efforts of the Government of Québec in tackling obesity had failed so far. His intervention would give the needed tap in the back and bring things forward.

In fact, the mission of QeF evolved with time. Starting in 2001 with a mission focused on improving children's health through the implementation of a sustainable program in promotion and participation in sports and physical activity, the mission had evolved by 2005 (QeF., n.d.). The concept of sustainable actions promoting a healthy and active lifestyle with engaged communities was introduced (QeF, n.d.). Along with it, the vision evolved. From a focus on integration of physical activity in children's behaviors to a focus on decision-makers enactment of policies to promote health promoting environments. Despite the evolving missions and visions, Québec en forme's actions at the level of communities and through their local partners targeted mostly the practice of physical activity among children in disadvantaged settings. The CDAC approaches reflected mainly behavior modification approaches and started in fact as such. In fact, at the beginning roles and responsibilities of Québec en forme were less clear (MSSS, 2013). In addition, Québec en forme was less equipped conceptually to start with its mandate. Probably the following

quotes explain better what was to be built as far as conceptual frameworks guiding future interventions at Québec en forme after they got the GAP-related mandate.

> *"So, at the beginning we [in reference to Québec en Forme] had the money, we had the mandate, but we had nothing else; so (we had to) define everything the conceptual basis of the promotion, the promotion of physical activity"*
>
> *Government professional (2016)*

> *"The first mandate from 2002 to 2006 of Québec en forme was focused on creating physical activity experiences for young people and providing access to physical activities for young people from disadvantaged backgrounds, to which they wouldn't have access otherwise… Québec en forme partners were very much focused on individual factors, namely allowing children to live experiences through which they develop attitudes and beliefs conducive to physical activity."*
>
> *Government professional (2016)*

This contrasted with the EEAC whose beliefs, advocacy and proposed interventions focused on improving environments and the HLPAC, to a certain extent. It was also contradictory with the EEAC's belief of the necessity of expanding prevention to the whole population.

> *"…this dilemma between the Foundation and the government because they do not have the same vision. It took time, for the Foundation, to make them understand the environments, my God it was complicated! […] his concern is very much focused on individuals, so you had a vision problem…"*
>
> *Government director (2016)*

> *"What the ministry [referring to the MSSS] wants is to do prevention on a broad spectrum. The Chagnon Foundation evolved […] but it was really the young people […]"*
>
> *President provincial organization (2016)*

The CDAC benefited from a well-defined structure, with coordination varying from medium to high depending on the perceived threat on their policy core beliefs. The FLAC founder participated to the Perrault Working Group. The FLAC being a philanthropic organization that was created by a successful entrepreneur who valued children's health and development, the choice of issues to work on is based on the founder's opinion and directives (Erudit, 2011). Partners are of paramount importance and are at the heart of their operations. However, they are not involved in the strategic directions of the foundation. Such directions are set by the founder of the organization (Erudit, 2011). The following quote reiterates this point, also reported by many study participants. *"And with the foundation, that is the main problem: today they go there, then*

tomorrow morning they go elsewhere! And there is one person who decides it was Mr. Chagnon!" President provincial organization (2016)

Figure 13. Article 3 – Figure 3 Advocacy Coalitions – Obesity Prevention Policy Subsystem – *Québec, Canada*

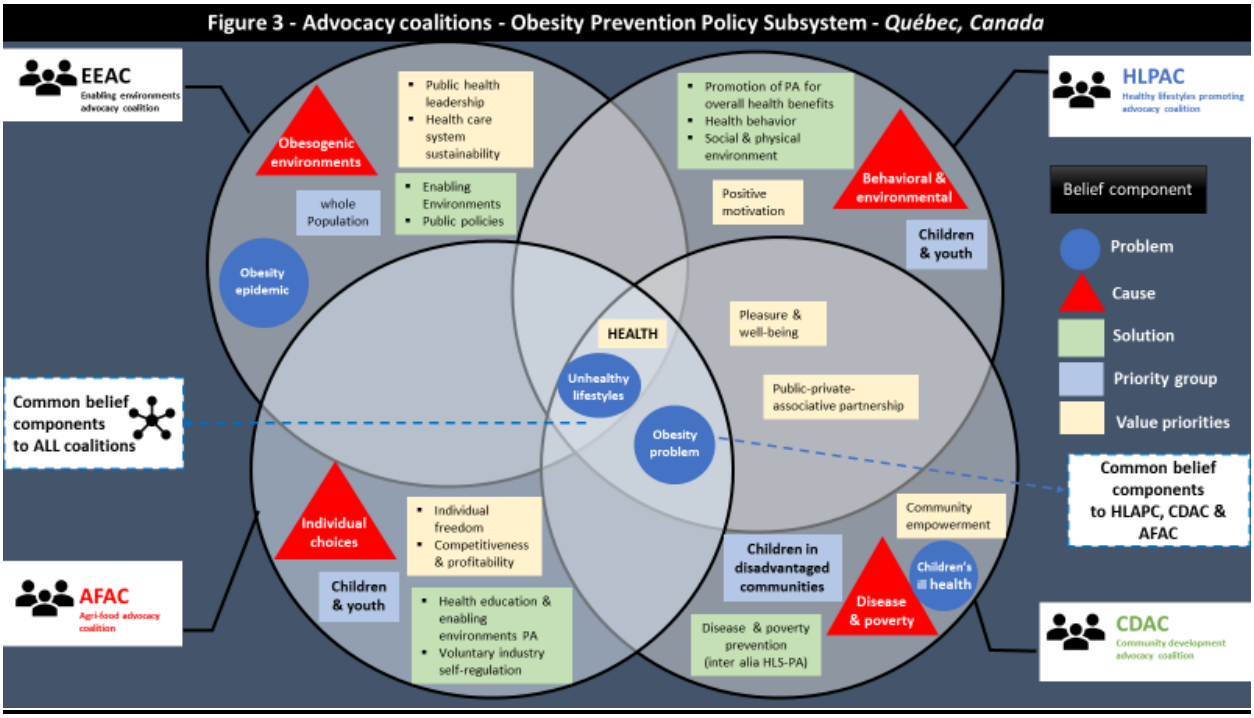


Tableau II.Article 3 – Table 1 Components of the Policy Core Belief System of the Four Advocacy Coalitions in the Obesity Prevention Policy Subsystem in Québec, Canada

	Enabling Environments Advocacy Coalition (EEAC)	Agri-food Advocacy Coalition (AFAC)	Healthy Lifestyles Promotion Advocacy Coalition (HLPAC)	Community Development Advocacy Coalition (CDAC)
Coalition members	Team of the promotion of healthy lifestyles unit at the MSSS and their collaborators: INSPQ, GTPPP, ASPQ	MAPAQ and its partners from the agri-food industry	MELS, its Sport and Leisure Secretariat and their partners, Kino-Québec and its collaborators' network	Lucie and André Chagnon Foundation, Québec en forme
Policy core beliefs				
Seriousness of the problem	Obesity is a public health problem, an epidemic. Two facets of the problem: obesity and excessive concern with weight.	Obesity is a serious problem in Québec and Canada, less problematic than other countries such as the USA	Obesity is a serious problem; it is the consequence of unhealthy lifestyles; The problem is unhealthy and sedentary lifestyles	Poverty and disease in children and youth is the main problem. Unhealthy sedentary lifestyles have devastating health effects and are an early prevention target.
Basic value priorities *(related to the policy problem)*	Health, knowledge, public health leadership, credibility, authority and accountability, stigma avoidance and positive body image, collective and government responsibility, health care system sustainability	Individual freedom and choice, individual responsibility, economic competitiveness and profitability, support for Québec agri-food industry, concern for socio-economically disadvantaged	Health and well-being, positive motivation, centrality of pleasure for behavior modification, self-development, education success, self-esteem, stigma avoidance	Poverty alleviation, education success, social charity, equity, community development and empowerment, individuals and communities' responsibility for their health, political influence and power, increased government investment in children
Groups whose welfare is of greatest concern	Everyone from birth Socio-economically disadvantaged	Youth and family Socio-economically disadvantaged	Youth and socio-economically disadvantaged communities	Children in socio-economically disadvantaged settings;
Collaboration channels	Advocacy group GTPPP, MSSS DGSP network and promotion of healthy lifestyles' team, Perrault Working Group, Inter-ministerial committee	MAPAQ working group on diet and health, Perrault Working Group, Inter-ministerial committee	Leisure and Sports Secretariat, Kino-Québec, MELS, Perrault Working Group, Inter-ministerial committee	Fondation Lucie et André Chagnon, Québec en forme, Perrault Working Group

Tableau III.Article 3 - Table 2. Components of the Policy Core Belief System of the Four Advocacy Coalitions in the Obesity Prevention Policy Subsystem in Québec, Canada

	Enabling Environments Advocacy Coalition (EEAC)	Agri-food Advocacy Coalition (AFAC)	Healthy Lifestyles Promotion Advocacy Coalition (HLPAC)	Community Development Advocacy Coalition (CDAC)
Causes	Obesogenic environments	Unhealthy individual choices with respect to diet and physical activity typical of north American modern diets and sedentary lifestyles	A mix of behavioral and environmental factors with large emphasis on behavioral factors related to sedentary lifestyles	Causes are more oriented towards behavioral factors; causes vary depending on the diagnosis in the local community
Policy core policy preferences	Enabling environments; Health behavior education only if coupled with enabling environments	Increase awareness, provide information and educate the public; Enabling environments with respect to physical activity; Voluntary self-regulation of agri-food industry and increase awareness	Promotion of healthy lifestyles (the practice of PA) Balance between health behavior education and population-based approaches including enabling environments	Behavior modification approaches to promote the practice of physical activity among children in disadvantaged settings
Priority to various policy instruments	Healthy public policies Government regulation and legislation (e.g. weight loss products, services & means: PSMA) Taxation (e.g. sweetened beverages)	Health education and awareness campaigns on healthy lifestyles Regulation of government provided food services (e.g. food supply & services in schools and hospitals) Increase availability of sports facilities through improved urban planning	Counselling and health behavior education Population-level interventions targeting social and physical environments (e.g. Social marketing campaigns; accessibility to PA facilities)	Mostly behavioral; Instruments vary based on local community diagnosis
Distribution of authority between government and market	Government role in regulation and legislation in all sectors Anti market self-regulation	Pro-market self-regulation Government role only in ensuring comprehensive food supply and creating enabling environments for the practice of physical activity	Government role in enacting public policies and in establishing partnerships with the private or associative sector	Mandatory government role in investing in children's health. Choice of government partners is based on the community's need and request Role of government partners is based on the CDAC interests and strategic directions
Distribution of authority between levels of government	Three levels: local, regional and national	Three levels: local, regional and national	Three levels: local, regional and national	Local community level

Knowledge Utilization

Rather than being fragmented and sporadic, utilization of knowledge by coalitions seems to have followed a strategic, iterative path from a conceptual utilization to problem-solving to a political and a deliberative utilization. Among other coalitions, it was the EEAC that demonstrated mostly and recurrently the knowledge utilization path we have just described. We can attribute this to at least two factors: (i) the presence of researchers, experts and practitioners interacting together in the EEAC, whether through the think tank, the government institutions and ministries; (ii) the frustration felt by the EEAC because of earlier public health policies that failed to address obesity and weight-related problems properly.

Our data did not reveal knowledge-driven research development by coalitions for the GAP elaboration. We can think of two factors that might explain this finding. Firstly, most knowledge-driven research was determined by biomedical and clinical interests of researchers attempting to unfold biomedical and clinical factors related to obesity and its solutions. Secondly, we can also attribute this to the lack of funds available for researchers to work on population-related factors and interventions on obesity. For instance, although the Heart and Stroke Foundation (HSF) had some of its members active in the obesity prevention policy subsystem, particularly in the GTPPP, this support was not translated into funding research on population health. Under our documentary review and analysis, we analyzed the HSF's annual reports between 2002 and 2006. Our review showed that most of the grant-in-aid provided was to support research under the basic biomedical (80 to 82%) and clinical themes (15 to 18%) rather than population health (1 to 2%) (HSF, 2003; HSF, 2004; HSF, 2005; HSF, 2006). We can reasonably think that this lack of investment in generating knowledge on population health would generate a parallel lack of interest in researchers in this specific area. Thus, knowledge-driven research production was absent from coalition strategies

Although knowledge-driven research was less observed, problem-solving research was carried out by all coalitions in support of their beliefs and interests. While the remaining four knowledge utilization types were central strategies to all coalitions, the EEAC was the most active coalition in terms of knowledge utilization. This coalition has deployed tremendous efforts to reconceptualise the obesity problem in Québec. Through its think tank, the GTPPP,

the EEAC developed a common understanding of the problem and its complex causes as well as a vision for its potential solutions. Internal and external events favoured knowledge utilization. For instance, a major global external event was the WHO 1997 consultation on obesity that advanced a public health perspective on obesity (WHO, 1998). Another major event was the election of a new government that allowed a reallocation of resources among coalitions eventually contributing to a change in the core of the government obesity-related policy.

Table 3 summarizes knowledge utilization by type and by coalition. We classified knowledge utilization occurrence in three categories based on the frequency of utilization by coalition throughout the policy process: (i) high; (ii) intermediate; and (iii) low. The table compares coalitions in terms of the use of knowledge utilization models. In this sense, the EEAC confirmed its leadership in all models. The higher use of knowledge and particularly the higher conceptual and problem-solving utilization can be attributed to its think tank, the GTPPP. A thorough description of knowledge utilization will follow.

Tableau IV.Article 3 – Table 3
Knowledge Utilization by Type and Coalition – GAP Elaboration - *Québec, Canada*

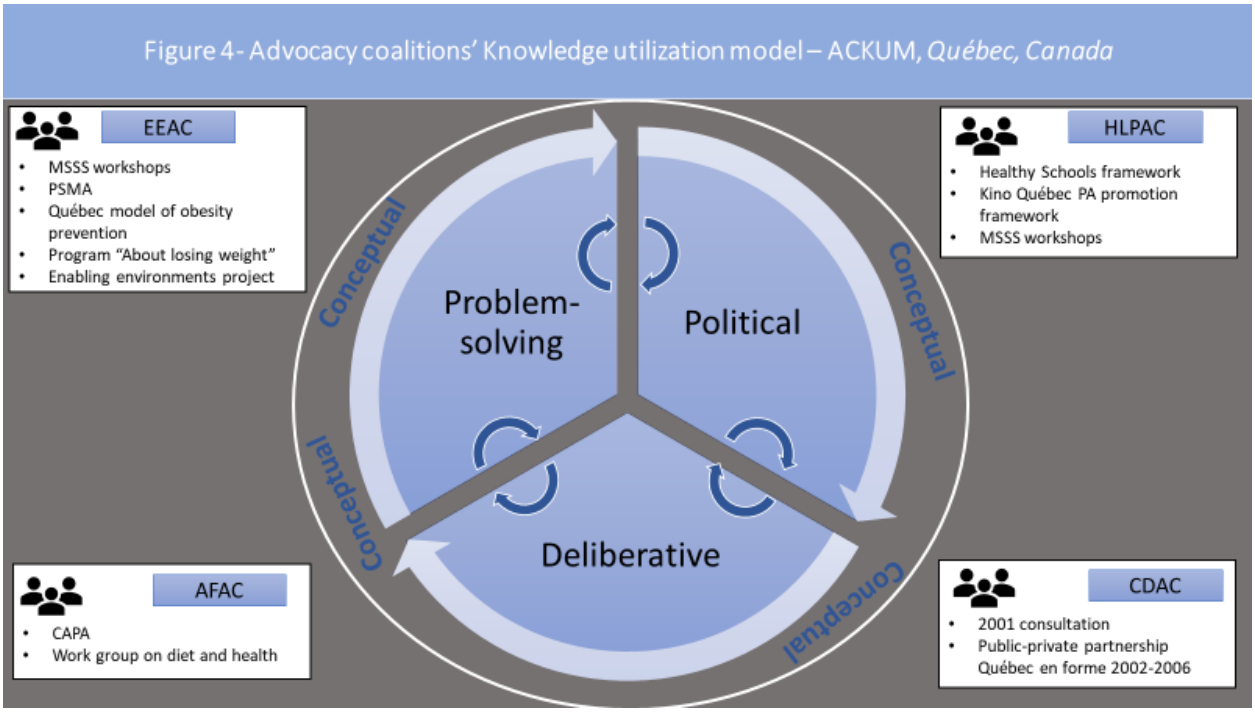
Table 3 - Knowledge utilization by type and coalition - GAP elaboration - *Québec, Canada*				
Coalition / *Knowledge utilization*	EEAC	HLPAC	AFAC	CDAC
Conceptual	•••	••	•	NA
Problem-solving	•••	••	•	•
Political	•••	••	••	••
Interactive	•••	••	••	••
Knowledge-driven	NA	NA	NA	NA

•••: High
•• : Intermediate
• : Low
NA : Data did not confirm

The following section outlines knowledge utilization by coalition and type. The deliberative type will be presented at the end of this section. Two deliberative forums bringing together all or most coalitions led to negotiated agreements between them and eventually the GAP adoption. Our data revealed interconnected knowledge utilization types that could be perceived as a knowledge utilization process or model that advocacy coalitions are likely to

follow in pursuit of their policy-oriented goals and interests. The process stipulates that a coalition with specific policy-oriented beliefs looks for existing evidence to confirm its beliefs, or works on generating such evidence, increasing as such its resources. The coalition will utilize the generated knowledge, in an iterative way, as a political ammunition through various means and in deliberative forums its members participate in. The model we propose (Advocacy coalitions' knowledge utilization model – ACKUM) is presented in Figure 4. As such, knowledge utilization is an integral part of actors' strategic behavior and political interactions.

Figure 14. Article 3 – Figure 4 Advocacy Coalitions' Knowledge Utilization Model – ACKUM, *Québec, Canada*



EEAC

Conceptual

Reconceptualise the Obesity Problem, its Definition, Causes and Solutions

National and provincial surveillance and research data on the increase in obesity rates alongside the increase in the concern for body image was iteratively used to measure the extent of the problem and appreciate its evolution and breadth. The EEAC used the scientific literature

and data on concern for body image, the scientific literature on a public health perspective on obesity policy that had accumulated over the past years in addition to the report of the 1997 WHO consultation on obesity to reconceptualize the obesity problem, identify its causes, possible solutions and target population (Schaefer & Mongeau, 2000; GTPPP, 2003; GTPPP, 2005).

The EEAC considered obesity as one facet of a double-faceted weight problem. This supported the existence of a paradox that embraces both the excessive concern with weight and body image alongside overweight and obesity. Therefore, the concept of the stigma inflicted on obese people was introduced along with the importance of avoiding it when developing policy solutions. Consequentially, the EEAC warned that any intervention should consider both sides of the medal and not improve one aspect of the problem at the expense of the other (Schaefer & Mongeau, 2000; GTPPP, 2003; GTPPP, 2005).

The EEAC adopted the 1999 obesity causal map introduced by the International Obesity Task Force given that it outlines the complexity of obesity causal factors. The EEAC advanced the belief that there are limits to health education-based interventions at the population level and other models should be considered. The EEAC advanced the concept of enabling environments as the preferred policy solution, including public policies. The EEAC emphasized the importance of enabling environments in making the healthy choices the easier choice, what the WHO recommended as a strategic approach to tackle obesity (Schaefer & Mongeau, 2000; GTPPP, 2003; GTPPP, 2005).

Based on the new public health philosophy of public health scholars (Milio 1981 in GTPPP, 2003 & Schaefer & Mongeau, 2000; Baum, 2002 in MSSS, 2006), the EEAC recommended that policies address everyone in their living and work environments; the EEAC's position with respect to groups to prioritize was in favor of the population at large. Moreover, members drew from the tobacco example to reassert the fact that one can not simply target the youth and leave out parents and families given that the latter are role models for their children.

> *"You could not deprive promotion and prevention in environments by targeting just children. Automatically you would reach people, adults, parents, automatically you would reach all your society. […] That's the philosophy of Baum in the new public health […]. That's what they tell us, is that you are going to reach for people where*

they are, where they are living, they are eating, they are entertained, where they are studying, working…"

Government professional (2016)

"we, from the point of view of public health, the focus exclusively on young people was not necessarily the right priority because it reproduced what we have done in tobacco for a long time; that the prevention of smoking, it is just for the youth, we will educate the youth […], but everyone around will continue to smoke, so it does not transform social norms, if adults do not change their behavior, if there is no transformation of society, thinking that just by educating the youth in an environment where everyone does the opposite, well, the main power of learning is social learning in youth, they will learn, then they will live similarly to how their parents live, their grandparents live, their friends live…"

Government director (2016)

New Weight Management Paradigm

A new weight management paradigm was conceived by members of the EEAC. Said paradigm questioned the traditional weight loss methods and their health impacts. The global and harmless program in weight management called "About Losing Weight" (C*hoisir de maigrir*) was developed based on the new paradigm. With a focus on the core element of choice and self acceptation, the new paradigm shifts the focus from weight loss to global health and well being and a containment of weight problems (Schaefer & Mongeau, 2000; EquiLibre, n.d.a).

The Québec Model of Obesity Prevention

The tobacco experience of public health actors in Québec and the successful enactment of the 1998 Anti-tobacco Act inspired the EEAC to develop a similar socio-political intervention model. While acknowledging the similarities and differences in public health action in tobacco versus obesity, several EEAC members and collaborators conceived an intervention model for obesity prevention. The model was designed as a replica of the tobacco control model in Québec. It consisted of creating two organizations: a socio-political coalition, *Québec Coalition on Weight-Related Problems* (*Coalition québecoise sur la problématique du poids*, CQPP) and a health promotion organism with focus on promoting the vision of enabling environments, the *Québec Council on Weight and Health* (*Conseil québecois sur le poids et la santé,* CQPS). Three more intervention components fell under this model: (i) recruiting a team of experts at the

INSPQ; (ii) providing support to Québec regional public health directorates in human resources, namely dietitians and (iii) elaborating a governmental action plan.

Products, Services and Weight Loss Means, PSMA

The body of evidence that had accumulated on PSMA throughout the previous years, including data on their use, research on their harmful effects and focusing events related to PSMA harm alerted EEAC actors of the urgent need to act to halt, reduce and prevent their harmful use. This data was used to develop guidelines and educational materials on PSMA under the project: "Education for healthy weight control practices as a strategy to promote a healthy lifestyle" (Mongeau, Vennes and Sauriol, 2005).

Problem-Solving

Review Document « L'obésité et la préoccupation excessive à l'égard du poids »

At the time, there was no public health perspective on obesity. Obesity was perceived a clinical problem, whether by the public or health professionals. EEAC members had to produce knowledge on the policy issue through original research or review of existing research. Their aim was to increase awareness on the public health perspective on obesity policy. The EEAC produced a review document entitled "Obesity and excessive concern with weight" (*L'obésité et la préoccupation excessive à l'égard du poids)* drawing from the WHO 1997 consultation on obesity, among others. In this document, the EEAC emphasized a public health perspective on obesity and a need for population level interventions. The EEAC also introduced the new weight management paradigm under their review and compared it to the traditional weight loss paradigm. The new paradigm had not been evaluated for its effectiveness yet in Quebec, so they reviewed available literature on its implementation across different countries. They also reviewed national obesity prevention strategies from around the world, along with the WHO recommendations. They recommended the development of a governmental plan on weight issues. They also requested the creation of a working group on weight issues with a mandate to elaborate the governmental plan (Schaefer and Mongeau, 2000). The EEAC's review was the starting point for the launch of various advocacy strategies they spearheaded.

"It was in 98, […] I started to be interested in the aspects of public health, and then, I was like looking for something there, something to hang on to, to follow my belief, and at that time here in Québec and almost everywhere there was no public health perspective on obesity, there was none because it was a problem that can be described as orphan, meaning that in public health we do not care about it; we take care of tobacco we deal with road accidents […] but we do not care about obesity as a public health problem. Obesity is a clinical problem that physicians are interested in, dietitians or kinesiologists, but especially a problem that has a very bad perception because we have the impression that we can not do anything about it. The treatments are not effective, there is nothing we can do, people have no will […] And the public health perspective is absent. In 98, wow, here comes the document! […] I told myself it is necessary to let this be known in Québec…"

Government consultant (2016)

Program Implementation "About losing weight"

The new weight management paradigm was embedded in the program "About losing weight". A group of health professionals including dietitians, some of whom were EEAC members, had been implementing the program as of 1982. The program went through various improvement phases ever since it was launched. The common interest in the new weight management paradigm led various dietitians, some of whom were EEAC members, to network and convene under a group. Originally, the group created a NGO, *Collective Alternative Action on Obesity (Collectif action alternative en obésité)*, that was incorporated in 2004 under the NGO *EquiLibre* (EquiLibre, n.d.a). The mission of the NGO is to prevent weight-related problems and body image through the promotion of healthy lifestyles and a positive body image. The implementation of the newly conceived program in weight management *About Losing Weight* (*choisir de maigrir*) based on the new weight paradigm fell under its mission (EquiLibre, n.d.b.). The implementation of the program *About losing weight* fell under the fourth GAP axis.

Products, Services and Weight Loss Means, PSMA

The body of evidence that had accumulated on PSMA throughout the previous years raised the need to produce local knowledge on PSMA. The EEAC was concerned with the striking need to address the PSMA issue in Québec to halt, reduce and prevent their harmful use. Accordingly, EEAC members, through the ASPQ and with a funding from Health Canada, launched a project on PSMA. The project entitled: "*Education for healthy weight control practices as a strategy to promote a healthy lifestyle*" led to the development of guidelines and

educational guides addressing various audiences: the public, women, the youth and health professionals. The educational guides were made available for public use. The guidelines were diffused to health professionals through their professional regulatory bodies or associations (GTPPP, 2005; Mongeau, Vennes and Sauriol, 2005).

Strategic Planning Workshop

The EEAC was concerned with the slow progress in obesity prevention, particularly after the PNSP 2003-2012 was issued, with few obesity prevention actions targeting environments, if any (MSSS, 2003). There was a need to put together a comprehensive socio-political model for intervention. Once implemented the model will help build a striking force able to support and accelerate the sought-after change. The EEAC members organized a strategic planning workshop to develop a strategic plan to address obesity prevention. EEAC collaborators and invited experts and researchers participated to the workshop. The Québec model of obesity prevention was developed during the activities of this workshop.

> *"We, the GTPPP, we want something to happen, we want to act concretely in the prevention of obesity […]; it is not a round table, it is a think tank and it wants to lead to action. So, at some point, we did a strategic planning workshop […]. We invited […] our political strategist […]. And there, […] he gave us a drawing of how to get organized, based on the tobacco model and what we called the Québec model […] and […] he said, to get organized, we will take the example on tobacco: it takes a socio-political coalition, […] its job is to claim public policies […] then to react to the media, then to go to the ministers' offices, similarly to the tobacco coalition. It takes an organization that is softer like the Québec council on tobacco and health, the Québec Council on weight and health, the CQPS; therefore, an organization that will have the mission to promote the vision of enabling environments […]. After that, well, it takes a team of expertise […]. All this will conquer to get it [in reference to a governmental action plan]"*
>
> *Government consultant (2016)*

Enabling Environments Project

Research performed by the advocacy group GTPPP included a project on enabling environments and led to the production of two documents: one in 2003, *A call for mobilization* (*Appel à la mobilisation*) and another one in 2005, *A call for action* (*Appel à l'action*) (GTPPP, 2003; GTPPP, 2005). The project "*Analysis and Identification of Strategies aiming at the establishment of enabling environments for the prevention and reduction of weight related*

problems" aimed to review and validate the actions with the largest potential impact in the concerned sectors (Mongeau, 2004). The GTPPP conducted four studies: (i) a public opinion survey; (ii) analysis of the sectors concerned with weight problems (a) the *agri-food*, (b) the *socio-cultural* and (c) the *built environment*; (iii) a stakeholder consultation and (iv) participatory forums. Following the analysis, the GTPPP was able to identify the most promising interventions and validate them with the public, with key actors from the three sectors and with other concerned community actors (GTPPP, 2005).

MSSS Workshops and Literature Review

In 2004, a consultation was launched by the MSSS with its network: the regional public health agencies and the national institute of public health. The objective of the consultation was to map current actions in obesity prevention and propose future ones. Five workshops were held along five axes: (i) healthy food environments, (ii) clinical preventive practices, (iii) physical activity and enabling environments (iv) social norms and media, (v) the program 0.5.30. Members of the HLPAC from Kino-Québec participated to the last three workshops. The main purpose of the workshops was to develop solutions in each axis or domain that had been identified.

> *"We had five projects with the network. […] It was a large mobilization. In fact, we asked all the regions for contribution, a lot of participation. We had an axis that was on the diet, a focus on the physically active lifestyle, so physical activity, we had a focus on social norms and communications […]; in fact, it is special because the workshops' titles [..] have almost given rise to the PAG axes; in fact the work was to say 'what are the solutions to put forward in the five areas?'"*
>
> *Government professional (2016)*

The working group on the healthy food environments had the mandate to analyze the current actions and opportunities and to propose the framework of a food policy that is possible to adapt to each child care center, private nursery and school. In addition to these settings, the group's mandate also extended to municipal and private settings given that the group was requested to explore, document and propose some modifications in food norms and practices in these settings. (MSSS, 2005d, unpublished). All settings were covered during their mandate except for the private setting that were left out for future works (MSSS, 2005d, unpublished). The theme of this workshop gave rise to the first GAP axis.

The importance of the physical activity and enabling environments workshop is that it was co-chaired by two members from two different coalitions: the EEAC and the HLPAC. The workshop set the ground for the implementation of the continuum: active child-care center-school-municipality. Tools such as definitions of an active school and an active municipality were developed. These tools established the grounds for an auto-analysis to be utilized by schools and municipalities. Participants also recommended collaboration with concerned ministries, governmental and non-governmental organizations to promote enabling environments for the practice of physical activity (MSSS, July 2005c unpublished). The theme of this workshop gave rise to axis 2 of the GAP: enable a physically active lifestyle.

The socio-cultural and media workshop had the mandate to unify the speech of public health stakeholders on weight, lifestyle and prevention of chronic diseases, to support the regions in their communication strategy and to develop a strategy for changing social norms. Participants to the socio-cultural and media workshop highlighted the fact that public health professionals were well equipped with health behavior education tools. The challenge was to launch action on structural aspects, namely the socio-cultural, political and economic environments. Therefore, tools and trainings among other support means were needed to unify public health professionals' discourse around weight problems, healthy life styles and prevention of chronic diseases (MSSS, 2005e, unpublished). The theme of this workshop gave rise to axis three of the GAP: promote enabling social norms.

In parallel a literature review of existing governmental plans and conceptual models in obesity prevention was performed within the public health network. This led to the adoption of the Cohen model (Cohen et al., 2000 in MSSS, 2006) as a theoretical intervention model to promote enabling environments. A review document summarizing various existing governmental plans was also developed. The review was used to highlight other countries' experiences with respect to obesity prevention (Jalbert and Mongeau, 2006).

Political

« L'obésité et la préoccupation excessive à l'égard du poids »

The WHO 1997 consultation on obesity was a major milestone that has marked the international progress in obesity prevention. A document with similar effect in Québec was

"Obesity and excessive concern with weight" (*L'obésité et la préoccupation excessive à l'égard du poids*) the EEAC developed. It triggered the emerging works on obesity prevention in Québec starting with the creation of the GTPPP. The document raised a red flag on the problem of obesity, characterizing it with an epidemic. Through their document, the EEAC hoped to raise the issue priority on the government policy agenda, put pressure on the decision makers to act and break the status quo. In addition, EEAC members sought strategic support from key public health actors.

The review document was in fact utilized to raise awareness on the obesity epidemic from a public health perspective, mainly through three means: (i) the address of the assistant deputy minister (ADM) for public health in the document; (ii) the purposeful selection of the members of a peer review committee; (iii) a press conference and a participation in the annual public health meetings to launch the document. The aim was to increase the number of the EEAC supporters within the circle of mid-level policy actors and policy elites and other influential actors in public health in Québec. EEAC members were able to garner support for their document and to launch it during one of the most prestigious public health venues in Québec, the annual public health meetings. The document was supported by the ADM for public health. In his introductory note addressed to the document's audience, the ADM called for public health professionals to use the document as a work tool to promote enabling conditions for healthy lifestyles, a healthy weight and an improved self-esteem (Schaefer and Mongeau, 2000).

The production of this document in the year 2000, was a break-through in the perception of obesity and possible courses of actions to prevent weight problems from a public health perspective. As of that time, the obesity epidemic concept started being rooted in the minds of researchers, practitioners and media actors in Québec. Through their document, the EEAC called for the creation of a cross-sectoral group to work on a national plan for the prevention of weight-related problems under the leadership of the MSSS (Schaefer and Mongeau, 2000).

About Losing Weight

The program *About losing weight* failed to make it through the rigid intervention framework set by the National Public Health Program 2003-2012 (PNSP). This is mainly because the scientific committee of the PNSP had established that the effectiveness of an

intervention is a prerequisite before said intervention could be considered under the PNSP. The program *About losing weight* was scientifically evaluated by some EEAC members leading to its update in 2003 and its inclusion under one of the GAP axis concerned with service provision to people suffering of weight problems (EquiLibre, n.d.a).

> *"…the scientific committee which was at the head of the national program; it was a decision from the deputy minister and others who said we will base everything we do on evidence, so people will not be able to say in public health we have our head in the clouds […] 'and where is the efficiency?' it remains to be demonstrated […]. We were able to say […] we will work to have evidence, we will promote research […] so that when we have an update of the national program we can include these things, then actually when we had the update, it was in 2008, we were able to add 'About losing weight'…."*
>
> *Government professional, 2016*

> *"There was the fourth axis in the GAP which was to offer services to people who are living with the problem. And in axis four, one of the measures was to, to provide for the diffusion of the program 'About losing weight' in the network, for it to be offered free of charge…"*
>
> *NGO director, 2016*

Enabling Environments Project

Following the diffusion of the document entitled "Obesity and excessive concern with weight" and facing a surveillance data showing escalating obesity rates in Québec, the GTPPP was created under the auspices of the ASPQ (GTPPP, 2003; ASPQ, 2003). The GTPPP was multidisciplinary; it gathered experts and researchers from government, university and community backgrounds to analyze the problem, develop a common vision, propose solutions and disseminate their findings (GTPPP, 2003; GTPPP, 2005). Members consisted of representatives of the following institutions/entities: Kino-Québec, ÉquiLibre, Heart and Stroke foundation of Québec, Université de Montréal, Merck Frosst/CIHR Research Chair on Obesity, Université Laval, Ministry of Health and Social Services - General Directorate for Public Health, the Association for Public Health of Québec, the National Institute of Public Health of Québec (*Institut national de santé publique du Québec*, INSPQ) and one regional Public Health Directorate (GTPPP, 2005). The GTPPP members were affiliated to various institutions involved in the policy subsystem. The documents the GTPPP produced and its works were

utilized by its members to influence other actors in their home institutions to adopt the new vision of the policy problem and its solutions.

The GTPPP had the dual mandate of developing a common vision on weight-related problems and proposing an action plan to address them (GTPPP, 2003; ASPQ, 2003; MSSS, 2015). The research the GTPPP carried out was diffused through various means. Specifically, two documents were of importance: "*A call for mobilization*" and "*A call for action*". The second was in fact launched during the 10th JASP anniversary in the presence of the ADM and members of the regional directorates of public health and many public health regional directors. A press conference and numerous media interviews were made for that specific event which helped disseminate the enabling environments vision.

The GTPPP proposed various courses of action which left many actors perplexed as to which policy solution to prioritize. Therefore, the GTPPP committed to five priority actions for public health action. These priority actions were established to guide actors in setting priorities for action (GTPPP, 2005). They include the implementation of food policies in school and child care settings, the modification of social and physical environments to promote a more active lifestyle, the revision of policies on marketing for children, the regulation of weight loss products, services and means and the establishment of new rules to fund research on weight problems (GTPPP, 2005). The GTPPP also called for a governmental plan to address weight-related problems and healthy lifestyles and requested that such a plan is managed by an independent agency, to keep some distance from the political arm.

Strategic Planning Workshop

EEAC members acknowledged the need to undertake political strategies to influence decision-makers and other stakeholders. Having conceptualized the Québec model for obesity prevention, members of the EEAC requested funding from the MSSS to implement their model and received the requested funds. The two organizations, CQPP and CQPS were created. A team of experts was recruited at the INSPQ for scientific support. The Québec model for obesity prevention also recommended a governmental action plan.

Following the implementation of the Québec model for obesity prevention and based on it, Québec regional health agencies got staffed with dietitians. The Québec model for obesity

prevention created a window of opportunity to fulfill a long-standing goal for some actors in the EEAC. Many of them, and specifically dietitians suffered the under staffing of the regions as compared to Kino-Québec regional consultants' network. The under-staffing could possibly be attributed to gaps in previous public health policies (MSSS, 2005e, unpublished). For instance, the 1997-2002 public health priorities failed to include the healthy lifestyles domain under their priorities. This also reflected the relatively low historical interest of the public health network in healthy lifestyles (MSSS, 2005e, unpublished).

> *"…there were people in physical activity in all regions […], because of the agreements with Kino, […] whereas we did not have in nutrition because they had to release their own budgets for that, because they did not see the relevance of engaging nutritionists. Therefore, they didn't see the relevance of hiring dietitians because they said they had nothing to do for a nutritionist, anyone or just anyone did nutrition"*
>
> *Government professional (2016)*

> *"we always seemed to have one step further than the others […] and we had a network of actors throughout Québec from Kino-Québec councillors, we met regularly, we had means of communication and that made the people from nutrition a little jealous, who, who would have liked to have the same kind of network […] everyone speaks for his parish you know in these things"*
>
> *Government professional (2016)*

MSSS Workshops

The bustling civil society and its enhanced readiness to address obesity-related problems ought to be leveled with an equal intensity in the public sector. Accordingly, the MSSS made a "Proposal for Action to Prevent Weight Problems in Québec" to the national consultation table on prevention and promotion in 2004, which resulted in the implementation of the five workshops mentioned earlier (MSSS, 2005e, unpublished). Proposed actions were to be operationalized by the public health network (MSSS, 2005e, unpublished). The MSSS workshops with its network were crucial in terms of research and documentation. The MSSS promotion of HLS unit team was active in terms of increasing its resources to improve its readiness for the upcoming governmental plan.

> *"When Mayor Perrault was doing his works, Alain Poirier […] said to himself 'there is some work being done within the civil society, something will definitely come out of the recommendations'. He convened […] people from the institute, people from the MSSS, people from the network […] and then he asked: 'how can*

we start working to prevent obesity? it is urgent, we must work on diet, we must work on the physically active lifestyle, body image is important, how can the public health network contribute in no time?' we have held workshops…"

Government professional (2016)

Not all recommendations following the workshops were followed. For instance, the participants to the *0.5.30 workshop* recommended that the program 0.5.30 should be included under the GAP (MSSS, 2005a, unpublished), however it wasn't. The program had been deployed in various regions in Québec since 2002 at the time. The main reason was that the program had not been subjected to a comprehensive evaluation and that its implementation occurred in some regions, but not across all regions in the province. Another reason was that it focused more on the individual components of the program, rather than the environmental ones, once implemented.

"the problem […] was that […] one region at the time had this program [in reference to the program 0.5.30], the others, they had other things. Then, for the ministry, the evidence was not made that it is an evaluated program that had, which had demonstrated that it was effective"

Government director (2016)

"0.5.30 [in reference to the Program 0.5.30], but it is more in the individual behavior, you know, the individual he does not smoke, he takes five fruits and vegetables, 30 minutes of activity, you see, one is always addressed to the individual, but you see the question of the environments was more or less addressed at that time. It is one of the reasons why the ministries were reluctant to say […] it is like the important program of the GAP"

Government director (2016)

Lobbying for Regulating PSMA

The document and guidelines produced on the PSMA were launched during a press conference attended by seven professional regulatory bodies. The documents received the support of the professional regulatory bodies who endorsed them and committed to disseminating them to their members. These documents were used as an advocacy tool to call for government regulation and legislation on PSMA. The EEAC's aim was to introduce a bill to control the use of weight loss products, means and services. *"So, we had a project on […]*

the PSMA […]. Ultimately our intention was to try to bring out a regulation on that." Government consultant (2016)

AFAC

Conceptual

The knowledge that has accumulated on obesity, its prevalence, severity and the effect of an unhealthy diet on chronic diseases on one hand and the highly contextual role of the agri-food sector in obesity genesis and solutions on the other hand influenced AFAC actors (GTAS, 2006). Redefining the role of the MAPAQ and its partners in health promotion and particularly with respect to a food policy and a healthy diet policy occurred around the year 2004, partly triggered by the works of the Commission on Agriculture Fisheries and Food (CAPA, 2004). Probably the following statement made by the representative of the Council of Québec Restaurant Chains (*Conseil des chaînes de restaurants du Québec, CCQ*) at the hearings of the Commission on Agriculture, Fisheries and Food shows the readiness of the AFAC to address the policy issue and its cognizance of the emerging threats.

> *"In terms of labeling, we took advantage of the opportunity, because you were talking about food labeling? […] to address the issue of obesity. We suspected that this would be a subject that would be developed enormously in the Commission, and we see it in the newspapers. So, we would like to correct certain situations. Canadians only buy one meal out of 10 at a restaurant per week. Obesity is not a food service and catering problem. The food service and catering refuses to be pointed to."*
>
> *Lefebvre J. – Vice-president CCQ (ASSNAT, 2004)*

The food supply at the same time had undergone a sharp twist to more processed foods in Québec.

> *"at the turn of the year 2000 there was, at the supermarket level, prepared foods have taken more and more space in food establishments to the extent that today there are establishments that are, you can do your grocery shopping only with prepared foods. There are people who will buy meals, they will not buy food products"*
>
> *Government director (2016)*

Problem-Solving

Works of the Commission on Agriculture, Fisheries and Food (CAPA)

The CAPA underwent a vast public consultation on food security in 2004. The Commission issued a set of recommendations in June 2004. The CAPA warned of the consequences of a bad diet, namely on obesity, particularly among children and youth. The CAPA also reminded the government of its role and responsibility in informing and educating citizens on food and diet. With respect to healthy lifestyles, three recommendations for government action were particularly relevant: (i) an integrated policy on food security; (ii) a food awareness and education program that starts as of early childhood and (iii) a similar program targeting the parents and the public at large. The program's aim was to educate and raise awareness on nutrition, food safety and food handling (CAPA, 2004; MSSS, 2006).

Activities of the Working Group on Diet and Health

A working group was created at the MAPAQ in December 2005, following the Perrault Working Group's report submission. The group was set up by the board of directors of the MAPAQ at the initiative of the director of the Quality and Customer Service directorate. The objective of this working group was to identify the MAPAQ's orientations and possible areas of intervention in food and health, while contributing to the development of the Government Action Plan to Promote Healthy Lifestyles and Prevent Weight Problems (2006-2012). Each directorate in the MAPAQ was represented in the group by one of its members (GTAS, 2006). Through its six-orientation plan, the report highlights the beliefs of the AFAC. Among others, the authors recommend ensuring food quality and safety standards, local food consumption, education and increase in consumer awareness and heightened responsiveness of the agri-food industry to consumer demands based on voluntary improvement of current practices (GTAS, 2006).

Political

The working group utilized data from the agri-food sector to help elaborate an action plan for the MAPAQ. Communications with the agri-food industry representatives contributed to protecting their interests and to the development of a plan that does not undermine them.

While achieving the AFAC goals of developing actions to promote a healthy diet and health, their firm commitment to protect the Québec agri-food industry's interests was of paramount importance. Moreover, the working group responded to the earlier recommendations set forth by the CAPA and it also advanced a collaborative relation ship with the MSSS.

> *"A number of measures were identified by ensuring that all ministerial directorates involved could participate either by being in charge or supporting their colleagues in carrying out their actions […] and when we had a plan that looked consistent to various stakeholders, that's when we submitted the plan to the board of directors of the ministry. In fact, it was the draft plan that was submitted […] because I do not remember exactly how it was done, but, there was also a period when we consulted the different associations [in reference to Agri-Food associations] on this plan, in this regard, the project that we intended to submit to our colleagues from other ministries and agencies to actually identify our contribution to the governmental plan. At that time, I was, I was very active at the level of relationships with the different sectors of the representative groups in food and agriculture."*
>
> *Government director (2016)*

HLPAC

Conceptual

Scientific Guidelines and Opinions

The scientific committee of the program Kino-Québec was created in 1997 (Kino-Québec, 2005). The committee produced scientific guidelines, opinions and other documents on the importance of enabling environments and their role in promoting physical activity, namely cycling paths and accessibility to sports facility. The scientific committee adopted a conceptual framework to promote physically active lifestyles. The framework showed an interaction between individual and environmental factors that influence the adoption of physically active lifestyles (Boudreault and Martin, 2006). Although, the enabling environments' concept was introduced, it was less rooted in the minds of individual HLPAC members and stakeholders and the intervention logic aimed at obesity prevention was almost absent.

> *"when this concept of enabling environments came out with the GAP, people said what is this business? […] often when they talked about environments, people were often referring to the physical environment they were not referring to other environments"*

> *"we were very much in the fight against sedentary lifestyles […], we made a link with obesity but not that much, we were more in the logic of sedentary lifestyles."*
>
> *Government director (2016)*

Still, even after the enabling environments vision was elucidated, documented and disseminated through trainings across the province years after the GAP adoption (MSSS, 2012), it was less grasped in school settings.

> *"where it was hard to penetrate was the school environment […] I think we had the most difficulty to convince, you see? For them, they are much into the individual intervention, the school environment; then they did not see the impact of the environment. Yes, when you spoke of the school courtyard, they understood it, but when you spoke about the food environment at schools, it was a bit more complicated"*
>
> *Government director (2016)*

The EEAC also perceived that the enabling environments concept was less rooted in the HLPAC members. The HLPAC's focus in promoting enabling environments relied heavily on promotional campaigns according to the EEAC. Such campaigns are less effective when other structural supportive environments are less promoted. The opinion the NPHD gave on the healthy lifestyles campaign launched by the Government of Québec in 2004 (Deglise, 2004; Government of Québec, n.d.), *Vas-y, fais-le pour toi!*, across the province brings more insights to this point. In addition, the campaign was heavily criticized for its design and the choice of its mascot (RDI, 2004).

> *"we said no matter whether the concept [of the campaign 'Vas-y, fais-le pour toi!'] was good or bad, communication comes, it is a reinforcing element when all actions are established; we have not yet developed the GAP, we have not started yet. We can not start with a communication when there are no actions to communicate […]! Whereas, [the MELS minister in office] 'we are going to launch a campaign', so this vision we inform people […] was absurd. First it was with respect to the logic and effectiveness of promotional campaigns, not good…"*

The importance of promoting a physically active lifestyle early on in life was entrenched in HLPAC members' beliefs, the alarmingly reduced levels of physical activity levels in youth and the necessity to address this problem as well (Kino-Québec, 2000b). Lifestyles are deeply anchored in an adult's behaviours and accordingly they are hard to change. Therefore, interventions should prioritize children according to the HLPAC. Children are quick learners

and flexible with respect to modifying their lifestyle habits. Such habits are likely to be maintained when they become adults, particularly when they are taught early on in life.

> *"The ministries here, [in reference to ministries hosting the Sport and Leisure Secretariat, whether the Ministry of Municipalities, Leisure and Sports or the MELS, the youth ministers, it has always been important, to focus on young people, even before we go to education, there was a concern for the youth, even the Kino-Québec program, at some point we said the priority is young people, we must bet on young people! […]. But for many years, the priority was young people, yeah…"*
>
> *Government professional (2016)*

Healthy School Policy Framework

Well-known international principles (WHO, 1997), international and national experiences, evidence generated through research and Québec generated experience (Martin and Arcan, 2005) were the driving force behind the introduction of the healthy school policy framework *Going the healthy route at school- Framework policy on healthy eating and active living* (*Pour un virage santé à l'école-Politique-cadre pour une saine alimentation et un mode de vie physiquement actif*) in 2007. The healthy school approach was one of the interventions of the PNSP (MSSS, 2003) and it was later integrated under the GAP actions (MSSS, 2006; MELS, 2007).

Problem-Solving

Prior to the introduction of the framework in 2007, a national orientation committee made up of various stakeholders from the MELS, the MSSS, the INSPQ and the Québec association of health and social services establishments developed a Guide for the school community and its partners (*Guide à l'intention du milieu scolaire et de ses partenaires*). The guide is meant to be a practical approach to facilitate situation analysis at schools and identification of potential partners and actions to put in place. The guide would also help integrate the orientations and actions of the healthy School approach into the development or revision of the school's educational project and success plan (Martin and Arcan, 2005).

A consultation for the elaboration of a healthy school policy framework in Québec was ongoing at the time the GAP was elaborated. The framework was in fact launched shortly after the GAP (MELS, 2007). The consultation was led by the MELS. Therefore, the MELS

introduced the healthy school policy framework as one of its actions under the GAP (MSSS, 2006; MELS, 2007).

The HLPAC also participated to the MSSS workshop on physical activity and enabling environments. The workshop occurred at a time Kino-Québec had started a planning process, to prepare for its 3-year 2005-2008 plan. One of the mandates of the working group was to set the ground for the implementation of a continuum: active child care center-school-municipality. Child care centers were not targeted during the Kino-Québec planning process, despite the importance of early intervention (Kino-québec, 2000b). However, limited human and financial resources led to such decision. Therefore, workshop participants extended their recommendations to child care centers (MSSS, July 2005c).

Political

The MELS had been working on a healthy school framework quite before the GAP; it was an intervention retained under the PNSP (MSSS, 2003). The framework was later integrated under the MELS contribution to the GAP actions. In fact, the framework was launched right after the GAP adoption (MSSS, 2007). Whereas the Sports and Leisure Secretariat had developed actions under the framework, the policy component that was of interest to the minister in office concerned the *healthy eating* component of the policy. A public opinion survey done in 2005 showed a heightened population interest in improving schools' food supply. 92% of the population was in fact in favor of eliminating junk food and soda drinks from schools (GTPPP, 2005). So, the major change the framework sought to achieve was at the level of the school food policy. That change was also a political gain to the policy instigator.

> *"if I come back to 'Going the healthy route at school', […] this policy we must say, […] the primary goal is to get the fries out of school, it was political, because there was a whole physical activity component, but it is the food component that interested the minister, although the physical activity section has been developed, well developed"*
>
> *Government professional (2016)*

The MELS wanted to advance its own political agenda and minimize interference of its ministerial partners in the policy content. The MELS gave the mandate of developing the *Framework policy on healthy eating and active living* to academic consultants. It did not seek the collaboration of ministerial partners in writing the policy content. In fact, the MELS minister

in office wanted to avoid any ministerial partners' interference in said policy. He wanted to assert the ownership of the policy and to have his own ministry receive the merit for the elaboration and adoption of this policy. The content of the policy was researched and written by non-governmental consultants, the *Childhood and Adolescence Research Group for Prevention of Obesity Laval Hospital Research Center* (*Groupe de recherche en prévention de l'obésité chez l'enfant et l'adolescent Centre de recherche de l'Hôpital Laval*) (MELS, 2007). Still, ministerial partners specifically from the AFAC and the EEAC, had to provide support to the implementation of said policy (MSSS, 2006; MELS, 2007).

> *"Well, they started a food policy at school, that also helped us, we managed to work a little with them, we tried to influence them on the contents, it was very difficult because they were very closed; they had given it to others, it's people from Laval University who worked on the content […] so they had the mandate to work with the Ministry of Education on the policy […]"*
>
> *Government professional (2016)*

> *"And I still remember the Minister [in reference to the MELS minister in office] […] who said he wanted to launch the policy 'Going the healthy route at school ', he was in a hurry. He said, 'it's me who will launch it', […] he used to say [about the minister of health] that the he is minister of diseases, 'me, I will be the health minister'. But it also implied that he wanted to make himself a political capital, he wanted to launch the policy 'Going the healthy route at school '"*
>
> *Government professional (2016)*

CDAC

Conceptual

The philanthropic organization Fondation Lucie et André Chagon (*FLAC*), has been active in Québec since October 2000. Decades of volunteer philanthropic community engagement of the Chagnon family culminated in a renewed commitment to poverty prevention following the cessation of the activities of their company Videotron Limitee. Getting established in Québec, the company made use of a long-standing tradition of North American philanthropy and adapted it to the Québec social context (FLAC, 2013). We were not able to identify a philanthropic model for the FLAC activities in Québec prior to the GAP. However, a model of the FLAC philanthropic contributions and impacts was developed in 2017 (FLAC, 2017b).

Problem-Solving

The FLAC led a large consultation in 2001 to identify the determinants of global health and determine the Foundation's future scope of action accordingly. Researchers, professionals and experts from the education, sports, health and social services sectors participated in this consultation (QeF, n.d.).

> *"The purpose of the consultation in 2002 was really, at the time we were in all sorts of things. Then, in 2002, to better understand what the best in terms of value - quote, unquote - should be […] in fact, we wanted to better understand […] to really focus on the causes, what we should focus on in the context of a mission of disease prevention. Then, it is at that moment that these 40 researchers, told us: 'let go of all other approaches – it is no cigarette, a good diet, physical activity and then stress management, and probably a part of mental health that is probably important'"*
>
> *Anonymous (2017)*

The results highlighted a social context in mutation. Widespread lifestyle changes left soring people's diets and physical activity levels. Children and youth's health status was at stake. Sedentary lifestyles are negatively affecting children's health and development. Most importantly, an increase in obesity, growth retardation, learning difficulties and increased risk of anxiety and depression were noted. These negative consequences were further exacerbated in socially disadvantaged settings (QeF, n.d.). Prevention specialists were unanimous: early prevention is key to modifying lifestyle habits. With its wide scope and considerable health benefits, physical activity is a fundamental area of intervention. It improves global health and the quality of life and is associated with a reduced incidence of chronic diseases. In addition, and on the psychosocial level, physical activity increases self-esteem, helps in developing social skills and reducing risky behavior while contributing positively to education success (QeF, n.d.)

The expert consultation carried out by the FLAC in 2001 highlighted current concerns, gaps and potential areas of action that will guide the Foundation in the design of their project. As a result, and facing a multitude of intervention options, the FLAC prioritized sports and physical activity as a fundamental intervention area. In addition to acknowledging the well known potential health benefits of sports and physical activity, the Foundation believes that they improve children's psychosocial adaptation and consequentially their education success (QeF, n.d.). Following this consultation, in 2002, Québec en Forme, a not-for-profit organization, was

created. The government of Québec partnered with Québec en Forme in a Public-Private partnership. An agreement was signed between the government of Québec and the FLAC for an equal investment of $12Mio to be provided by each party over a period of four years, from 2002 to 2006 (QeF, n.d).

> *"In the consultations we were doing, we were very encouraged, in fact, to put more emphasis on this aspect, physical activity among young people. So, 2002, there was the establishment of a first partnership with the Government of Québec and then there were three ministries at the time: I think it was municipal affairs, there was health and education, if I have a good memory. And, it's a partnership that spanned from 2002 to 2006 and was focused on promoting and supporting a coalition of local organizations' approach to implementing strategies and then physical activity among 4 to 12-year-old children in school settings. It was called "Québec en Forme.'"*
>
> *Anonymous (2017)*

Québec en Forme's initial mission was to improve children health and autonomy through the implementation of a sustainable program of promotion of sport and physical activity targeting 4 to 12-year-old children. The FLAC was equally concerned with the equality of chances and fighting exclusion in disadvantaged communities and accordingly prioritized actions with families experiencing exclusion. The FLAC intended to carry out its project in partnership and in support to local communities to ensure sustainability of the desired effects. The project was not a substitution to government action and responsibility nor to local communities' actions. It was rather intended as an added value through the provision of financial investments, technical resources and consultancy to promote effective interventions (QeF, n.d).

Political

The consultation the CDAC led was used as political ammunition to push for their objectives through a public-private partnership with Government of Québec. The consultation would eventually legitimize their investment decisions. Their main objectives were to prioritize children in their interventions, increase government spending on children, empower communities, bypass government bureaucracy, reduce inefficiency when need be and control allocation of resources. In addition, the FLAC sought to legitimize the investment of its tax-spared dollar in effective interventions with guaranteed health impacts. In fact, the creation of

the FLAC allowed its founder to benefit from a tax credit of $500 million following the selling of his telecommunications enterprise Videotron Limitee (Bélair-Cirino, 2016).

> *"He sold his Vidéotron business […] for a few billions and he has kept some for him and has blocked $1.4 billion in a foundation. Alas the truth is, when we block $1.4 billion is that some millions belong to you and me, to the public treasury […] It was brilliant on his part. But at the same time, when he was said to be generous, we said yes, half of the money you give belongs to me, belongs to us. So, had it been in the public treasury it would have been treated differently."*
>
> *President provincial organization (2016)*

Deliberative

Two deliberative forums were of significance for the GAP elaboration given that they convened multiple coalitions around the same table. A provincial forum that gathered all four coalitions and a ministerial forum that convened ministerial participants from all coalitions, except the CDAC. Table 4 describes the composition of various working groups and committees that convened during the GAP advocacy and preparatory works. It shows policy participants by level of government and working group/committee. Although our research focuses at the provincial level, however, many times regional and local actors participated in the policy process. Two other findings are worth mentioning: (i) The EEAC, through the HLS unit of the MSSS and the INSPQ was dominant in terms of participation to working groups/committees; (ii) The provincial Working group (the Perrault Working Group) was the most inclusive in terms of diversity of policy participants and level of government (Table 4).

Perrault Working Group

The provincial working group, the Perrault Working Group named after its chairperson, convened various participants from the civil society. It was created following a political decision of the Premierin office, as a response to growing population concerns in prevention. In fact, in 2004, and following the Premier's provincial tour culminating into a Generations' Forum, early prevention and health came out as the main population's concern. Therefore, and to satisfy the public's expectations, Québec cabinet created a working group and appointed the mayor of a large city in Québec and at the same time a physical educator to chair the workgroup on

prevention. The cabinet also appointed members of the working group based on the recommendations of the MSSS (ASPQ, 2004).

The mandate of the Perrault Working Group was to mobilize efforts in prevention through the development of preventive approaches aiming to: (i) offer a healthy and affordable diet to youth in childcare centers, private nurseries and schools; (ii) favour youth growth in environments that enable the practice of physical activity. Members of the Perrault Working Group decided to go beyond their first mandate that concerns the healthy and affordable diet and tackle it the same way they would with physical activity, i.e. favour youth growth in environments enabling a healthy diet. Youth according to committee members include the 0-18 years old. Members considered that it was necessary that recommended actions included families and professionals working with the youth (Perrault Working Group, 2005).

The Perrault report was made public during a press conference that received a large media coverage. The Group issued 62 recommendations targeting the entire population including children. The Group called for an effective government commitment to youth health and the establishment of an inter-ministerial entity with decisive powers. Its role would be to coordinate all interventions aimed at improving youth well-being. The Group also recommended to develop an action plan at the earliest. To implement the actions under the plan and ensure their funding, the Group recommended the creation of an official authority, made of the two main financial partners, the government and the FLAC. Said authority could also help in formulating orientations and strategies and coordinating actions as well (Perrault Working Group, 2005).

The Group met five times in six months. It was chaired by Mr. Perrault and moderated by the NPHD. The MSSS HLS unit team had the mandate to provide support to the Working group. The Working group activities were characterized with interventions from experts in healthy lifestyles, ministerial respondents, invited people and members of the Working group. Representatives of five ministries and governmental institutions attended the Working group meetings in back venture.

> *"...we have experienced a phenomenon that had almost never occurred; that ministries accompanied us, gave us information, they were in back venture, they were taking notes; this was the first-time ministries sat down to listen to what local*

actors had to say, then for us, it was a really meaningful experience… And this was the only committee that I worked on, out of three other, where seven ministries were present, ministries that barely communicated with each other earlier… then for us it was an obvious sign of interest. And I think that yes this committee did a fantastic job …"

President provincial organization (2016)

Discussion periods were loaded with exchanges on knowledge and experiences related to youth health. Presentations aiming to increase or update the members' knowledge or to provide them with needed information were part of the Working group activities (Perrault Working Group, 2005). The INSPQ had three presentations on determinants of healthy lifestyles, enabling environments for diet and physical activity and possible actions. The NPHD presented on the promotion of healthy lifestyles. The MSSS HLS unit team presented on the actual situation. Two ministerial respondents from the MELS and one MAPAQ respondent gave out presentations on the actual situation as well (Perrault Working Group, 2005).

"And, first meeting of the group Perrault, who will present? Me and my colleague […] so we will present […] the famous presentation on the prevalence of obesity, then we are collectively gaining weight with the slides of the United States, then people get shocked […].'How to explain that? It's not the individuals, it's the environment that is changing'. Then, after that, you show them the escalators, then the pick up your coffee at the drive-in restaurants […] the reduction of the energy expenditure, the transformed food, […] then I obviously add all the issues of body image, always always always always! And then […] 'what should we do? Well, everyone must do something: a school director, a mayor, a company manager etc.' Then, well, there is something for everyone. We basically presented the outline of a collective action plan"

Government consultant (2016)

Except for the research and the PSMA component, all priority actions of the EEAC/GTPPP found their way to the Perrault Working Group recommendations. A governmental action plan was included under the Group's recommendations as well; except that the Perrault Working Group recommended the creation of an official implementation authority, jointly managed by both financial partners: the government and the FLAC. The EEAC was able to have actions targeting marketing to children but not any targeting the PSMA. The EEAC was also able to convince the audience of the necessity to extend the promotion and prevention action to the whole population, and the importance of enabling environments and specifically public policies as voiced in the Working group's recommendations. Said recommendations included

many actions on food and physical activity environments, both being of concern to the HLPAC and AFAC. The importance of social norms was also of concern; recommendations included the launching of social marketing campaigns to educate the population on food choices and preparation and how to increase physical activity level, among others.

In line with the HLPAC focus on the concepts of pleasure and well-being, the quality of life was promoted in the GAP and was said to be contingent to the possibility of enjoying a healthy living place (MSSS, 2006). Consistently with the HLPAC beliefs, the Group promoted the importance of pleasure and well-being in modifying one's lifestyle and the value of a physically active lifestyle for its multiple health, psychological and scholastic achievements benefits. Social marketing campaigns should also emphasize this point. The Group also recommended actions to promote a physically active lifestyle including active transportation, leisure activities and sports in all settings: child care centers, schools and municipal settings. Actions were planned under each, many aiming at increasing the accessibility to infrastructures. Many actions that fall under a healthy school framework were recommended as well, specifically a food policy was recommended that includes multiple components such as zoning policies and conformity of food service caterers to the food policy to be developed.

The CDAC was represented at the Perrault Working Group by its founding member. He proposed to partner with the government to fund local initiatives that are aligned with the Working group's recommendations and that aim to promote healthy lifestyles. In response to the CDAC proposal, the health minister in office requested the creation of a health promotion fund. This set the stage for a public-private partnership negotiation process that followed. The process eventually led to the enactment of the law instituting the healthy lifestyles fund in Québec. The CDAC was able to achieve its goal of increasing government spending on children and partnering with the government on actions that relate to their mission.

Many actions from the AFAC action plan found their way to the Perrault report, specifically under its food policy and social marketing components. For instance, an educational program on healthy diet was recommended to be integrated to school curricula, training of food service personnel on food safety and a healthy diet and food selection criteria in establishments were included among others. Of importance, was the recommendation concerning the Agri-Food sector. The Perrault Working Group recommendations, and in alignment with the AFAC

goals, only included actions of the *soft* type. The Group recommended to increase awareness of Agri-Food stakeholders to the food policy to be developed and mobilize them to promote healthy food habits. They also highlighted the importance of promoting local consumption.

Tableau V.Article 3 – Table 4
Comparative Composition of GAP Preparatory Working groups – Québec, Canada

Table 4 - Comparative Composition of GAP preparatory work groups - Québec, Canada

	Policy participants	GTPPP 2000-2005	MSSS workshop Progress 0-5 yr	MSSS workshop Clinical preventive practices	MSSS workshop Physical activity and nutrition environment	MSSS workshop Healthy food environments	MSSS workshop Socio-cultural and media	Perrault work group 2004-2005	GAP writing committee 2005-2006
National level	Ministry of Health and Social Services	●	○	●●	●●	●●	●●●	●●●	●●●
	Ministry of Education							●●	●●●
	Sports and Leisure Secretariat	●	●		●●		●●	●	●●●
	National Public Health Institute	●●●		●●	●	●●	●	⊙⊙	●●●
	Ministry of Agriculture, Fisheries and Food							●	●●●
	Family and Children Council							●	
	Ministry of Municipal Affairs, Sport and Leisure							●	●●●
	Ministry of Transportation								●●●
	Ministry of Justice (Consumer Protection Office)								●
	Ministry of labor, Social Solidarity and Family							●	●●●
	Ministry of Family, Seniors and the Status of Women								●●
	Youth Secrétariat							●●	●●●
	Elected Official (MP)							●	
Regional level	Regional public health directorates	●	●●●	●●●	●●●	●●●	●●●	●	
	Regional directorates other ministries							○	
	Regional conference of elected officials (CRÉ)								
Local level	School boards					○		○	
	Parents' committees							○	
	Municipalities					○		●●○	
	Health and social services centers					○			
	Child care centers							●●	
	Elected official (Mayor)							●	
Non-Government	Non Governmental federations, associations & organizations*	●●●				○○○		●●●	
	Private corporation							●	
	Interest groups								
	Professional orders							●	
	Private sector							○	
	Philanthropic sector							●	
	Media								
	Communication	⊙							
	Academic institution	●●							

● : participated directly

○ : participated indirectly

⊙: invited participant

*Perrault work group: Federation of Québec Parents' Committees, Federation of Québec School Boards, Québec Federation of Municipalities, Association for Public Health of Québec, Environnement jeunesse, Quebec Association of Fruit and Vegetable Distribution, Family and Children's Council.
GTPPP: Heart and Stroke Foundation, Association for Public Health of Québec, EquiLibibre
MSSS workshops (Enabling food environment): AQCPE, AGPQ, APCCPEQ, CAMF, RQVVS

Inter-Ministerial Committee

Based on the Perrault report, the Premier requested a governmental plan and asked for the participation and collaboration of other concerned ministries on the plan. The GAP writing committee was inter-ministerial and thus involved only provincial-level participants (Table 4). In fact, and prior to the GAP, the national public health director had convened representatives

of various ministries and created an inter-ministerial committee. His aim was to have his ministerial counterparts map current actions so that they discussed the gap between current actions and desired actions. So, when the GAP command arrived, the inter-ministerial committee had already been established.

> *"The minister of health at the time, receives the recommendations of this external group, he tells me […] 'I want an action plan on these recommendations' […] 'I want a plan of action within three months'. Three months something so broad! Then we were already 5-6 ministries because […] I had started bringing them together before, when the GAP arrived, it gave me a good reason to meet, we tried to influence them, 'what are we doing already? then what could we do?' So, we revitalized our committee and then we said 'well, friends, let's roll up our sleeves, we have three months to write a governmental action plan.'"*
>
> *NPHD (2016)*

Deliberations within this forum entailed the most difficult negotiations. There was a lack of common understanding of the policy problem, especially that some ministries were not present at the Perrault Working Group meetings such as the Ministry of Transportation. Despite the clear message that the adoption of a governmental plan to promote healthy life styles and reduce weight-related problems sends regarding the seriousness of the health problem, it did not favour a common understanding of the policy issue nor on the actions to be put forward. Besides, whereas the MSSS was not starting from scratch and had a comprehensive approach to address weight-related problems at hand, most ministerial counter parts were oblivious of such work, or of their contribution to such a plan (Table 4).

> *"It's difficult because normally you do not start from previous works so quickly to conclude in six months. You give time to know each other […] when I said earlier there were some ministries that were involved to support the Perrault Working Group, these people were on our working group also for the GAP elaboration. So, they were aware, some were aware of the problem, had attended as an observer at the Perrault report level. So, when they found themselves in inter-ministerial discussions, they were more prepared; others not. Because the Ministry of Transportation had not been solicited in the Perrault report. So, for them it was all new. therefore, it has been a lot of work bilaterally with the ministries; uh, a lot of work too, I would say even to convince them that something had to be done, despite everything that I described."*
>
> *Government professional (2016)*

What didn't help in the negotiations was the attitude that most non-EEAC participants characterized the MSSS with. The health sector had a long-standing history of imposing policies on other government sectors and this approach was less welcome by actors:

> *"… Over and over again, health authorities are approaching us with a sounder vision of what to do at the public health level…"*
>
> *Government professional (2016)*

> *"…even if they were asking for ministerial contributions, it was a contribution […], I would call this a minimal contribution, they did not really encourage us to be, to become a stakeholder…"*
>
> *Government director (2016)*

The EEAC relied on the knowledge they had generated earlier to influence their ministerial counterparts and garner their support for the GAP. Ministerial EEAC members disseminated the reports of the workshops to the inter-ministerial committee members. They prepared presentations based on the workshops describing the scientific rational and offering real-life examples. Their aim was to increase their awareness on the obesity problem and its solutions. The EEAC made use of previous works that have all been congregated to produce the GAP: the GTPPP works, the Perrault Working Group and the workshops among others.

> *"So, we were very connected, because we were connected with the GTPPP, with all the GTPPP partners, we were connected with the Perrault Working Group and we were connected with the public health network, so we could channel all these works to the benefit of writing the GAP, so when we started writing the GAP, we did not start from scratch, we already had proposals"*
>
> *Government professional (2016)*

The narrative around obesity in the GAP reiterates the WHO's warning regarding the urgency of the problem and its consequences, a narrative the EEAC promoted. The contribution of the obesity epidemic to the increased global chronic diseases burden was evoked (WHO, 2000 in MSSS, 2006). There was a subtle insinuation to considering obesity and other weight-related problems as being one of the chronic diseases: "the increase in the prevalence of chronic diseases, including weight-related problems…" (MSSS, 2006 p.13). The EEAC economic argument, namely the increase in health care costs associated with chronic diseases was

portrayed as a serious threat to government budgets. The use of vivid language such as the economic burden that obesity entails, and the eroded governments' budgets associated with the increased health care costs were reflected in the GAP.

The GAP embraces a double-faceted definition of weight related problems. It focuses on environmental factors as causes for unhealthy life styles and weight-related problems. The IOTF obesity causal map was adopted in the GAP. The Cohen model was used as the intervention framework of the GAP. All five priority actions of the EEAC/GTPPP were integrated to the GAP, including the axes on research and PSMA regulation. Those actions were not addressed in the Perrault report. Recommendations issued under each theme of the MSSS workshops were also used to elaborate the GAP actions. This culminated with the introduction of environments-focused policy actions advanced by the EEAC that were relatively innovative in Québec.

Other coalitions, specifically the HLPAC and the AFAC, did not introduce new actions under the GAP. Many of their proposed actions were excerpts from their own ministerial plans such as the MAPAQ GTAS recommendations, or actions they had started implementing, or others that were being developed such as the healthy school framework. They were reluctant to introduce new policy actions under the GAP. The reason for that is that they didn't want to use their own ministerial resources and funds for a plan that doesn't fall under their own mission and credit allocation. Often, they ended up putting *recycled* actions in the GAP. Some even proposed examples of actions to be included under the GAP, to avoid commitment and accountability.

> *"At some point we came to a meeting and there were people who said, 'Well, instead of having actions we could have examples of actions' because they did not want to commit themselves because they did not know: 'are we going to have new budgets?' You know? there is that too: 'are we going to have development money? Then, we could propose examples of possible actions without committing ourselves to decisive actions.'"*
>
> *Government professional (2016)*

> *"A school-based food policy, yes the Ministry of Education had started to set it, to work on it before the GAP came out, yes, they could put it in the GAP, but otherwise we would have never got it."*
>
> *Government professional (2016)*

> *"we would have wished to be innovative […] to come up with new measures but if the ministerial authorities told us 'no you do not sign up for that because if you do, it will consume budgets and we don't have the necessary budgets in our regular credits to put them forward'. Well, this reverts to saying: 'you will put forward things that you know we are already financing, that we are able to finance', so yes indeed, at times, it is recycling of actions that the Ministry is already carrying out"*
>
> *Government professional (2016)*

The EEAC pushed to have the GAP fill in some *gaps* earlier works had failed to address. For instance, whereas the work settings were not explicitly targeted under the workshops' activities (MSSS, 2005c, unpublished) nor at the Perrault Working Group (Perrault Working Group, 2005), they were targeted as a distinctive setting under the GAP. The healthy enterprise norm the EEAC advocated for to target people in their work places was included under the GAP. This is noteworthy, because the GAP was originally tailored for the youth and the EEAC had to concede for that, even though it was in favour for population-level interventions. The inclusion of the healthy enterprise norm and actions in work environments necessitated an expansion of the GAP target age range from 0 - 18 to 0 - 25.

Another intervention the EEAC promoted under the GAP was the introduction of services to people suffering from weight-related problems. The Perrault report did not include such recommendations and the EEAC corrected for that in the GAP. The EEAC introduced the program *About losing weight* under its fourth axis. Moreover, the GAP set clear targets with respect to decrease in obesity prevalence in children and adults. Not that any coalition was willing to set targets, but without targets, a policy could never make it through to adoption. So, the political pressure forced EEAC members to commit to reduction targets which they were aware are unreachable.

> *"They were unachievable health goals, to reduce the prevalence of obesity […] in 5-6 years. But at the time […] for sure, it was politically impossible to set the goals to halt the progression of obesity. We had to, we wanted this document to have a symbol-like value to mobilize people. If it is just to stop an increase, it's not very mobilizing."*
>
> *Government director (2016)*

The remaining coalitions could not challenge many aspects of the policy issue advanced by the EEAC. They couldn't question the seriousness of the obesity problem given that the alarm

sound was triggered by the WHO in the 1990s. However, they could challenge some other aspects of the problem. For instance, the AFAC challenged the validity of the EEAC causal assumptions and priority policy instruments. Specifically, the AFAC denied any responsibility of the agri-food sector in contributing to obesogenic food environments. They blamed it instead on individual choices. Their strong opposition to taxation as a policy instrument was supported with the argument of the economic vulnerability of socio-economically disadvantaged families and the lack of evidence of such policies in achieving the desired behavioral change.

> *"At the level of the Ministry of Health, there was a lot of belief in the positive effect of taxation on junk food and I told them that I did not feel that it was an effective way of intervening in the health field; especially since taxing a diet that was considered to be less good for one's health could have an impact on the less well-off. What you have to remember is that unlike smoking eating it's not a choice, and that's what I told them at that time."*
>
> *Government director (2016)*

Paradoxically, the AFAC's concern to vulnerable populations was less evident under the GAP food security theme. For instance, the only GAP action concerned with food security was not under the responsibility of the MAPAQ nor was the MAPAQ a collaborator on it. This action called for the reinforcement of the implementation of interventions fostering the accessibility to healthy foods, specifically for the economically disadvantaged populations. It was rather under the MSSS' responsibility and with the collaboration of two other ministries: the MELS and the MESS.

Even though the CDAC was concerned with children's health and development in disadvantaged communities, the GAP actions did not reflect that. This can be explained by the fact that the FLAC founder had already proposed to co-finance community-level actions in parity with the government. Accordingly, interfering in a governmental action plan that was of interest to ministerial actors was not an option. What was at stake was the plan itself. The priority was to have the plan adopted, then to establish the partnership and define the terms of the agreement in line with his interests.

> *"Then obviously the government action plan, well, the Ministry of Health in particular brought together all the ministries and it was a relatively long process; we were also consulted, invited in this exercise […] I know that we were part of different exchanges, I don't remember when precisely in the process […]. Then at some point, when it was adopted, of course everyone was very happy."*

Still, the GAP did not follow up on some of the Perrault Working Group recommendations, specifically those concerned with poverty and social inequality. For instance, the GAP did not retain actions aiming at providing subventions for the supply of healthy foods targeting children and families. In general, poverty and social inequality issues were less addressed in the GAP as compared to the Perrault report. There was also some internal inconsistency within the GAP. Its actions were in general perceived rather soft by study participants. There was some incongruence and inconsistency between the problem narrative and the type of solutions proposed. Most of the proposed actions were of the soft type, focused on providing information and increasing awareness of various societal actors including individuals and institutions.

Policy-Oriented Learning

All coalitions experienced policy-oriented learning within the study period. New information and knowledge on the policy problem, its determinants and the factors that influence those determinants were one source of learning. Other sources include information on the probable impacts of alternative solutions. Perceptions regarding external system dynamics and other policy subsystems' dynamics also contributed to learning. Learning concerned the empirical precepts of policy core beliefs. Normative aspects remained unchanged. Each coalition held on to its basic value priorities; groups to prioritize according to each coalition were unchanged as well. Learning concerned both the cognitive dimensions or changes in precepts of the belief systems and behavioral dimensions such as the use of political strategies to achieve the coalition's goals. Intra-coalition learning was more frequently observed than cross-coalition learning.

One of the factors that explain learning is the type of information and experience that prompts learning (Jenkins-Smith et al., 2014). Coalition actors use this stimulus to enhance their understanding of causal relation-ships and important variables related to their belief systems. They also use it to identify challenges facing their belief systems and respond to them (Jenkins-Smith and Sabatier, 1993). In the previous section we were concerned with knowledge

utilization. We reported our findings with respect to information utilized by coalitions either for conceptualization purposes, problem-solving, political or deliberative. The analysis of the semantic structure we had created to study policy-oriented learning revealed that the stimuli prompting learning paired with, and even matched the knowledge actors utilized throughout the policy process. This led us to improve our understanding of knowledge-utilization in the policy process by linking it to policy-oriented learning. Knowledge is in fact a key factor contributing to learning. When knowledge utilization induces a change in cognitive dimensions and behavioral intentions of coalition actors, this is when policy-oriented learning occurs according to the ACF (Jenkins-Smith and Sabatier, 1993). Notwithstanding the importance of enlightenment (Weiss 1977) in altering belief precepts, there are other types of learning our results point at. We were able to identify three additional types: political, deliberative and problem-solving learning. Accordingly, we can propose a typology of learning that is consistent with the typology of knowledge utilization adopted in this study.

This section will present our findings concerning intra-coalition, cross-coalition learning and factors affecting them. We will particularly address two factors: (i) the level of conflict and (ii) analytical forums. We reported on analytical tractability of the policy issue, the third factor, in earlier works. Earlier results showed there was considerable consensus of the scientific community on the seriousness of the policy problem, yet, wide disagreement on the solutions. With time, emergence of new studies, reviews, research and surveillance data, national and international reports, the tractability of the issue increased. This improved the opportunities for learning and adjustments in belief systems. This section will end with a typology of policy-oriented learning that can be used and refined by scholars in future works to help analyze policy-oriented learning through well-defined concepts.

Intra-Coalition Learning

EEAC

The EEAC actors sought to communicate their vision and understanding of the policy problem and to engage other governmental key actors so that collectively, they reach their policy goals. They convened a think tank, the GTPPP. They recruited scientific experts for their think tank and sought allies among them. When the GTPPP started convening, members were not in

full agreement. Information was diffusing across the group through research done by some of its members, presentations or other scientific communications. The compatibility of members' beliefs favored learning. Other enablers include the relatively long timespan through which the group was active and the low turn over rate of its members. Group dynamics were excellent according to members and resistance to knowledge diffusion within group members was almost nil.

Given this context, group members were able to pool their resources and align their strategies. Learning was unproblematic; members could easily improve their understanding of the policy problem. Moreover, they could easily convince themselves that attacks to their beliefs are based on invalid or inadequate understanding of the policy problem. The EEAC was the coalition that experienced policy-oriented learning the most. Learning was prompted by the various reviews, studies, projects and information from other policy subsystems such as tobacco (c.f. knowledge utilization section). Learning concerned the following policy core precepts and behavioral changes: (i) various aspects of the policy problem, specifically its definition, causal linkages, conceptual intervention models, possible solutions and policy instruments; (ii) needed strategic actions, namely advocacy and negotiation strategies; (iii) various actors' roles and participation in the policy process. An example we can give concerns the policy actions the GTPPP proposed following their first reviews. They later had to shrink their to-do list and focus on five priority actions to achieve their policy goals.

AFAC

Learning within the AFAC concerned the policy problem, its seriousness, its causal linkages, specifically with respect to food consumption patterns, and its possible policy options and instruments. The AFAC learnt on the possible role of the MAPAQ and its partners from the Agri-Food industry in policy solutions and in health-related matters in general. This was prompted by the CAPA's works and report and the activities of the AFAC working group GTAS. Accordingly, they strategically modified their coordination patterns with the MSSS and became more open for collaboration on health-related matters. This change was specifically highlighted by the national public health director (2003-2012).

"When I arrived in 2003 at the Ministry of Health, […] at the very beginning, the first times I met for example the […] MAPAQ, the expression that I have often used was [expression to say: I have been asked to step aside]. They were there to support the industry, promote the industry, subsidize the industry. They were not there for the health of Quebeckers […]. My speech was a failure, and then two-three years later, when the governmental action plan was about to start […], or at about the same time, it is a complete turnaround, why? I do not know […] But when we released the governmental action plan and there were actions for several ministries, the first one was the MAPAQ because they had already actions […] to implement. A trend […] towards a healthy diet. There was a complete turnaround!"

NPHD (2016)

HLPAC

Learning within the HLPAC concerned the policy problem, its seriousness, its causal linkages specifically the relationship between physical activity and obesity and the possible policy options. The works of Kino-Québec scientific committee helped improve the HLPAC's understanding of the role of environments in promoting a physically active lifestyle and of the importance of policies to address these environments. The link between physical activity and obesity started being integrated into some actors' belief systems.

"Of course, there has been an evolution in thought, but I am not sure I would be able to situate it in time but between the 90s and 2000s I think we were not at the same place, that's clear"

Government professional (2016)

The healthy school policy framework stood out as a priority policy option in school settings. Earlier works and consultation on this framework prompted learning. Moreover, learning from previous policy works coordinated with the MSSS necessitated unwarranted accommodation the HLPAC had to concede. This prompted the HLPAC to strategically modify its collaboration patterns on this policy by seeking external consultants to develop the policy and avoiding collaboration with the MSSS.

CDAC

Learning within the CDAC concerned their understanding of the causes of disease in children, the seriousness of obesity, the impacts of unhealthy lifestyles on children and the importance of interventions on physical activity as a policy option in disadvantaged

communities. The consultation this coalition held in 2001 as well as the experience generated through field work prompted learning.

Cross-Coalition Learning

The EEAC attempted to initiate dialogue with other coalitions to try to alter their beliefs. Most attempts targeted the HLPAC explaining why most cross-coalition learning we observed occurred between the EEAC and the HLPAC. As a matter of fact, both coalitions were more collaborative, in the sense that they had an intermediate-level of belief differences with frequent cross-coalition interactions. This finding can be attributed to three facilitating factors: (i) the common coordination of the program Kino-Québec; (ii) the Agreement on the Complementarity of Services between the Health and Social Services Network and the Education Network that was signed in 2003. Through their agreement, both the MSSS and the Ministry of Education asserted their commitment to collaboration and intersectoral work (ME, 2003). Lastly, (iii) the role of policy brokers; one EEAC member coordinated Kino-Québec for a couple of years on one hand and on the other hand, one HLPAC actor was a GTPPP member. The HLPAC actor contributed to all the GTPPP projects and activities for over five years (2000-2005). Therefore, integrating some of the GTPPP's beliefs into that actor's belief system was possible.

> *"I really liked the context because the actors came from different backgrounds. There were people who were more in research at university, people from ministries, people from the Association for Public Health in Québec. So, the diversity of actors; then I really learned about the problem of obesity and weight problems."*
>
> *Government professional (2016)*

Learning concerned various precepts of policy core beliefs, specifically the problem seriousness, causal links and policy solutions. However, communicating the vision of the problem and its solutions to remaining HLPAC members was not automatic nor easy. This was due to discrepancies in belief systems in addition to structural and time constraints.

> *"I can tell you that, with respect to the team here, the work of the GTPPP and then obesity, at some point I can not say that it 'wow let's go, let's go' they said they had all the credibility at the beginning […]; it was not obvious to them, the link (in reference to the link between PA and obesity), […] now, they are completely convinced with the approach on the environments […] but I can tell you that initially it was not like that"*
>
> *Government professional (2016)*

Therefore, the participation of one HLPAC member to the GTPPP was necessary to decrease the level of conflict and increase communication channels between both coalitions. However, it was not enough to resolve the conflict around some policy core beliefs. Most importantly, the discrepancy around basic value priorities namely the primacy of pleasure and well being in inducing behavior changes rather than the fear message. With respect to policy core preferences, the HLPAC believed in balanced policy solutions promoting health behavior education and enabling environments rather than focusing only on promoting enabling environments.

> *"But the health [in reference to the MSSS] was based on the fact that […] the WHO had said crisis of obesity, urgency to act etc. So, they took over this argument […]. I think that basically if we want to interest politicians, probably it was a good way […]. This discourse, this vision is not always adequate for all ministries and agencies."*
>
> *Government professional (2016)*

> *"It has evolved over time [in response to whether perceptions of obesity evolved]. It is difficult to say when, but then I would even say that it has evolved so much that we swung in the opposite direction at a certain time! we were no longer talking about the individual, individual factors we only spoke about environmental factors, what always irritated me because it's a balance of both. […] You must do both! Given that the discourse of individual factors had taken a lot of place, it's as if public health people needed to put a lot of emphasis on environmental factors but then they evacuated completely 'no, no, no, people know it, we have talked enough about it!'"*
>
> *Government professional (2016)*

Cross coalition learning also occurred through the interactions of the CDAC with the EEAC. Precepts concerned were causal factors and policy options; the main change in belief aspects concerned the environment role in shaping lifestyles and the importance of solutions focused on enabling environments.

> *"it is true that the first phase was perhaps more, without saying that it was individual, I do not think that the first phase of Québec en forme was really centered on the individual, but we understood really much better the impact of environments, the impact of the population approach on all individuals […] And that has been an evolution, more towards an enabling environments approach. In fact, it was one of the big changes that Québec en Forme did in this context."*
>
> *Director provincial organization (2017)*

Cross-coalition learning occurred at the Perrault Working Group; it concerned reconfirmation of beliefs of the HLPAC, AFAC and CDAC on the importance of targeting youth as a priority group. All coalitions reaffirmed the primacy of health as a value priority. Consensus was established on the seriousness of the problem and on enabling environments as a policy solution. Coalitions improved their understanding on the role of various ministries in obesity prevention. Following the Perrault Working Group report, the EEAC learned that they needed to adjust their strategies to reach their goals concerning the GAP's target group. Even if the GAP was meant to target children, the EEAC responded to the threat to its normative beliefs by extending the age range to include young adults.

Analytical Forums

Analytical forums in the case of the GAP were all closed participation forums. Participation in these forums was strictly controlled based on specific screening. This screening can limit the diversity and representation of belief systems and accordingly the degree of conflict between them. It can also screen out actors who speak a different analytic language or do not share the same bases to evaluate analytic claims (Sabatier and Jenkins-Smith, 1993). A few forums were important for intra-coalition learning. For the EEAC, it was the GTPPP, for the HLPAC it was Kino-Québec and the team of consultants working on the healthy school framework, for the AFAC it was the Commission (CAPA) and the MAPAQ working group, the GTAS and finally for the CDAC, it was the experts' consultation they launched in 2001. Analytical forums that represented important mediums for cross-coalition learning were the Perrault Working Group and the inter-ministerial committee. All the study participants confirmed the importance of these two forums in the obesity prevention policy process; the first being created by the cabinet to address the policy issue, and the second, for bringing together all the ministries in charge of the policy elaboration and implementation. In the following section we will attend to important attributes of these forums.

Perrault Working Group

The GTPPP had been doing research for five years when the Perrault Working Group was created. Based on the GTPPP research, an enhanced understanding of the policy problem and its preferred solutions materialized. Because of their tenaciously held beliefs, the EEAC

influenced the composition of the Perrault Working Group. Members were selected among civil society actors whose interests, beliefs and goals match the craftsmen elaborating the GAP. By design, the Perrault Working Group screened out potential participant members with dissident belief systems and fostered the recruitment of members with similar language and belief systems. For instance, screening of participants excluded potential members with different viewpoints, such as the transformation sector of the Agri-Food industry. Instead a representative of the Québec Association of Fruit and Vegetable Distribution was appointed. The Perrault Working Group was characterized with professional dominance. Therefore, it is of no surprise that a commitment to scientific norms guided the group's activities. These members shared common empirical and theoretical assumptions which enabled resolution of the analytical disputes around the policy issue and favored a consensus. Given that the MSSS HLS unit team was moderating the meetings, the scientists that were invited were from the EEAC coalition. No "*neutral*" scientists were invited and as such the narrative around the policy problem matched that of the EEAC.

> *"…On the other hand, I think that public health had already prepared the ground with important documents and which served as the basis of the exchanges that we had [in reference to Perrault Working Group]. Then, honestly, I'll tell you there might have been, I'm saying that retrospectively, but there might have been some bias in the composition of the working group, and I'm not saying that necessarily negatively […] They recruited actors who were for prevention, who were, who already had a positive perception of prevention and who had a vision of what prevention could be. So, they gathered around the table people from different sectors, which is perfect, but people who had already identified prevention as a priority [...] I think the people around the table had been carefully chosen for the contribution they could make to this discourse that is to be created on prevention […] So, around the table we only had people who could get along…"*
>
> *Anonymous (2016)*

Inter-Ministerial Committee

One of the most difficult tasks EEAC members were faced with was to start negotiating with ministerial representatives. Clearly, for some of them, they were starting almost from a blank page, whereas the EEAC had spent years generating knowledge and evidence in support of their policy preferences.

"The challenge we had in developing the government's action plan was to build on the knowledge […] that had been generated and developed rigorously in public health, with our network, sit down with other ministers and then say: 'first, we have a command, you must'; well there was also the command, because it was a government plan, each minister was asked to delegate; so, we definitely had delegated people, but at the same time people who are not necessarily aware of the problem, who have their own program, […] that is to say that they are a little bit closed to see anything but what they were working on and worried […] that public health decides on actions to put in place; it was not the dynamics we wanted neither. The intersectoral inter-ministerial work must be in real collaboration it's not: 'I know, and I tell you what to do', it's not the approach"

Government professional (2016)

While the scientific debate was significant at the inter-ministerial committee, another debate emerged. The most fiercely debated theme during this committee's meetings as reported by the participants was the funding of the actions ministerial respondents were anticipating. Inter-ministerial policy actors reached a hurting stalemate when they refused to introduce actions under the plan and rather proposed to introduce *examples of actions*. This occurred when they learnt that the GAP actions would not have earmarked budgets.

"when […] I said well Mr. Couillard told us to develop a governmental action plan, we will not be funded 'but then, we will not take action, we can commit to nothing!'. This is not new to deputy ministers. 'we do not commit to anything if we do not have money! how do you want us to deliver if we do not have a cent to do it?'. Well we must do it from our resources and then every year, 'no no!' They said 'we'll put examples of actions'. Then I said […] there is no question to issue an action plan with examples of action! We must commit!"

NPHD (2016)

Level of Conflict

The frequent cross-coalition coordination between the HLPAC and the EEAC helped reduce conflict. The level of conflict between HLPAC and EEAC was moderate, basically due to existing structural coordination mechanisms and because of the presence of two policy brokers. The following quote will help explain the relatively lower level of conflict between both coalitions.

"In those times, you had to be versatile [...]. I tackled everything, school food policies, cholesterol, hypertension, cardio-vascular, tobacco, physical activity. At one point someone was absent, so I was also called for to work at Kino-Québec coordination level; because Kino-Québec was an agreement between the Ministries

of Health and Education and the health network, so we had a coordination team, I coordinated with the team for seven years, Kino-Québec also, in physical activity"

Government professional (2016)

The contentious issues between both coalitions mostly related to the promotion of physically active lifestyles as a weight-loss promotion tool which the HLPAC radically objected, because of its prescriptive and coercive nature. The EEAC on the other hand had a compelling attitude whereby they enforced their own knowledge and expertise on others. This relatively increased the level of conflict between both coalitions. The moderate informed conflict between HLPAC and EEAC fostered policy-oriented learning between both coalitions.

In contrast, the level of conflict between the AFAC and the EEAC was high, mainly because both coalitions threatened each other's core values and beliefs with respect to market regulation and economic competitiveness. The EEAC was promoting regulation of Agri-Food industry practices through coercive measures. In contrast the AFAC was in favour of voluntary self-regulation through education and increased stakeholders' awareness. The GAP integrated only such actions; the GTAS report served as a political weapon in that regard. The AFAC resistance paid off.

With respect to the CDAC, there was no conflict between the EEAC and the CDAC prior to the GAP elaboration until the "*challenge"* launched by the FLAC founder to co-finance interventions aligned with the GAP in parity with the government. The level of conflict increased when the negotiations on a prospective agreement started. The apparently technical debate on the provisions related to GAP funding reflected in fact a much deeper debate on core issues related to value priorities and target groups to prioritize.

Typology of Policy-Oriented Learning

Based on our empirical findings, we suggest that policy-oriented learning follows the same typology of knowledge utilization. To develop a typology of policy-oriented learning, we used Sabatier's definition of policy-oriented learning: "relatively enduring alterations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives (such as advocacy coalitions)" (Jenkins-Smith & Sabatier, 1993, p.42). Therefore, and with reference to Denis et

al. (2004) and Weiss (1977) definitions of knowledge utilization types, and based on the boundedly-rational model of the individual presumed by the ACF (Jenkins-Smith et al., 2014), we propose a typology of policy-oriented learning as per the following (Table 5):

Tableau VI.Article 3 – Table 5 Typology of Policy-oriented Learning

Table 5 – Typology of Policy-oriented Learning	
Type of learning	**Definition**
Enlightenment or conceptual learning	This type of learning occurs tacitly over years, with the gradual accumulation of knowledge. It occurs following the long-term policy actors' exposure to technical and scientific information that emerge over time. It results in policy actors' change or confirmation in belief system whether in the core aspects or the secondary aspects. We would expect this type of learning to alter cognitive dimensions of learning irrespective of the behavioral intentions of policy stakeholders.
Problem-solving learning	This type of learning occurs when policy stakeholders identify gaps or experience doubts in one or more components of the core or secondary aspects of their belief system. Therefore, they seek out or commission research and empirical evidence to determine, enhance, confirm or modify pre-existing beliefs. It results in policy actors' change or confirmation of precepts in their belief system whether in the core aspects or the secondary aspects.
Strategic or political learning	Learning occurs through political interplays of policy actors according to how well fitted and self-serving the learning stimuli is with respect to the actors' objectives. Learning is less of a rational process of information identification or search or knowledge development, or a tacit process similarly to enlightenment. It is rather an opportunistic process. We would expect this type of learning to alter behavioral intentions or strategies of policy actors irrespective of the cognitive dimensions of learning.
Deliberative or interactive learning	Integrating both the enlightenment and the political learning, this type of learning occurs during deliberative forums when actors pool their beliefs and skills to enhance the understanding of a problem within a deliberative democracy framework. Learning is prompted by a multitude of sources and is the result of mutual discussions and consultations. Learning aligns with the rules structuring deliberations within the forum and can be subject to public debates.

Discussion

The analysis of the GAP policy process through the ACF lens allowed us to identify four advocacy coalitions that are active in the obesity prevention policy subsystem, each trying to advance its policy solutions. These coalitions have been defined based on normative and empirical beliefs reflecting the values, ideologies and understanding of the policy problem.

The EEAC was the coalition that was first concerned with the obesity problem. The EEAC started as a minority coalition that was less able to influence the policies of the MSSS with respect to obesity prevention. The coalition was faced with powerful actors requiring only evidence-based interventions to be included under the MSSS' programs. The EEAC sought to

increase their resources. They started with an information search regarding the causes and possible solutions of the obesity problem. The coalition advanced its own vision and policy solutions and communicated its vision to the scientific community, to public health actors and to the public at large. This vision introduced the concept of enabling environments to promote healthy life-styles and prevent weight-related problems, a new paradigm in addressing the policy problem. The EEAC was also able to propose its own understanding of the role of the public, experts and elected officials. They also proposed political strategies to try to influence decision-makers and other stakeholders to adopt the coalition's policy core policy preferences.

The Generations' forum led to a sequence of events that favored the EEAC. More government resources were invested in obesity prevention through the creation of a governmental working group. Because of its knowledge and expertise in the policy issue, leadership of the future policy was granted to the MSSS general directorate of public health, more specifically its HLS unit team, many of whom were committed EEAC members. This altered the power balance between advocacy coalitions and opened a new deliberative venue. The mandate to work on a national action plan to prevent obesity and to attend to the working group's activities conferred upon the EEAC some authority. The larger resource superiority empowered the EEAC with larger control over subsystem politics and policy. Thus, the coalition could advance its preferred policy solutions.

The EEAC was committed to developing policy solutions based on the enabling environments paradigm. The actors of this coalition sought to influence the Perrault Working Group's recommendations so that they support this paradigm. Screening out participants with different beliefs, the EEAC made sure the Perrault report would provide needed provisions for the GAP elaboration. Another powerful coalition was the CDAC. Their financial resources bestowed upon them some resource superiority. In fact, they were perceived as the sole providers of financial resources that could be mobilized to support the governmental plan. The health minister in office did not want to launch the plan without new funds. He was also considering a public-private partnership as a viable option. This equally echoed the interest of the Premier in public-private partnerships as an innovative way to have the private sector contribute to state related missions, modernize services and increase their effectiveness (Premier, 2004).

Every coalition utilized knowledge as part of their strategies to promote their policy goals. Many times, research was commissioned to confirm pre-existing beliefs and buttress the coalition's arguments. Moreover, deliberative policy-making processes that occurred at various instances throughout the policy process helped move the policy process forward while promoting the use of evidence in policy. Deliberative policy making processes are known for their potential to resolve controversies and reframe policy dilemmas (Flitcroft et al., 2011). They also promote the relative influence of evidence in policy (Flitcroft et al., 2011).

In as much as policy-oriented learning occurred smoothly and frequently within the same coalition, cross-coalition learning was less common. The collaboration context for the GAP elaboration was less than optimal. It was characterized with high intra-coalition coordination and little cross-coalition coordination if any. This is more observed in adversarial policy subsystems (Weible et al., 2010). Intra-coalition learning was the highest within the EEAC think tank, the GTPPP. Cross-coalition learning was the highest between the EEAC and HLPAC and among coalitions participating to the Perrault Working Group. Two conditions provide an appropriate setting for possible cross-coalition learning allowing the policy process to progress: an intermediate level of conflict on policy core beliefs between coalitions and a relatively significant cross-coalition coordination (Weible et al., 2010). Both conditions were present at the level of both EEAC and HLPAC. Within the Perrault Working Group, the likelihood of learning increased because the forum was prestigious enough to guarantee the participation of civil society actors, elected officials and ministerial actors on one hand and on the other hand, professional norms prevailed within the Working group.

To better explain the role of policy-oriented learning in the GAP elaboration and adoption, we can envision the counter-factual. Accordingly, we would ask the following questions: in the absence of policy-oriented learning, would the GAP have been adopted? And would the GAP policy content have emulated previously adopted obesity prevention policies? Based on our empirical data and analysis, the reasonable answer is that policy-oriented learning was necessary but not sufficient for the GAP adoption. The GAP was in fact requested by the Premier of Québec. Based on previous study findings, the adoption of the GAP was attributed to an aggregate of contextual and political factors as well as focusing events. Government and non-government policy actors were identified, convened and mandated to work on the plan.

Mid-level policy actors experienced learning, however it was not the case of policy elites. Beliefs of the ministers in office who were concerned with the GAP and those of the Premier were oriented to individual causal factors and solutions to the obesity problem (Bernier, 2011). We can reasonably assume that a plan focused on the enabling environments paradigm was not their main interest at the time. Rather, it was the plan itself that interested the Premier. So, we can not attribute the GAP adoption to policy-oriented learning occurring at the level of policy elites. We can however attribute the content of the GAP to policy-oriented learning, mainly the philosophy of the GAP based on the new enabling environments paradigm and the policy actions that were introduced under this paradigm. Within the context we described, characterized by intense, focused and goal-oriented knowledge utilization and policy-oriented learning, we can hardly envision any plan that fails to promote enabling environments. Learning had indeed improved the understanding of the policy issue and the range of causal factors and their interactions as well as possible solutions. Had any subpar plan been proposed, we can reasonably assume that mid-level actors would have resisted its adoption through democratic means available.

Some shortcomings related to the GAP content are noteworthy. The EEAC fell in the trap of setting the wrong goals for the GAP. With the goal of reducing obesity prevalence, many interventions are doomed to fail to achieve this target. They fail to account for the natural feedback loops on one hand and on the other hand, they may lead to unintended consequences (Johnston et al., 2014). Furthermore, setting this goal accentuated the internal GAP inconsistencies, namely with respect to the GAP axis concerned with people suffering of weight-related problems. For instance, the program *About losing weight* that was integrated to the GAP actions so that it is implemented across the province in all local community services centers (CLSC) does not set weight loss targets to its subscribers (EquiLibre, 2005). Yet, despite avoiding establishing weight loss goals in a clinical program, *About losing weight*, the GAP established such targets in its population goals.

Instead, process-oriented goals could have been integrated to the GAP. For instance, "Make physical activity an integral and routine part of everyday life" (IOM, 2012, p.10 in Johnston, 2014) allows for a thorough examination of environments and the identification of opportunities to leverage environmental changes (Johnston et al., 2014). Some measurable

intermediate indicators to reach this goal could have been established as well. Such indicators could have been based on specific, key environmental determinants at the socio-cultural, political, physical or economic levels, which had never been defined for the GAP actions.

This shortcoming in the GAP was highlighted by the auditor general of Québec (auditor general of Quebec, 2015). In his 2015-2016 report, the auditor general criticized the lack of measurable objectives or performance indicators for the GAP actions (auditor general of Quebec, 2015). Although GAP actions benefited from a variety of operational follow ups, however it was impossible to measure the effectiveness of said actions (auditor general of Quebec, 2015). Another GAP critical shortcoming is the attempt of ministerial actors to integrate all kind of ministerial interventions under the GAP regardless of how related they were to obesity prevention. The aim was to pile up interventions and inflate the government actions on obesity prevention so that they make it sound more of a multisectoral and inter-ministerial government strategy (CREXE, 2014). Another GAP inconsistency concerns industry self-regulation. The GAP actions varied depending on the industry type. Whereas self-regulation was tolerated for the Agri-Food and the media and image industry, it was not tolerated for the weight-loss industry. GAP provisions included the establishment of a regulatory framework to control the weight-loss industry's activities (MSSS, 2006). This can be explained by the fact that such regulatory framework fell under the axis concerned with services. This axis is mostly under the responsibility of the MSSS and within its scope of action. In fact, actors are more inclined to propose "solutions" that are consistent with their intentions and goals and that align best with action-prospects within their reach (Rittel and Webber, 1973).

Much like "resolutions" to wicked problems (Rittel and Webber, 1973), the GAP was not the "true or false" policy option for the policy problem, rather the "good enough" for what policy stakeholders were capable of negotiating. The disagreement between policy stakeholders didn't get "solved" but "re-solved". Likewise, the debate had to end due to other constraints, namely time constraints set by Québec cabinet in our case. This limited the capacity of policy actors to negotiate better outcomes and even improve the policy process itself. Being the first policy adopted on the policy issue, little coercion and a strong research focus are likely to prevail (Jenkins-Smith & Sabatier, 1993). In fact, the GAP consisted mostly of soft actions and included a strong research axis. Still, it was the first governmental plan in Québec to address weight-

related problems. It was a successful step forward in obesity prevention, after several earlier attempts had failed. Besides, it set the grounds for enhanced cross-sectoral collaboration on weight-related problems across Québec.

The debate on the preferred interventions to target obesity remains open until today. In a recent study on the health effects of overweight and obesity in 195 countries over 25 years, Afshin et al. (2017) warned from the rapid increase in high BMI prevalence and the disease burden attributed to such increase. To address this problem, the authors call for the identification, implementation and evaluation of evidence-based interventions (Afshin et al., 2017). Simultaneously, in an editorial authored by Gregg and Shaw (2017) in the same journal, Gregg and Shaw (2017) respond to Afshin et al. (2017) and recommend improved data collection, among others, on natural experimental studies to find out which interventions work locally and why. Contextual factors being key in the determinants, effects and solutions to obesity, improved data systems would allow a better and more targeted response of policy makers (Gregg and Shaw, 2017).

Whether evidence-based interventions or emergent promising interventions, we do not expect the debate on obesity prevention policy to end any time soon. Most of the uncertainty around obesity policy emerges from the conflicting narratives competing actors and coalitions create around obesity (Boswell, 2014). The narratives that have been utilized so far in describing the policy issue explain in part its wickedness; different ideologies, values and beliefs have been reported in various contexts (Boswell, 2014; Roberto et al. 2015; Clarke et al., 2016). This explains why the policy is still a high priority issue on the international health agenda (WHO, 2018; OECD, 2017).

A quite recent policy process theory that studies narratives' power and truth claim is the Narrative Policy Framework (NPF) (McBeth et al., 2014). The NPF helps us understand how various policy narratives promote different policy solutions. A narrative is characterized by its form and its content. The form, or narrative element, includes the setting, the characters, the plot and the moral or policy solution. The content reflects both the belief systems embedded in the narrative and the narrative strategies (McBeth et al., 2014). Using a conceptual framework of pluralistic nature, that includes the Advocacy Coalition Framework and the political analysis model enabled us to test our data against the NPF. We could compare our empirical results with

the NPF constructs. Each advocacy coalition in Québec subscribed to a different narrative based on its beliefs. Problem definition, causes and the most appropriate solutions varied depending on the coalition's beliefs. Those beliefs guided knowledge utilization strategies advanced by coalitions. Deliberative processes fostered a negotiated agreement between coalitions and the adoption of the policy.

Based on a narrative analysis approach, Boswell (2014) identified similar coalitions in the UK and Australia. In both contexts, discourse coalitions subscribed to opposing narratives about obesity. Regardless of the narrative itself, a shared aspect of these clashing narratives was *evidence*. In fact, every discourse coalition appealed to the use of evidence, showed commitment to the use of evidence or relied on evidence for its policy choices. Despite this common ground, no consensus has been established on what is considered the appropriate policy approach. This is because narratives around obesity and its policy solutions clash. Besides, there is considerable discrepancy between coalitions on what is considered important and sufficient evidence. For instance, some discourse coalitions would adhere to double-blind controlled trials as the "gold standard" evidence, whereas others would call for "parallel evidence" drawn from similar experiences. Moreover, for the same type and volume of evidence, one policy stakeholder will consider that the threshold for action hasn't been reached whereas another will consider it ample enough for action (Boswell, 2014).

Our case study findings reveal that all coalitions in the obesity prevention policy subsystem in Québec emphasised evidence as the "gold standard" to advance their policy solutions, develop and legitimize their arguments. We have showed that knowledge utilization has been an integral part of actors' strategic behavior and political interactions. Taking into consideration the individual model presumed by the ACF, we must caution from possible unwarranted use and interpretation of evidence. Based on the boundedly rational model of the individual, policy actors tend to filter new information through their belief systems. Accordingly, they are likely to screen out dissonant information and to keep the one that aligns best with their pre-existing beliefs (Weible et al., 2010; Jenkins-Smith et al., 2014). With a specific narrative rooted in a policy actor's beliefs, one would reasonably question whether the knowledge generated would be screened out for dissonant findings leading to confirmation bias.

We can imagine a worse situation whereby research is initially commissioned to help confirm existing beliefs.

The use of evidence can not resolve conflicts over policy options. It can even exacerbate conflicts when it is drawn to the policy arena on need basis to take a stand on a certain policy position. In fact, the call for evidence-based public policy making is rather naïve, given that it presumes a linear correlation between evidence and policy (Wesselink et al., 2014). We echo Boswell (2014) in highlighting the benefits of using evidence in deliberative processes. Firstly, all actors abide by the same "rules of the game", secondly everyone's claims and arguments can be scrutinized for credibility based on a common ground (Boswell, 2014). Both conditions will help ensure a transparent and robust argumentation. Political argumentation will eventually serve to tame wicked problems (Rith and Dubberly 2007 in Crowley and Head, 2017). We would add that deliberative democratic processes can benefit from integrating non-traditional policy actors in the deliberative process. For instance, integrating policy actors from other policy subsystems such as sustainable development and climate change to deliberative processes concerned with obesity-prevention policy can foster complementarity, inter-sectoral collaboration and innovative solutions. The aim wouldn't be to "solve" the obesity problem, but rather, to tame the policy cacophony and as one study participant eloquently stated, "to transform our societies, our environments, our policies, our social norms, in a way that will allow a better match between human biology and lifestyles".

The strength of this article is in the development of a model for knowledge utilization by advocacy coalitions. This model reveals important insights on how knowledge is utilized in the context of Québec, a province in Canada, a high-income country. We expect the dynamics and processes related to knowledge utilization to differ between high-income countries and low-income ones, namely because of the limited capacity of these countries to fund research and their weaker research infra structure.

We also developed a typology of policy-oriented learning. The development of this typology responds to the call of Jenkins-Smith et al. (2014) to re-examine this concept (p.205). This typology can be refined further to capture other types of learning that may occur in other socio-cultural contexts. However, it can be utilized and improved in similar socio-cultural contexts. Its use can also extend beyond obesity prevention to other public health policy

domains, specifically those concerned with wicked policy problems and for policy problems in public health related fields.

Another strength of this article is that it showed that advocacy coalitions were able to overcome the policy cacophony that has plagued obesity policy through a consensus facilitated by policy-oriented learning. Learning occurred in closed participation analytical forums characterized with professional dominance. The public health led coalition was able to integrate the new paradigm of enabling environments to the GAP and to ensure that actions included under the GAP align well with this paradigm. However, it failed to integrate other policy options that may entail threats to normative beliefs of other coalitions, for instance when economic competitiveness is at stake because of a proposed government regulation. We would expect policy actors to resist any threat to normative beliefs irrespective of context or policy domain. In general, government actions under the GAP were more of the soft type and included a strong research axis. This echoes government action in obesity prevention in other OECD countries (Sassi, 2010).

Our study brings insights on the role of knowledge in public health practice and how it can be translated into policies, programs and interventions. The public health led coalition was able to get most of its policy narrative integrated to the plan: the prominence of environmental causes among other causal factors, the seriousness of the problem, the concerned population and the solutions, though to a limited extent. It was less able to influence the actions that were proposed by other ministerial actors. Not withstanding the importance of knowledge translation, the constraints surrounding the policy process may lead to a "good enough" policy solution rather than the "good or bad" one. In our case time constraints were imposed by the Premier so that policy actors delivered quickly the GAP. The prospective plan was a recommendation of the provincial working group that the Premier created. Irrespective of context, we would expect various constraints on the policy process that actors must deal with. Public health actors should enhance their readiness and increase their resources; capacity building of the public health work force on the dynamics of the policy process is essential in this regard.

In our case, the readiness of the public health led coalition was key to its success. The knowledge generated by this coalition was one of its main strengths and ensured its resource superiority. It was the coalition that has utilized knowledge the most in its advocacy strategies,

specifically within the provincial working group and the inter-ministerial one. The cohesiveness of its members and their compatibility, the long-time span for its coordinated activities favoured resource pooling and strategy alignment. A major winning strategy for the public health led coalition was the influence it exerted on the composition of the provincial working group. Mandated by the Premier, and highly inclusive in terms of diversity of policy participants and level of government, this working group fostered cross-coalition policy-oriented learning. We highlighted the fact that policy-oriented learning was less frequent at the level of the inter-ministerial working group.

Created to follow up on the report of the provincial working group and to develop the GAP, this group was less able to maintain the momentum. Without the direct support of the Premier, the inter-ministerial working group was the hub for difficult negotiations. Irrespective of the policy domain, we would expect that the direct support of the Premier to a policy issue to be a key issue, albeit with varying degrees depending on the political context. His or her direct support is important all through out the process. Accordingly, policy actors must seek to maintain this support. One possible way is by reinforcing their communication with policy elites and ensuring they keep the policy issue on their agendas.

Our study had many limitations. There is a considerable risk for recall bias to occur given that our participants are recalling past events and reporting on previous beliefs. Beliefs, events and strategies key informants are reporting might reflect actual beliefs rather than previous beliefs, namely beliefs prior to the GAP elaboration period. To help overcome recall bias, we did recursive checks from various sources of information; for example, we noted some of the contributions of the key informant through document search and analysis as well as interviews' analysis; we discussed those contributions with the key informant. In addition, we asked specific questions emphasizing changes in beliefs and requested participants to state their views on those changes.

With respect to belief aspects of coalitions, many times it was less possible to code for secondary belief aspects of coalition actors because participants' statements were mostly focused on the policy core belief aspects. This can possibly be attributed to the fact that the plan was a provincial action plan addressing a province-wide problem; statements that concern only parts of the policy subsystem were less frequent. Besides, the public health structure in Québec

allows the regions to bring in modifications to some interventions to best suit their regional context and objectives (*Public Health Act*), as long as they keep an alignment with the GAP.

It was possible for us to identify four advocacy coalitions that were involved in the GAP policy process. Based on our interviews, we could identify other actors with policy core beliefs that are more aligned with the clinical approaches of obesity prevention and treatment. However, our data did not reveal any coordination channels or activities among them. This leads us to hypothesize that these actors did not feel threatened by the GAP and thus did not attempt to coalesce to try to influence the policy. Accordingly, it is less likely that another advocacy coalition could have influenced the GAP elaboration in Québec. It is also less likely that additional coalitions led by other government ministries or agencies were active in the case of the GAP. Our study participants included governmental policy actors from the MAPAQ, MSSS, INSPQ, MELS, and the Ministry of Transportation. These represent some but not all the participating ministries and government institutions. However, the GAP actions were mostly borne to the MSSS, MELS and the MAPAQ. Very few actions were borne to other ministries, the majority being reinforcement of actions already in process. This would reduce the likelihood of the presence of an active coalition beyond those we were able to identify. In addition, data triangulation from policy documents and study participants did not reveal the presence of other active coalitions, led or coordinated by other ministries.

Conclusion

Despite global calls to solve the obesity epidemic, attempts to solve it has been plagued with failure for the last decades. Obesity is a wicked problem and one can not find the "best solution" to it, rather a good "re-solution". At best one can tame the problem through optimizing the use of evidence within deliberative democratic processes. The strength of this article is that it showed that advocacy coalitions were able to overcome the policy cacophony that has plagued obesity prevention policy through a consensus facilitated by policy-oriented learning. The public health led coalition was able to integrate the new paradigm of enabling environments to the GAP and to ensure that actions included under the GAP align well with this paradigm.

This research examined knowledge utilization and policy-oriented learning through a pluralistic conceptual framework integrating the Advocacy Coalition Framework and the political analysis model. The framework allowed us to identify a process of knowledge-utilization, the *ACKUM*, which advocacy coalitions utilized to advance their goals. We were also able to expand our understanding of policy-oriented learning through the development of a typology of policy-oriented learning. As such we responded to the need to re-examine the concept of policy-oriented learning. We also responded to the call to expand the understanding of the role of scientific and technical information in the policy process.

Future research should address knowledge utilization in other policy subsystems and contexts to allow for a re-examination of the model we have proposed in diverse contexts and across policy subsystems. It will also enhance the understanding of policy-oriented learning. Accordingly, a more comprehensive typology would be developed; one that can catch various forms of learning that occur across policy subsystems and contexts. Comparative research on knowledge utilization and policy-oriented learning between jurisdictions, countries or multiple policy issues for instance tobacco and weight-related problems is also an interesting research avenue.

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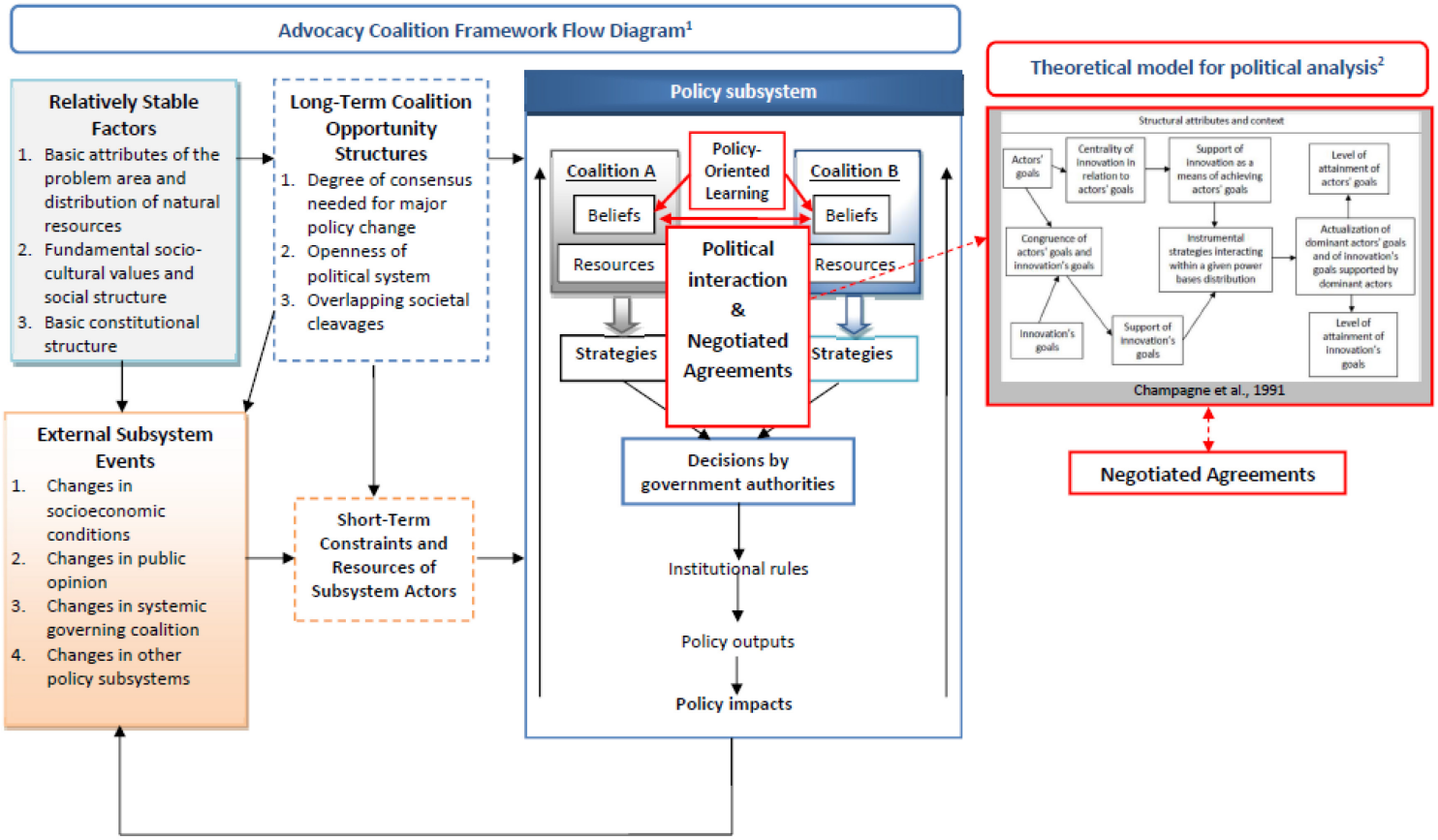
Appendix 1 – Conceptual Framework



Appendix II – Belief Systems

Revised Structure of Belief Systems of Policy Elites, 1998			
	Deep Core	***Policy Core***	***Secondary aspects***
Defining characteristics	Fundamental normative and ontological axioms	Fundamental policy positions concerning the basic strategies for achieving core values within the subsystem	Instrumental decisions and information searches necessary to implement policy core
Scope	Across all policy subsystems	Subsystem wide	Usually only part of a subsystem
Susceptibility to change	Very difficult; akin to a religious conversion	Difficult, but can occur if experience reveals serious anomalies	Moderately easy; this is the topic of most administrative and even legislative policymaking
Illustrative components	**1. Human nature** a. Inherently evil vs socially redeemable b. Part of nature vs. dominion over nature c. Narrow egoists vs. contractarians 2. **Relative priority of various ultimate values**: Freedom, security, power, knowledge, health, love, beauty etc. 3. **Basic criteria of distributive justice**: Whose welfare counts? Relative weights of self, primary groups, all people, future generations, nonhuman beings etc. 4. **Sociocultural identity** (e.g. ethnicity, religion, gender, profession)	**Fundamental normative precepts** 1. Orientation on basic value priorities 2. Identification of groups or other entities whose welfare is of greatest concern **Precepts with a substantial empirical component** 3. Overall seriousness of the problem 4. Basic causes of the problem 5. Proper distribution of authority between government and market 6. Proper distribution of authority among levels of government 7. Priority accorded to various policy instruments (e.g., regulation, insurance, education, direct payments, tax credits) 8. Ability to society to solve the problem (e.g., zero-sum competition vs. potential for mutual accommodation; technological optimism vs pessimism) 9. Participation of public vs. experts vs. elected officials 10. Policy core policy preferences	1. Seriousness of specific aspects of the problem in specific locales 2. Importance of various causal linkages in different locales and over time 3. Most decisions concerning administrative rules, budgetary allocations, disposition of cases, statutory interpretation, and even statutory revision 4. Information regarding performance of specific programs or institutions

Source: Sabatier (1998, p.113)

Appendix III - Key informants' demographics

i. Key informants by profession*

Profession	Number of participants
Agriculture engineer	**1**
Dietitian	**8**
Engineer	**1**
Administration/management	**2**
Medical doctor	**4**
Public figure/Media chronicler	**1**
Physical educator	**6**
School educator	**1**
Sociologist	**2**

ii. Key informants by organizational or ministerial affiliation*:

Organization/ministry	Number of participants
Academic Institution	**2**
Association of public health directors	**1**
Association of Public Health of Québec	**3**
Institute of Nutrition and Functional foods	**1**
Media	**1**
Ministry of Agriculture, Fisheries and Food	**1**
Ministry of Education, Leisure and Sports	**6**
Ministry of Health and Social services	**5**
Ministry of Transportation	**1**
National Institute of Public Health	**4**
NGO (EquiLibre & Québec council on weight and Health)	**3**
Private sector (health services and sport facility)	**1**
Professional Order of Dietitians	**1**
Québec en forme	**3**
Regional public health agency	**1**
Sports Quebec	**1**

Some key informants are members of more than one organization - affiliations during GAP elaboration

iii. By workgroup memberships*:

Working group	Number of participants
GTPPP - Provincial working group on weight-related issues	
Members	**7**
Perrault Working Group	
Members	**3**
Direction, collaboration and support	**6**
GAP - Governmental action plan on weight-related problems	
GAP authors	**2**
GAP writing directors	**2**
GAP collaborators	**8**

Some key informants are members of more than one working group

iv. Key informants by position*:

Key informants by position	Number of participants
Assistant deputy minister of health and social services & national public health director	**1**
Associate professor	**1**
Board member or chair NGO	**9**
Communication consultant	**1**
Director NGO	**1**
Director private sector	**1**
Director/manager and/or assistant deputy minister representative	**5**
Media (radio chronicler)	**1**
Medical assistant to the national public health director	**1**
President professional order	**1**
Professional	**8**
Regional public health director	**1**
Scientific consultant	**2**
Masters student	**1**

Some key informants have more than one position - positions during GAP elaboration

v. Key informants by education level:

Highest Education level	Number of participants
Bachelor's degree	**6**
Master's degree	**12**
Medical doctor	**4**
PhD	**3**

Appendix IV – Variables and Data Sources

Variable	Data sources
Policy subsystem	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations
	• Documents of the National Assembly
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Advocacy coalition members	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Published journal articles on obesity prevention policies in Québec
	• Unpublished documents provided by key informants
	• Government reports and other grey literature
Beliefs and goals	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Strategy and resources	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
External events	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• WHO, OECD documents and reports
	• Published journal articles on obesity prevention policies and other related policy subsystems

Relatively Stable Parameters	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports and strategic plans
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• Documents and reports of the WHO, OECD, Canadian Institute of Health Research, Statistics Canada, Institut de la Statistique du Québec
	• Published journal articles on obesity prevention policies in Québec
Long-term coalition opportunity structure	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Portail Québec
	• Published journal articles on obesity prevention policies in Québec
Short-term constraints and resources of subsystem actors	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans,
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Policy-oriented learning	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Negotiated agreements	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec

Policy decisions	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec and other related policy subsystems

Appendix V - Ministries and Organizations – Québec, Obesity Prevention Policy Subsystem

National and provincial Governments:

(1) Public health network: Ministry of health and social services, National institute of public health, regional directorates of public health, national concertation table on prevention-promotion
(2) Ministry of education, leisure and sports and Kino-Québec
(3) Youth secretariat
(4) Ministry of agriculture, fisheries and food
(5) Ministry of justice including the Consumer Protection Office
(6) Ministry of family, elderly and women's condition
(7) Ministry of transportation of Québec
(8) Ministry of labor and social solidarity
(9) National institute of clinical excellence (as of 2011)
(10) Ministry of municipal affairs and regions; local governments and municipalities
(11) Relevant parliamentary committees: Committee on health and social services, Committee on Agriculture, Fisheries, Energy and Natural Resources, Committee on social affairs. (12) Health Canada; Public Health Agency of Canada; Agriculture and Agri-Food Canada; Food Inspection Agency

Non-government – NGOs, NFPOs, foundations, federations and professional regulatory bodies:

(13) Professional regulatory bodies namely : Ordre des pharmaciens du Québec, Collège des médecins du Québec, Ordre professionnel des diététistes du Québec, Ordre des infirmières et infirmiers du Québec, Ordre des psychologues du Québec, Ordre professionnel des travailleurs sociaux du Québec; professional federations : Fédération des kinésiologues du Québec, Fédération des éducateurs et éducatrices physiques enseignants du Québec (FÉÉPEQ), Fédération des médecins spécialistes du Québec, Fédération des médecins omnipraticiens du Québec; Unions, Commission des normes, de l'équité, de la santé et de la sécurité du travail
(14) The Association for Public Health of Québec (ASPQ) and the CQPP (*Coalition québécoise sur la problématique du poids* as of 2006); Center for science in the public interest (CSPI)
(15) Various NGOs working on body image, weight related problems, physical activity and healthy lifestyles : EquiLibre, ANEB (*Fondation de l'anorexie mentale et de boulimie*), CQPS (*Conseil Québecois sur le poids et la santé* as of 2005), Jeunes Pousses, Regroupement des cuisines collectives du Québec, Les Ateliers cinq épices, La Tablée des Chefs, ParticipACTION, Vélo Québec, Capsana, Equiterre etc.
(16) Sports corporations and federations : Sports Québec, Réseau du sport étudiant du Québec etc.
(17) Fondation Lucie et André Chagnon (FLAC) and Québec en forme (public-private partnership as of 2002)
(18) Heart and Stroke Foundation; Canadian Cancer Society
(19) Consumer associations such as Option consommateurs
(20) L'Association québécoise des centres de la petite enfance (AQCPE); L'Association des garderies privées du Québec (AGPQ); L'Association du personnel cadre des centres de la petite enfance du Québec (APCCPEQ); Fédération des commissions scolaires du Québec; Fédération des comités de parents du Québec; Fédération québécoise des directeurs et directrices d'établissement d'enseignement
(21) Municipal unions, federations and organisms (Union des municipalités du Québec, Fédération québécoise des municipalités ; Réseau québecois des villes et villages en santé, Vivre en ville, Le Carrefour action municipale et famille)

Non-government – Private sector :

(22) The agri-food industry including: Union des producteurs agricoles (UPA), Association des restaurateurs Québécois (ARQ), Conseil des chaînes de restaurants du Québec (CCRQ), Association des détaillants en alimentation, Conseil du commerce de détail, Association des épiciers et des dépanneurs, Conseil de la transformation alimentaire du Québec (CTAQ), Association des fruits et des légumes
(23) Weight loss centers and services, health and physical activity centers and services and their interest groups
(24) Consulting firms, communication & marketing firms: strategic advice, communication, marketing research, opinion polls (e.g. Crop, Léger, Boite de Com., Bleu, blanc rouge etc.)
(25) Pharmaceutical industry; manufacturers of weight-loss and physical activity products;
(26) Media, image, public relations, marketing, communication and fashion industries

Research, statistics and standardization :

(27) Canadian Institute for Health Research (CIHR), Fonds de recherche du Québec – Société et culture (FRQSC), Fonds de recherche du Québec – Santé (FRQS), Canadian Cancer Society, Heart and Stroke Foundation, Statistics Canada, Institut de la statistique du Québec (ISQ)
(28) Centre ÉPIC de l'Institut de Cardiologie de Montréal, Centre de Recherche de l'Institut universitaire de cardiologie et de pneumologie de Québec
(29) CREPO (*Centre de recherche en prévention de l'obésité* – as of 2010 *Plateforme d'évaluation en prévention de l'obésité, PEPO*), CREXE (*Centre d'expertise et de recherche en évaluation*), INAF (*Institut sur la nutrition et les aliments fonctionnels*), BNQ (*Bureau de normalisation du Québec* of the Centre de recherche industrielle du Québec, CRIQ)

CHAPTER 7 - General Discussion and Conclusion

General Discussion

The use of policy process theories in analyzing policy decisions in public health is still in its infancy stage. Analyzing policy decisions in nutrition related policy and particularly obesity through a policy process lens is still behind in meeting the growing need for such research. Enormous strides have been achieved so far in improving the research quality and the extent of the analysis (Cullerton et al., 2015; Clarke et al; 2016). Our study responds to the call of scholars interested in public health policies (Breton and Leeuw, 2011), nutrition (Cullerton et al., 2015) and obesity policies (Clarke et al; 2016) to use policy process theories to analyze policy decisions. We also responded to the call of scholars interested in the theories of the policy process (Jenkins-Smith et al., 2014; Breton and Leeuw, 2011) to improve current frameworks and theories.

Our research aimed to analyze *how* and *why* the *Governmental Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight-Related Problems 2006-2012, Invest in the Future (GAP)*, was adopted in the province of Québec Canada in 2006. With a six year-time frame, the GAP came to an end in 2012. It was not extended, nor replaced, despite many lost hopes for a *GAP II*. Four years later, the government adopted a governmental prevention policy that addressed weight-related problems and healthy lifestyles within a broader province-wide, multi-focused prevention strategy (MSSS, 2016).

Our research brings numerous insights and contributions to the understanding of the policy process at the practical and theoretical levels. It offers an application of a framework drawn from the policy process theories to obesity prevention policy. At the theoretical level, we developed an innovative conceptual framework that combines a policy process framework, the Advocacy Coalition Framework, with a political analysis model. Through our conceptual framework, we tested the policy change hypothesis of the ACF and were able to build explanation on policy change. We also developed a model for the knowledge utilization process by coalition. At the practical level, we advanced the understanding of the role of a group of health professionals, dietitians, in the policy process, emphasizing the role conflicts and

ambiguity that participation in the policy process might induce. This group constituted the core of the major advocacy coalition. We analyzed their advocacy strategies through an application of the Alive & Thrive (A&T) policy process change advocacy model (A&T, 2016). Our conceptual framework provided the conceptual elements to analyze advocacy strategies, understand the challenges that advocates face due to the ever-changing contextual conditions and identify the adaptive tactics and strategies that emerge. Our research helps inform actual and future public health advocacy efforts as well as strengthen public health capacity building and work force development, specifically in the field of public health nutrition.

The ACF has shown to be a very useful framework to answer our research questions. Its scope provided for an explanation of the questions we sought to answer: the *why* and *how* of policy change and learning. The ACF has indeed been used extensively to answer questions about policy change and learning (Jenkins-Smith et al., 2014). The political analysis model completed the analysis and provided the conceptual elements the ACF is less equipped with. The altered belief-based explanation of policy change of Sabatier is not enough to explain a policy change. An interest-based explanation would reveal the gap between interests and policy core beliefs (Nohrstedt, 2005). Through our empirical analysis we showed that shared belief systems are not enough to explain how and why heterogeneous actors form coalitions and maintain coordination to achieve their policy goals. Therefore, the analysis of self-interests and goals complemented the ACF analysis. Through the complementarity between the ACF and the political analysis model, our conceptual framework allowed for an understanding of advocacy strategies, policy-oriented learning and policy change. The following is an explanation of the contribution of our conceptual framework to our empirical inquiry. It can guide future researchers interested in questions related to policy change and learning in identifying what to explore and analyze under each concept.

The conceptual elements that are relevant to the context, contributed to the identification of the external events that occurred throughout the study period. The analysis of these events over time allowed us to build a timeline and highlight the contribution of each event, and particularly that of focusing events. It also helped us identify opportunities and constraints related to those events and how they impacted the policy process. An understanding of the constitutional structure of Québec allowed for an understanding of the dynamics of governance

and its association with strategies of elected officials and other policy actors, as related to the policy problem. Factors related to the policy problem along with the influence of socio-cultural values, contributed to the understanding of the unique way of defining obesity in Québec. The problem definition went in fact beyond obesity to include body image problems. The rational behind this definition is to protect people suffering of weight problems from discriminatory and stigmatizing policies that the *fight* against obesity might induce. Stable factors such as the specific attributes of the problem, its surveillance and research data, prevention and treatments available, public opinion polls etc. were indicative of a problem whose magnitude and extent had increased across the province. This increase was globally recognized as an epidemic. Yet, it was not matched with a similar policy action and political concern in Québec. Previous policy actions had failed to acknowledge the urgency of the policy issue. They fell short on advocates' expectations.

With respect to the policy subsystem, the analysis of the policy process through the ACF lens allowed us to describe and delineate the obesity prevention policy subsystem. We were interested in the provincial level of government. We were able to identify actors from multiple sectors, institutions and levels of government that were involved at the provincial policy level. We could also identify principal actors, policy brokers and policy entrepreneurs. The long-term perspective we adopted was helpful to comprehend the strategic behavior of actors and the change in contextual elements. The characteristics of ACF policy subsystems refined our understanding of the obesity prevention policy subsystem. Specifically, the assumption that a policy subsystem is connected to others or nested in some others (Jenkins-Smith et al., 2014) helped us widen the breadth of our analysis to a diversity of participating agencies, institutions, and policies, to identify coalition actors and to understand their contribution. Furthermore, inter-dependence with other policy subsystems allowed us to understand coalition opportunities, constraints and resources and how coalitions maximized their resources. The inter-dependence of both the obesity prevention and the anti-tobacco policy subsystems and being both nested in the larger chronic diseases prevention policy subsystem helped us understand how actors identified and sought supportive resources including allies and supporting evidence.

The three-tiered belief structure of the ACF helped us identify and distinguish coalitions and assess whether policy-oriented learning occurred. Our results also confirmed the

assumptions that the ACF advances on policy learning, specifically concerning normative beliefs. Our findings confirmed that these beliefs are resistant to change, whereas precepts with empirical components are subject to change with the accumulation of evidence and experience. Normative beliefs are among the strongest binders of coalitions; this explains why all coalitions in our case study were stable over time. Besides, within the same coalition, we were able to acknowledge that the think tank created by that coalition was able to advance more radical positions than the government agency that supported it.

The ACF belief system structure helped us analyze policy options that actors advanced. Actors' beliefs are in fact translated into policies and programs that represent specific causal theories. Thus, embedded in the policy choice of a coalition is the belief system of coalition actors and the causal theory describing the logic behind achieving the policy's impacts (Jenkins-Smith et al., 2014). Therefore, we were able to analyze previous governmental or health policies concerned with the policy issue including the GAP and to assess the change in belief aspects that has occurred and thus policy change. The high value ascribed to scientific and technical information by the ACF guided us all through our research. We could determine the actors' rationale behind policy options, and consequently how they appraised those options.

So how has this thesis replied to the question that gave rise to it? *What explains the elaboration and the adoption of the GAP?* We will answer this question based on the research questions that guided our empirical inquiry with respect to advocacy coalitions, knowledge utilization, policy-oriented learning and policy change.

We were able to identify four advocacy coalitions interacting in the policy subsystem: an enabling environment advocacy coalition, the public health led coalition, a healthy lifestyle promoting coalition, led by sports, leisure and education policy actors, an agri-food coalition led by agri-food policy actors and a community development advocacy coalition led by policy actors from a philanthropic organization. In terms of breadth of policy actors, this study has contributed to the identification of diverse policy stakeholders involved in the obesity prevention policy development at the governmental level. Earlier studies using the ACF have reported on the presence of two advocacy coalitions, a public health led coalition and an industry led coalition (Johnson et al., 2012; Thow et al., 2011). Beyond policy-oriented strategies, the control over resources and critical functions was central to these coalitions' strategies. The

dominant public health led coalition strived to impose its own policy solutions designed to promote health and prevent disease across government sectors. The agri-food led coalition strived to keep off the government agenda any policy proposal aiming at regulating corporate practices or improving the food supply through coercive industry practices. The coalition led by the sports and education policy actors fostered their control over policy actions related to physical activity and school food policies. And the community development coalition ensured its firm control over resources and preventive actions needed at the community level.

With respect to our inquiry on knowledge utilization and policy-oriented learning, our research has highlighted the high emphasis of policy actors on evidence as the "gold standard" to advance their policy solutions, develop and legitimize their arguments. Knowledge utilization has been an integral part of actors' strategic behavior and political interactions. Every coalition utilized knowledge as part of their strategies to promote their policy goals. Many times, research was commissioned to confirm pre-existing beliefs and buttress the coalition's arguments. We could determine knowledge utilization strategies by coalition and assess its influence on policy-oriented learning. A knowledge utilization process was identified whereby most coalitions followed a process of knowledge use in an iterative and adaptive way: from conceptualization to problem-solving to a political use and finally to the use of knowledge in deliberative processes inside closed professional forums. The absence of the knowledge-driven use model was mostly attributed to lack of funds to finance fundamental research in obesity prevention from a population health perspective.

Evidence has also been used by discourse coalitions subscribed to opposing obesity narratives in other contexts (Boswell, 2014). In the UK and Australia, every discourse coalition appealed to the use of evidence, showed commitment to the use of evidence or relied on evidence for its policy choices. Despite this common ground, no consensus has been established on what is considered the appropriate policy approach (Boswell, 2014). Being an integral part of actors' strategic behavior and political interactions and taking into consideration the individual model presumed by the ACF, we must caution from possible unwarranted use and interpretation of evidence. Based on the boundedly rational model of the individual, policy actors tend to filter new information through their belief systems. Accordingly, they are likely to screen out dissonant information and to keep the one that aligns best with their pre-existing

beliefs (Weible et al., 2010; Jenkins-Smith et al., 2014). With a specific narrative rooted in a policy actor's beliefs, one would reasonably question whether the knowledge generated would be screened out for dissonant findings leading to confirmation bias. We can imagine a worse situation whereby research is initially commissioned to help confirm existing beliefs.

The use of evidence can not resolve conflicts over policy options. It can even exacerbate conflicts when it is drawn to the policy arena on need basis to take a stand on a certain policy position (Wesselink et al., 2014). In this sense the use of evidence can be paradoxical; rather than allowing the policy process to move forward, the use of evidence might actually constrain the policy process. Our research has shown that this paradox can be attenuated when evidence is used in deliberative processes. Deliberative policy-making processes that occurred at various instances throughout the policy process helped in fact move the policy process forward. Deliberative processes would necessitate that all actors abide by the same "rules of the game" and that everyone's claims and arguments can be scrutinized for credibility based on a common ground (Boswell, 2014). Both conditions will help ensure a transparent and robust argumentation. Political argumentation will eventually serve to tame wicked problems (Rith and Dubberly 2007 in Crowley and Head, 2017).

Our in-depth examination of knowledge utilization and the related policy-oriented learning allowed us to develop a typology of policy-oriented learning. The development of this typology responds to the call of Jenkins-Smith et al. (2014) to re-examine this concept (p.205). In addition, we have demonstrated that policy-oriented learning has occurred and has impacted the content of the policy. Policy-oriented learning occurred smoothly and frequently within the same coalition and was less observed across coalitions. The collaboration context for the GAP elaboration was less than optimal. It was characterized with high intra-coalition coordination and little cross-coalition coordination if any. This is more observed in adversarial policy subsystems (Weible et al., 2010).

Cross-coalition learning was enabled in a prestigious deliberative forum that was created by Québec cabinet. In this forum advocacy coalitions were able to overcome the policy cacophony that has plagued obesity policy through a consensus facilitated by policy-oriented learning. Two conditions favored cross-coalition learning. Firstly, the characteristics of this forum guaranteed the participation of civil society actors, elected officials and ministerial actors.

Secondly, professional norms prevailed within the forum. We were able to demonstrate that policy-oriented learning was necessary but not sufficient for the policy adoption. We could not attribute the GAP adoption to policy-oriented learning occurring at the level of policy elites. However, we were able to attribute the content of the GAP to policy-oriented learning, mainly the philosophy of the GAP based on the new enabling environments paradigm and the policy actions that were introduced under this paradigm. Mid-level policy actors experienced learning, however it was not the case of policy elites. Beliefs of the ministers in office who were concerned with the GAP and those of the Premier were oriented to individual causal factors and solutions to the obesity problem (Bernier, 2011).

We also found support to the need to foster input legitimacy to improve the performance of civil society groups through increasing inclusiveness. We recommended including non-public health stakeholders and marginalized populations such as First Nations representatives within deliberative democratic processes. Deliberative democratic processes can also benefit from integrating non-traditional policy actors in the deliberative process. For instance, integrating policy actors from other policy subsystems such as sustainable development, climate change and agriculture to deliberative processes related to obesity-prevention policy can foster complementarity, inter-sectoral collaboration and innovative solutions.

With respect to the research questions related to the GAP adoption, and through explanation building we could trace the policy process using the conceptual elements in our framework and draw conclusions on policy change. Only in rare instances did previous research papers explain policy change in public health nutrition policies (Cullerton et al., 2015; Clarke et al., 2016). Our research shows that Québec has followed a similar pattern to other Western democracies with respect to advocacy and government action in obesity prevention. Political attention to obesity seems to have grown similarly in many countries across the globe following the WHO consultation on obesity around the year 2000 and the Surgeon's general call for action on what was considered an obesity epidemic (Kersh and Morone, 2005; Vallgarda, 2015; Baker et al., 2017). In fact, the WHO consultation was perceived to have "launched obesity onto multiple government agendas" (Baker et al., 2017, p. 144). By the year 2006, many Western democracies had adopted national strategies of obesity prevention (Jalbert and Mongeau, 2006).

Backed with a strong political willingness, the GAP saw light under the request and leadership of the Premier in an enabling political environment. The political climate has been identified in the literature as a determinant of the policy progress in obesity prevention (Boswell, 2014). Being a governmental plan, the GAP responded to the WHO call upon governments to develop national strategies to prevent obesity (WHO, 1998; WHO, 2000; WHO, 2004). A change in the governing party led to a series of events that favored the public health led coalition. In a context of low public satisfaction, the Premier started regional public consultations across the province to identify population's needs. Consultations culminated with a provincial Generations' Forum that was held in 2004. The Forum mandated the creation of working groups to address the issues that participants had identified as a priority. Among others, prevention had its own working group. A window of opportunity opened for the dominant coalition given that some of its members oversaw the coordination and moderation of the working group activities. The group recommended the development of a governmental action plan. An inter-ministerial committee was mandated to develop the policy and a negotiated agreement was reached leading to the adoption of the GAP in 2006.

In fact, the sequence of events following the Generations' forum favored the public health led coalition. More government resources were invested in obesity prevention through the creation of the governmental working group. Because of its knowledge and expertise in the policy issue, leadership of the future policy was granted to this coalition. This altered the power balance between advocacy coalitions. The mandate to work on a national action plan to prevent obesity and to attend to the working group's activities conferred upon this coalition some authority. The larger resource superiority empowered the coalition with larger control over subsystem politics and policy. Thus, the coalition could advance its preferred policy solutions. Through its long-standing commitment to developing policy solutions based on the enabling environments paradigm, this coalition sought to influence the other advocacy coalitions within the deliberative venue so that they support this paradigm.

The GAP actions were far from being intrusive, confirming the say that "policy makers typically begin by following the path of least political resistance" (Kersh and Morone, 2005, p.849). No banning of unhealthy behaviors similarly to the wearing of seatbelts or raising prices of unhealthy food choices such as taxation were adopted under the GAP. Actions proposed

under the GAP (MSSS, 2006) were more focused on providing information and education, influencing established preferences or increasing choice. Such actions are the least intrusive and the costliest for governments to implement as compared to more intrusive measures (Sassi, 2010). The latter have a higher political cost (Sassi, 2010). The type of actions adopted under the GAP reflects somehow a common government practice within the OECD and EU countries at the time (Sassi, 2010).

Through our conceptual framework, we showed remarkable shortcomings of the GAP. The plan failed to provide policy support to promote enabling food environments where corporate practices would encourage a healthy diet. Such difficulty in generating political priority around regulatory interventions to tackle obesogenic environments have also been reported in other policy environments as well (Baker et al., 2017). This highlights a paradox: governments acknowledge the seriousness of the obesity problem and their fundamental role in addressing it, yet their obesity prevention action primarily focuses on soft policy approaches such as social marketing campaigns and health promotion programs. No government has so far implemented a combination of comprehensive preventive approaches, explaining in part the limited success in halting the epidemic (Clarke et al., 2016). Objectives of national plans and strategies seem to focus on individual behavioral targets with no "behavioral" targets set for corporate entities. Corporate benefits seem to have been prioritized over individual health in the actual policy context (Baker et al., 2017). This jeopardizes one of the most central mission of a state with respect to maintaining and promoting its population' s health and well being.

Another GAP shortcoming is that it fell short on actions targeting the reduction of social inequalities in health. With its well integrated public health action platform, Québec has always been a pioneer in promoting actions on the social determinants of health as compared to other Canadian provinces (Bernier, 2006). The GAP in fact reflected a *gap* in addressing the vulnerable populations as no specific actions targeted healthy diets'/physically active lifestyles' interventions in socially disadvantaged groups. This increases the risk of widening social health inequalities between the lower and the higher socio-economic groups. For instance, the GAP offered little to add to the existing actions on the social determinants, namely on food security as it relates to poverty. It is worth noting that both the National Program of Public Health and the Perrault Working Group recommendations contrasted with the GAP on this aspect (MSSS,

2003; Perrault working group, 2005). Accordingly, there was a missed opportunity in the GAP to develop and enhance food security actions.

Some shortcomings related to the GAP content are noteworthy. The public health led coalition fell in the trap of setting the wrong goals for the GAP. With the goal of reducing obesity prevalence, many interventions are doomed to fail to achieve this target. They fail to account for the natural feedback loops on one hand and on the other hand, they may lead to unintended consequences (Johnston et al., 2014). Furthermore, setting this goal accentuated the internal GAP inconsistencies, namely with respect to the GAP axis concerned with people suffering of weight-related problems. Despite not setting weight loss goals in its clinical program, *About losing weight*, the GAP established such targets in its population goals. Some measurable intermediate indicators that are process oriented could have been established. Such indicators could have been based on specific, key environmental determinants at the socio-cultural, political, physical or economic levels, which had never been defined for the GAP actions. Still in 2016, one of the most pressing promising interventions Le Bodo et al. (2016), authors of the book *Comment faire mieux,* recommend is to invest in the surveillance and monitoring of the nutritional quality of foods and beverages to enable the reformulation of processed foods in Québec (Le Bodo et al., 2016, p.227). The development and monitoring of environmental indicators related to healthy lifestyles was also recommended following the GAP evaluation after it came to an end (MSSS, 2015).

Another GAP critical shortcoming is the attempt of ministerial actors to integrate all kind of ministerial interventions under the GAP regardless of how related they were to obesity prevention. The aim was to pile up interventions and inflate the government actions on obesity prevention so that they make it sound more of a multisectoral and inter-ministerial government strategy (CREXE, 2014). Another GAP inconsistency concerns industry self-regulation. The GAP actions varied depending on the industry type. Whereas self-regulation was tolerated for the Agri-Food and the media and image industry, it was not tolerated for the weight-loss industry. GAP provisions included the establishment of a regulatory framework to control the weight-loss industry's activities (MSSS, 2006). This can be explained by the fact that such regulatory framework fell under the axis concerned with services. This axis is mostly under the responsibility of the public health led coalition and within its scope of action. In fact, actors are

more inclined to propose “solutions” that are consistent with their intentions and goals and that align best with action-prospects within their reach (Rittel and Webber, 1973).

If the success of a policy is measured against its target, the GAP would clearly be a failure. Obesity prevalence did not decrease in both GAP target groups; worse, some increases have been noted (MSSS, 2016; Santéscope, n.d.; Santéscope, 2016). Whereas in the statements of most study participants, the GAP was a huge government workshop for an unprecedented inter-sectoral collaboration promoting a whole-of-government approach to obesity prevention in an adaptive and learning context that challenged the existing silos. It was an innovative and successful step forward in obesity prevention, after several earlier attempts had failed. The GAP evaluation echoed the statements of our participants (MSSS, 2013).

The GAP was not the “true or false” policy option for the policy problem, rather the “good enough” for what policy stakeholders were capable of negotiating. Much like “re-solutions” to wicked problems (Rittel and Webber, 1973), we were able to highlight similarities between the GAP policy process and wicked policy problems in general. As the first policy adopted on the policy issue, the GAP was rather a soft policy, characterised with a strong research focus and little coercion.

The policy process benefited from the participation of two important policy participants: a think-tank created by the public health led coalition and a philanthropic organization that was at the origin of the community development coalition. What we learnt on the dynamics of their participation will be presented in the following section.

A less usual policy actor in obesity prevention policy, the founder of a philanthropic organization, participated in the policy process. We analyzed his role through the policy entrepreneur’s lens of Kingdon (1984). The participation of this actor was remarkable in the sense that it gave rise to a public private partnership between the government and the philanthropic organization. This partnership was an attractive avenue in terms of the prospective GAP funds. The coalition led by the philanthropic organization was guided by its own set of values and ideologies, political interests, preferences and goals in addition to the goals that are related to its mission. Besides, it had the needed resources to commission research to identify needs, decide on its priorities and legitimize its intended actions. In fact, this is what we would

expect why any intervention would be designed for, to respond to a specific need. With the presence of a dominant coalition, the public health led coalition, pursuing research of its own and generating knowledge on a specific policy issue, an agreement designed with the scope of "solving" the policy issue at stake must be carefully designed, given that disagreements may emerge. Whether belief-based or interest-based differences, policy actors from both coalitions must be aware of those differences and try to reconcile them. The basic premises for this agreement should be the delivery of activities and projects that promote the desired effects and within the appropriate accountability structure.

The think tank was an initiative of policy actors from the public health led coalition. It was the core of the dominant coalition and provided for two policy brokers within the policy subsystem that helped reduce conflicts between coalitions. An in-depth examination of the advocacy strategies of its members over a period of more than ten years revealed that it was a key driver in the policy process. Previous studies have also revealed the influence of think tanks and working groups in the policy process (Clarke et al., 2016). We were also able to define some key characteristics for think-tanks that are successful at influencing the agenda-setting and policy formulation. Cohesiveness, determination, consistency, persistence, expertise, persuasiveness and good argumentation skills are all essential; besides, their political connections and the presence of members with authoritative decision-making skills is important as well.

We particularly analyzed the advocacy strategies of dietitians who were members of this group. Some of the barriers they face are related to role conflict and ambiguity, especially when the policy actor has entrepreneurial skills and attitudes and is eager to defend the policy issue. From a policy advocacy and entrepreneurship perspectives, the participation of policy actors who accept to assume roles that entail some risk taking are essential in the policy process. Paradoxically, institutional roles of these policy actors might limit their advocacy practices. Policy advocates must be aware of this possible paradox and proactively mitigate it.

At the practice level, policy advocates for obesity prevention and other nutrition-related policies must develop successful advocacy strategy that rely on a compelling policy narrative that is supported with evidence such as surveillance data, national surveys, scientific opinions produced by national centers of expertise or international health organizations. They should

carefully analyze contextual factors including the political environment. Among other elements, policy advocates must pay specific attention to election cycles, policy cycle, political parties' ideology and programs. Not withstanding the importance of mid-level actors, policy advocates should reach for the policy elites to influence the political component of policy making.

With the growing role of public health actors in advocacy for public health policies, there is a universal need to equip the public health workforce with an understanding of advocacy practices. Empowering the public health workforce with the necessary knowledge and resources to develop competencies related to advocacy practices is key to achieving change in public health policies that is significant in terms of changing populations' health. Professional regulatory bodies should work on setting the competencies their professionals ought to develop to influence the public health policy making process. These competencies should be regularly reviewed to allow for promising professional practices in public health advocacy to emerge. Public health professionals currently involved in policy making will see themselves less constrained from practise limitations related to role conflict and ambiguity. Such capacity building will empower the workforce members so that they exercise more leadership and develop innovative practices.

Even though the GAP was not pursued, policy actions to prevent weight-related problems and promote healthy lifestyles are still on the government agenda. In 2016, they were integrated to the broader government policy on prevention issued in Québec in 2016 (MSSS, 2016). Considering obesity an epidemic, the policy document addresses it under its chronic diseases theme. Despite referring to weight related problems at various instances, it was mostly obesity preventive actions and healthy life styles that are promoted. Body image problems failed to make it to the policy on prevention; regulation of weight-loss industry suffered the same fate. Contrary to the GAP, the policy did not set obesity prevalence reduction targets. Targets were set with respect to lifestyles, some targeting youth only (MSSS, 2016).

What is interesting to note in the policy is its large focus on disadvantaged populations. The issue of food deserts was integrated under the policy. One of the policy's objectives concerned the increase in the physical and economic access to food for the socially disadvantaged communities and geographically remote areas. The relatively higher obesity rates in First Nations' communities and in socio-economically disadvantaged populations was

emphasized. Besides, taxation of sweetened beverages was proposed as a possible policy option under the new policy; a thorough, context specific analysis of taxation of sweetened beverages in Québec to assess the relevance, the feasibility and acceptability of such a measure was proposed under the new policy (MSSS, 2016). While a policy reflects the belief systems of its designers (Jenkins-Smith et al., 2014), we can assume that the policy core beliefs that are embedded in the new policy on prevention differ from those endorsed by the GAP designers. Now, we can not claim legitimacy to this statement except through an in-depth analysis of the adoption of the policy on prevention, similarly to the one we did in our case study. However, we can look at the example of the taxation of sugar sweetened beverages more closely as an example of regulation of corporate behavior under this policy.

The new policy on prevention is yet another example of how government policies fail to address regulation of corporate behaviors. Despite all the knowledge that have accumulated on taxation of sweetened beverages as a policy avenue, its implementation in different jurisdictions and other countries (Thow et al., 2010a; MSSS, 2016), the recommendations of international and provincial scholars (Freudenberg 2005; Freudenberg et al., 2009; Brownell & Frieden, 2009; Friedman & Brownell, 2012; Thow et al, 2010b; Le Bodo et al., 2016), health professionals (Dietitians of Canada, 2016) and health advocates (cqpp, 2018), a favorable public opinion towards this tax (Ipsos, 2012 in in cqpp, 2018), yet this policy failed to pass under the new Québec policy on prevention. Although, the impact of inaction was attenuated with the prospects of the upcoming assessment project, nevertheless taxation of sweetened beverages hasn't been retained as a policy action.

This is to demonstrate that despite the GAP shortcomings related to regulation of corporate behavior, ten years later, the following policy addressing weight-related problems failed as well. This shows the inherent barriers and difficulties when legislative or regulatory measures are proposed to control corporate behaviors. Even when what is at stake is the population health, whose maintenance and promotion is a main government mission, if not the most important mission (Premier, 2004).

While the provincial level is still questioning the merits of this policy, delaying action or extending inaction, the most populated city in Québec has been envisioning regulation on sweetened beverages. Its municipality has just banned the sale of sugar-sweetened beverages in

its municipal facilities (Remiorz, 2017). This example highlights some inconsistencies across various levels of government. We would expect such inconsistencies to be also relevant at the federal level and across sectors at the same level. What is troubling, is that within the same government, other pricing decisions affecting nutritious food items seem to follow a much easier path. The Canadian food guide recommends the reduction in consumption of sugar sweetened beverages. On the other hand, the consumption of nutritious food items, namely milk and dairy products is promoted as one of the basic food groups (Health Canada, 2011). Our aim here is to highlight contradiction in decisions addressing sugar-sweetened beverages taxation versus milk pricing within the same government.

The most recent increase in milk prices in Québec authorized by the *Québec Agricultural and Food Markets Board* is an obvious example of this paradox. The Board is a governmental organism whose role is that of an economic regulator (RMAAQ, 2018a). By virtue of the authority given to the board (Dairy Products and Dairy Products Substitutes Act, 1999), it has recently authorized a 4 to 6-cent price increase per liter of milk (Le prix du lait, 2018; RMAAQ, 2018b). On the other hand, not a dime was authorized as a tax on sugar sweetened beverages. Clearly, there are differences in legislative authorities, agreements, operational modes to list a few factors. In fact, what can bring insights into the *why* and *how* of this decision is an in-depth examination and analysis using our framework. However, the aim here is to highlight contradictory policy decisions that are the outcomes of governance. With a food insecurity prevalence of 8% reaching up to 11%, one of the highest in Canada in its most populous city (INSPQ, 2014), we question both the *inaction* of Québec in the case of taxation of sweetened beverages versus the *action* in the case of increasing milk prices. We would raise concerns on the paradoxical governmental decisions and policies across sectors, when and how they use evidence in the policy arena and question whether the actual governance model and within the current governance tools and structures is capable and sufficiently equipped to address such wicked policy problems.

With respect to the transferability of our findings, the thorough and rich explanation of contextual factors in Québec and an analysis of actors' strategic behavior in relation to that context provides us with important insights on the policy process and helps us capture beyond what is specific to Québec and enhance the transferability of our findings. What was of

significance to Québec was its favourable public health context on one hand and the change in the systemic governing coalition triggering a chain of events on the other hand. The change in the systemic governing coalition is an interesting window of opportunity policy actors, and more importantly policy entrepreneurs, can use to increase political attention on the policy issue, gain more resources, increase their power and push for their policy solutions. Building a timeline of major policy-related events and highlighting the contribution of each, particularly that of focusing events helped identify opportunities and constraints related to those events and how they impacted the policy process. From an ongoing advocacy evaluation perspective, current policy advocates involved in obesity prevention must be aware of concomitant contextual events that can create opportunities for action.

We also gained a lot of insights on the importance of knowledge and experience gained form other policy subsystems. Policy precedents and spill over effects from other policy subsystems, whether dealing with the same policy problem or a different one, are distinguished levers for policy actors to utilize. The importance of both the tobacco policy subsystem, and the international obesity policy subsystem to modify and advance advocacy strategies is particularly compelling.

A national working group on the policy issue with a clear mandate specified by the Premier is a remarkable window of opportunity. In similar contexts where much of the content of the upcoming policy is negotiated inside such forums, policy actors must attempt to participate in these venues and influence the policy process from within. We also gained insights from the pitfalls that we have observed in our case study. It is crucial for policy actors currently participating in obesity prevention policy action to know the missions of every organization, the mandates of every policy actor or member of a coalition sitting with them on the same negotiation table. Being aware of their concerns and understanding their political interests may favor a more collaborative approach rather than an authoritative one and may possibly reduce resistance and conflicts allowing for negotiated agreements between coalitions.

The knowledge utilization model we have developed reveals important insights on how knowledge is utilized. We expect the dynamics and processes related to knowledge utilization to differ between high-income countries and low-income ones, namely because of the limited capacity of these countries to fund research and their weaker research infra structure.

Furthermore, the typology of policy-oriented learning can be refined in other socio-cultural contexts to capture other types of learning that may occur. Its use can also extend beyond obesity prevention to other public health policy domains, specifically those concerned with wicked policy problems.

As such this research has provided for the advancement of policy process theories in general and obesity prevention policy process specifically. Future research can compare similar policies across jurisdictions using a multiple case-study design. This will highlight certain aspects such as the difference in socio-cultural factors in influencing the content of the policy and the decision process, how advocacy strategies vary across contexts, how think tanks emerge across different contexts and what contextual factors affect the design and creation of deliberative forums across contexts and in response to what.

There are other research areas that need to be explored and analyzed. With the historical concern to the influence of the corporate sector practices on health in general, not only in obesity but also in tobacco control and climate change among others (Freudenberg, 2005; Freudenberg et al., 2009), other research can focus on comparing policy processes of regulating these practises through the lens of policy process theories across policy subsystems and across contexts. Obesity prevention can also benefit from learning from research in these subsystems and extending interdependence to other policy subsystems beyond tobacco such as sustainable development and climate change. The aim would be sustaining political interest in obesity prevention while optimizing resources and minimizing government action duplication. Other comparative case studies are recommended across levels of government, for instance taxation of sweetened beverages at the provincial and federal levels and across different jurisdictions. This would help understand differences between provincial and federal governments in policy-making. This can also be extended to municipal governments in issues within their capacity. In addition, the current body of knowledge would benefit from real time evaluation of advocacy practices and adjustment of advocacy accordingly.

Conclusion

Policy making is not a rational process translating policy beliefs and evidence into policy decisions. It is shaped with values, ideologies, beliefs and context specific forces and constraints

to which we offered important insights. At a time when dichotomies with respect to obesity definition, causes and policy choices are impeding the progress towards halting the obesity epidemic, this research aligns itself with scholars' requests to use policy process theories to analyze obesity prevention policies. Our research also responds to the need to improve current policy process theories and to apply theories drawn from the policy science field to the health promotion field.

This research has theoretical and practical implications for obesity prevention policies. On the practical level, our case study contributes to the understanding of the complexity of the obesity prevention policy, specifically how contextual factors affect policy decisions, the advocacy role played by various policy actors including health professionals and how power struggles shape their relations. It highlights strategies that favor the development of a positive political climate, enabling policy learning and change. Accordingly, we hope it will inform and equip stakeholders who are trying to understand and influence the policy process. We also hope it will inform strategies to foster demand on obesity prevention policies.

Our findings showed that policy adoption was the result of various interrelated factors, strategies and events that contributed to a negotiated agreement between advocacy coalitions, the whole process being influenced by knowledge use and learning. With such contribution, this case study will equally inform policy makers, public health professionals and other professionals interested in advancing the obesity prevention policy process.

On the theoretical level, we have developed a pluralistic framework drawn from the policy process theories, the Advocacy Coalition Framework, and a political analysis model. The analysis of the interests and goals of policy actors complements the ACF-based analysis. Being oblivious to these goals and interests will lead to subpar understanding of the policy process defeating the purpose of the scientific inquiry on policy stasis and change. We strongly recommend the integration of the political analysis model to the Advocacy Coalition Framework in future works on the policy process using the ACF. By offering insights into a less explored area of research in public health, this research would empower public health researchers through providing them with a conceptual framework and a methodology that is possible to replicate in future case studies.

Taming policy cacophony in obesity prevention is an evolving art of scientific and value laden argumentation and adaptive advocacy strategies and tactics. While substantial strides have been achieved, especially through democratic deliberative forums, we do not expect the debate on obesity prevention policy to end any time soon. It is likely to persist a while longer, at least as long as social practices fall short on promoting population's health and wellbeing.

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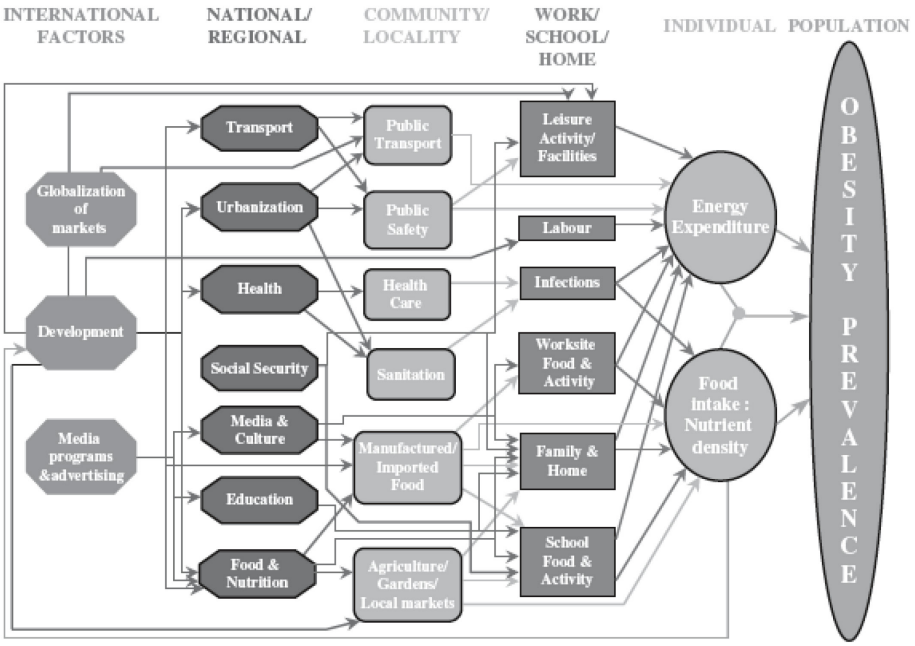
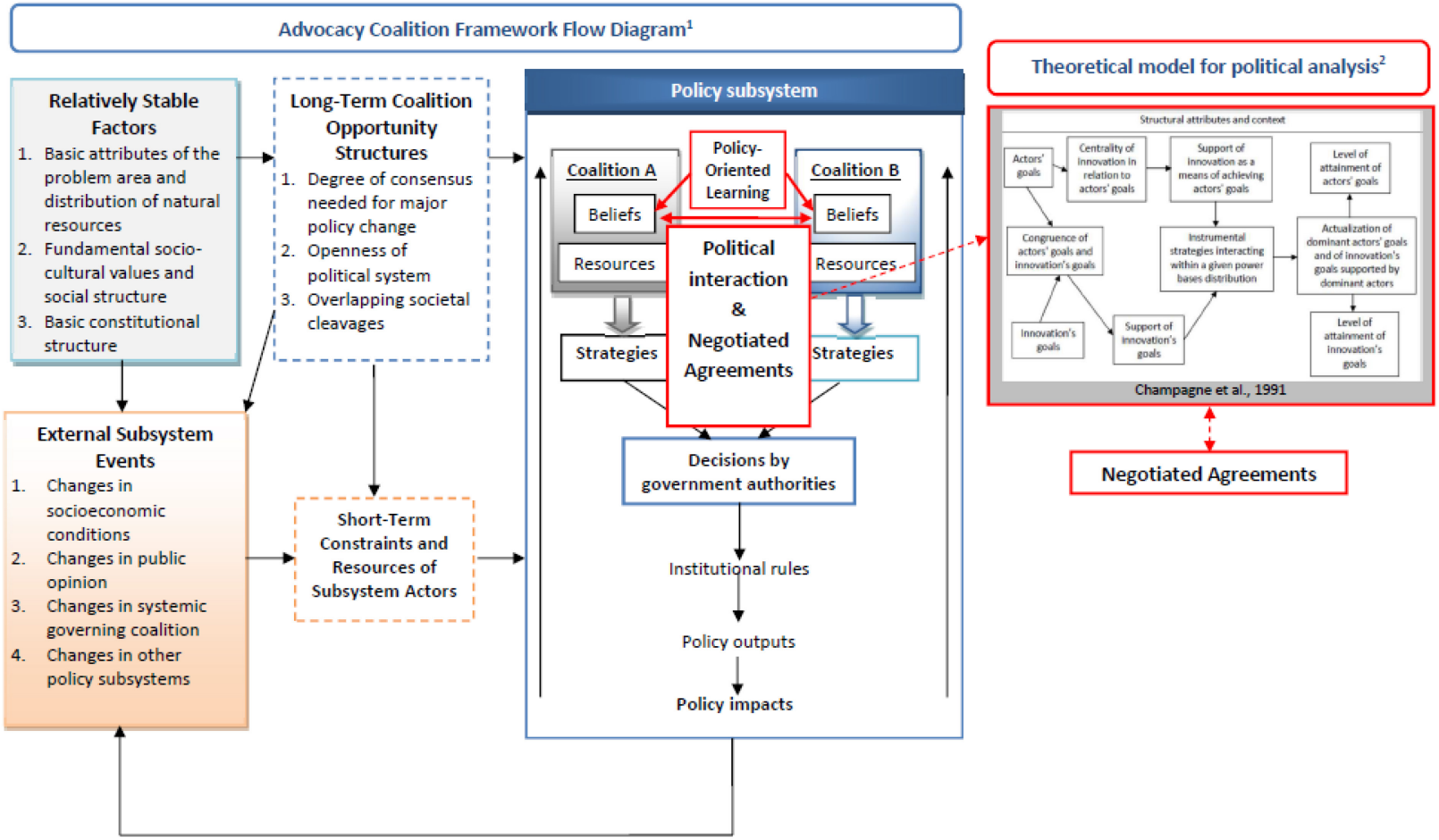
Appendix 1 - Causal web of societal processes influencing the population prevalence of obesity

Kumanyika, 2007 p. 105



Source: International Obesity Task Force [www.iotf.org], Kumanyika, S., Jeffery, R. W., Morabia, A., Ritenbaugh, C., & Antipatis, V. J. (2002). Obesity prevention: the case for action. *International journal of obesity*, *26*(3), 425.

Appendix 2 – Conceptual Framework



Appendix 3 – Structure of Belief Systems

Revised Structure of Belief Systems of Policy Elites, 1998

	Deep Core	*Policy Core*	*Secondary aspects*
Defining characteristics	Fundamental normative and ontological axioms	Fundamental policy positions concerning the basic strategies for achieving core values within the subsystem	Instrumental decisions and information searches necessary to implement policy core
Scope	Across all policy subsystems	Subsystem wide	Usually only part of a subsystem
Susceptibility to change	Very difficult; akin to a religious conversion	Difficult, but can occur if experience reveals serious anomalies	Moderately easy; this is the topic of most administrative and even legislative policymaking
Illustrative components	**1. Human nature** a. Inherently evil vs socially redeemable b. Part of nature vs. dominion over nature c. Narrow egoists vs. contractarians 2. **Relative priority of various ultimate values**: Freedom, security, power, knowledge, health, love, beauty etc. 3. **Basic criteria of distributive justice**: Whose welfare counts? Relative weights of self, primary groups, all people, future generations, nonhuman beings etc. 4. **Sociocultural identity** (e.g. ethnicity, religion, gender, profession)	**Fundamental normative precepts** 1. Orientation on basic value priorities 2. Identification of groups or other entities whose welfare is of greatest concern **Precepts with a substantial empirical component** 3. Overall seriousness of the problem 4. Basic causes of the problem 5. Proper distribution of authority between government and market 6. Proper distribution of authority among levels of government 7. Priority accorded to various policy instruments (e.g., regulation, insurance, education, direct payments, tax credits) 8. Ability to society to solve the problem (e.g., zero-sum competition vs. potential for mutual accommodation; technological optimism vs pessimism) 9. Participation of public vs. experts vs. elected officials 10. Policy core policy preferences	1. Seriousness of specific aspects of the problem in specific locales 2. Importance of various causal linkages in different locales and over time 3. Most decisions concerning administrative rules, budgetary allocations, disposition of cases, statutory interpretation, and even statutory revision 4. Information regarding performance of specific programs or institutions

Source: Sabatier (1998, p.113)

Appendix 4 – Definition of Concepts

Concept	Definition
Policy subsystem	Defined with respect to three characteristics: **the policy topic**, **the territorial scope** and **the actors** (Jenkins-Smith et al., 2014).
Advocacy coalition	"Groups of actors sharing policy core beliefs and coordinating their behavior in a non-trivial manner" (Weible and Nohrstedt, 2012 p.127). Based on empirical research, one to five advocacy coalitions are active within a given policy subsystem (Weible et al. 2009 in Weible and Nohrstedt, 2012).
Actor	Any person who is regularly attempting to influence the subsystem affairs directly or indirectly (Jenkins-Smith et al., 2014 p. 190).
Beliefs	Three-tiered structure: **deep core beliefs, policy core beliefs and secondary beliefs** (Jenkins-Smith et al., 2014).
Deep core beliefs	"The fundamentally normative values and ontological axioms; they are not policy specific and can be applicable to multiple policy subsystems" (Jenkins-Smith et al., 2014 p. 191).
Policy core beliefs	Territorial and topical components referring to the scope and topic of the policy subsystem to which they belong. Policy core beliefs are subsystem wide and have **normative** and **empirical** aspects. (Sabatier and Jenkins-Smith, 1999; Sabatier and Weible, 2007; Jenkins-Smith et al., 2014)
Secondary beliefs	Instrumental means the actors consider of relevance in order to reach their policy core beliefs desired outcomes (Jenkins-Smith et al., 2014).
Strategy	Inferred foundations ex post of consistent behaviors observed empirically (Crozier and Friedberg, 1977 p. 48).
Resources	Typology of resources: **(1) formal legal authority to make policy decisions; (2) public opinion; (3) information; (4) mobilizable troops; (5) financial resources; (6) skillful leadership** (Sabatier and Weible, 2007)
Policy-oriented learning	"enduring alternations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives" (Sabatier and Jenkins Smith 1993, 42-56 in Jenkins-Smith et al. , 2014 p.198). Variables conditioning learning: **(1) attributes of professional forums; (2) level of conflict between coalitions; (3) attributes of the stimuli; (4) attributes of individuals** (Weible and Nohrstedt, 2012 p.130-131).
Professional forums	"Professional forums are venues of discussion involving subsystem actors. Forums are structured by different sets of institutional arrangements. Some forums are structured by open participation rules (open forums) and others by closed participation rules (closed forums). Professional forums are based on common analytical training and norms and are postulated to increase the likelihood for learning between coalitions" (Jenkins-Smith, 1990 in Weible and Nohrstedt, 2012 p.130).

Level of conflict	"Level of conflict relates to the extent to which actors perceive a threat to their policy core beliefs from their opponents' objectives or actions" (Jenkins-Smith et al., 2014 p. 199).The level of conflict between coalitions falls between two extremes: high levels of conflict and low levels of conflict. At both extremes, little cross-coalition learning is expected to occur. Conversely, intermediate levels of conflict are conducive for cross-coalition learning (Jenkins-Smith, 1990 in Weible and Nohrstedt, 2012).
Stimuli (attributes)	Stimuli represent the data prompting learning. Sources of stimuli are variable and include events, actors and technical and scientific information. One important characteristic of stimuli refers to the level of analytical tractability of said stimuli. The more intractable a phenomenon is the less conducive to learning it is expected to be (Jenkins-Smith, 1990 in Weible and Nohrstedt, 2012).
Individuals (attributes)	Attributes of individuals that condition learning include their belief systems, network contacts and resources (Weible and Nohrstedt, 2012).
Policy brokers	"A category of actors … whose dominant concerns are keeping with the level of political conflict within acceptable limits and reaching some "reasonable" solution to the problem". (Sabatier and Jenkins-Smith 1993:27 in Weible and Nohrstedt, 2012 p.131)
Policy change	**Major policy change**: change in the policy core aspects; **minor policy change**: change in secondary aspects (Sabatier and Jenkins-Smith, 1999: 147-8 in Weible and Nohrstedt, 2012). Four paths for change: **(1) events external to the policy subsystem**; **(2) events internal to the policy subsystem**; **(3) policy-oriented learning**; **(4) negotiated agreements** (Weible and Nohrstedt, 2012).
Negotiated agreements	Agreements that are crafted between previously competing coalitions and that involve policy core changes (Sabatier and Weible, 2007).
External events	Events that "occur outside the territorial boundaries of the subsystem and/or the topical policy boundaries of the subsystem and are, hence, largely outside the control of subsystem actors" (Nohrstedt and Weible, 2010 in Weible and Nohrstedt 2012, p.132).
Internal events	Events that "occur inside the territorial and/or the topical area of the policy subsystem and are more likely affected by subsystem actors" (Nohrstedt and Weible, 2010 in Weible and Nohrstedt 2012, p.132).
Coalition opportunity structures	Polity features that affect the constraints and opportunities of actors in the subsystem particularly by altering their resources or behavior. Variables: (1) the **degree of consensus that is needed for major policy change** and (2) the **openness of the political system** (Sabatier and Weible, 2007), **(3) overlapping societal cleavages** (Jenkins-Smith et al., 2014).
Power relation	Disequilibrium between two individuals or groups of individuals because of the capacity of one to influence the other in a way that favors self interests. Four sources of power: **(1) expertise; (2) control of the relations with the environment; (3) control of communication and of information; (4) knowledge of operating rules** (Crozier and Friedberg, 1977; Bernoux, 1985).

Uncertainty zone	Uncertainties originating from internal sources as well as external environments that are differentially mastered by actors leading to an increase in power of those who master it better (Crozier and Friedberg, 1977; Bernoux, 1985).
Concrete system of action	Defined by Crozier and Friedberg (1977, p. 246) as a structured group of individuals that coordinates the actions of its participants by relatively stable mechanisms of coordination and maintains its structure, that is to say, the stability of these coordination mechanisms and the relationship between them by regulation mechanisms that are distinct from coordination mechanisms. Four main dimensions: the nature of the "organization" or structure and how formal it is, the existence of goals around which are articulated regulation mechanisms as well as mechanisms for establishing awareness and integration of these goals by actors and finally the willingness of some actors to implement a few regulations (Friedberg, 1993).

Appendix 5 – Data Sources and Variables

Variable	Data sources
Policy subsystem	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations
	• Documents of the National Assembly
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Advocacy coalition members	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Published journal articles on obesity prevention policies in Québec
	• Unpublished documents provided by key informants
	• Government reports and other grey literature
Beliefs and goals	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans
	• Documents of the National Assembly
	• Newspaper articles
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
	• Government reports and other grey literature
Strategy and resources	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec

External events	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• WHO, OECD documents and reports
	• Published journal articles on obesity prevention policies and other related policy subsystems
Relatively Stable Factors	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports and strategic plans
	• Newspaper articles
	• Government reports and other grey literature (provincial, national and international levels)
	• Documents of the National Assembly
	• Documents and reports of the WHO, OECD, Canadian Institute of Health Research, Statistics Canada, Institut de la Statistique du Québec
	• Published journal articles on obesity prevention policies in Québec
Long-term coalition opportunity structure	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans, GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Portail Québec
	• Published journal articles on obesity prevention policies in Québec
Short-term constraints and resources of subsystem actors	• Semi-structured interviews
	• Agencies, ministries and organizations' annual reports, strategic plans,
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec

Policy-oriented learning	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Negotiated agreements	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec
Policy decisions	• Semi-structured interviews
	• Documents available on websites of ministries, agencies and organizations including annual reports, strategic plans and GAP evaluation reports
	• Newspaper articles
	• Government reports and other grey literature
	• Documents of the National Assembly
	• Unpublished documents provided by key informants
	• Published journal articles on obesity prevention policies in Québec and other related policy subsystems

Appendix 6 - Interview guide

6.1. Thank you for granting me the interview

6.2. Research presentation

- 6.2.1. Researcher conducting the study
- 6.2.2. Objectives of the research
- 6.2.3. Key informant contribution
- 6.2.4. Ethical issues and consent form
- 6.2.5. Request for recording the conversation

6.3 Key informant presentation

- 6.3.1 Education and professional path
- 6.3.2 Position held by the informant

6.4. Interview guide (Appendix 8)

6.5. Feedback from participant

6.6. Thank you for granting me the interview

Appendix 7 - Interview Themes

Constructs of the conceptual framework	Interview theme
Policy subsystem	
Advocacy coalitions	
Who are the members of coalitions?	1- The role of the key informant in the obesity prevention policy process, capacity and type of organization; evolution of this role in time; People he/she collaborates with (type of relationship); their role in the obesity prevention policy process, capacity and type of organization; evolution of their role in time. Probe: - First time involvement and successive roles - Role in governmental action plan, taxation of sweetened beverages, role in any other obesity prevention policy - Role of collaborators and opponents - Institutions, organizations or groups that have been active in obesity prevention policies from a historical perspective - Types of collaboration, relationships and networks and how they were first initiated
Policy beliefs *(Sabatier and Jenkins-Smith 1999, p. 133)*	
Policy Core	
Fundamental normative precepts What are the basic value priorities? Who are the groups whose welfare is of greatest concern? *Precepts with substantial empirical components* Overall seriousness of the problem, basic causes of the problem, proper distribution of authority between government and market, proper distribution of authority among levels of government, priority accorded to various policy instruments, ability of society to solve the problem, participation of public versus experts, versus elected officials, policy core policy preferences.	2- Description of the importance of obesity and its prevention, position with respect to obesity prevention policies, how the role of the government, the market, and other stakeholders overlap and diverge. Probe: - Seriousness of the obesity problem - aspects of the obesity problem that are more important - Importance of obesity prevention for the health and well-being of the population - Causes of obesity - Roles of government ministries, institutions and agencies, industry, media, civil society, private sector, academia etc.

Secondary aspects *Instrumental decisions and information searches necessary to implement policy core*	- Preferred policy instruments - Preferred policy solutions to obesity; his/her position regarding obesity prevention policies; positions of collaborators and opponents
External events	
Factors that helped move the obesity prevention policy to the government policy agenda. External factors with positive/negative impact on advocacy capacity of promoters of obesity prevention policy: changes in socio economic conditions, in systemic governing coalition, in public opinion, in state of subsystem-relevant technology and in other policy subsystems	3- Factors that influenced the participation/involvement of the key informant, his/her unit/department/ organization in obesity prevention policy; factors that prompted specific actions. Probe: - public health concern - promotion of healthy lifestyles - chronic disease prevention - promotion of youth health - factors or events that are external to the organization that influenced key informant's participation and/or triggered specific actions (positively or negatively i.e. opportunities or constraints): changes in governing party, public opinion, technology, other subsystems etc. - influence of other programs and policies (national public health program, governmental action plan, adoption of policies in other provinces / countries etc.)
Short-term constraints and resources of subsystem actors	
Effect of external events on short-term constraints and resources of actors	4- Effect of barriers that impeded progress in obesity prevention policy and enablers that favored progress. Probe: - Resources : funding, leadership etc. - Competing priorities - Others
Resources	
Leadership, public opinion, mobilizable troops, financial resources, person with formal legal authority, information	5- Resources which are available to the key informant, his/her unit/department/organization in promoting obesity prevention policies. Probe: - financial resources (specific allocations) - experts

	- leadership - public opinion (opinion polls) - mobilizable troops (supporters, opponents) - person with formal legal authority (legislator, agency officials etc.) - Knowledge - media - utilization of resources - resource coordination (central versus regional)
Strategies	
Coalition strategies	6- Strategies which key informant use to advance obesity prevention policies. Strategies employed by opponents and actions to mitigate them. Probe: - Partnerships - Professional, institutional etc. - Disagreements / conflicts in obesity prevention policy - Conflict resolution - Barriers - Facilitators - Winning strategies
Policy-oriented Learning	
Has the evolution in knowledge in obesity prevention led to policy-oriented learning among proponents or opponents? Has any event or other stimuli favored policy-oriented learning? Who is more prone to learning?	7- Change of beliefs of key informant on obesity prevention policies with time. Change of beliefs of key informant's proponents and opponents on obesity prevention policies with time. Probe: - Evolution in defining the problem - Evolution in defining the solution - Role of professional forums - Role of organizations, institutions - Role of events - Role of leadership/actors - Role of policy brokers - Role of Information/other stimuli - Actors who are more / less prone to learning - Impact of the level of conflict - Intractable issues

Change	
Has any minor or major policy change occurred in the obesity policy over time?	8- Evolution of obesity prevention policies that have been adopted in time. Probe: - Effect of scientific information - Effect of external events - Effect of internal events - Effect of negotiated agreements - Role of organizations, institutions - Role of leadership - Role of policy brokers

Appendix 8 - Detailed Interview Guide (Grille d'entrevue détaillée)

Date : _____ **Ministère(s)/ autres organisations :** _____

Sexe : F H **Poste(s) occupé(s) :**

Thèmes ACF	Questions	Sous-questions	Commentaires
Sous-système des politiques de prévention de l'obésité (SSPPO)/ ***coalitions plaidantes : acteurs***	Quelles sont les **personnes impliquées** dans les politiques de prévention de l'obésité (problèmes reliés au poids PRP, promotion d'une saine alimentation SA et d'un mode de vie physiquement actif MVPA) au Québec ?	**1.** Pouvez-vous me décrire **votre implication** dans le dossier de la prévention de l'obésité : prévention des PRP, promotion d'une SA et d'un MVPA ? **Probe :** emploi actuel, emplois antérieurs, organisation et secteur d'emploi actuels, organisations et secteurs de travail antérieurs, implication locale, régionale, nationale, canadienne ou internationale, évolution de carrière depuis 1996 **2.** Qui sont les **personnes et quelles sont les organisations avec qui/avec lesquelles vous avez collaboré** sur la thématique de la promotion d'une saine alimentation et de l'activité physique depuis 1996 ? **Probe :** personnes et institutions/organisations avec une collaboration actuelle et antérieure	Les informations sur l'implication de l'informateur clé aident à : • Le situer dans un **groupe d'acteurs selon sa profession et son organisation**. • Connaitre les acteurs, professions et les organisations impliquées dans le SSPPO au Québec • Reconnaitre les acteurs et les organisations matures dans le sous-système
Coalitions plaidantes / ***croyances***	Quelle est votre perception de la problématique de l'obésité ?	**3.** Parlez-moi de votre **perception de la problématique de l'obésité**. **Probe :** Ampleur et gravité, aspects les plus importants de la problématique, problème à l'échelle de la société ou à l'échelle de l'individu **3.1** Comment votre perception a évolué **à travers le temps** ? **3.2** Pourquoi ? **4.** Quelles sont selon vous les **causes** de l'obésité ? **Probe :** choix personnels, causes physiologiques et génétiques, environnement obèsogène **5.** A quel point pensez-vous qu'il **soit possible de réduire les taux d'obésité** ?	Les informations sur les croyances de l'informateur clé aident à : • Comprendre sa perspective sur la problématique de l'obésité • Identifier la stabilité ou le **changement** de ses croyances et l'expliquer • Comprendre le point de vue de l'informateur clé sur la **capacité de la société** de résoudre la problématique
Coalitions plaidantes / ***croyances***	Quelles sont vos préférences vis-à-vis les	Quelle est votre **perception des solutions** à la problématique de l'obésité qu'il faut privilégier ? Quelles sont vos **préférences** vis-vis les	Ces informations aident à :

(suite)	politiques de prévention de l'obésité ?	politiques de prévention des PRP et de la promotion d'une SA et d'un MDVPA ? **Probe :** promouvoir la saine alimentation et l'activité physique au niveau des individus/ au niveau des collectivités / autres ; améliorer les environnements (physique, socioculturel, politique, économique) ; améliorer les services aux personnes prises par la problématique du poids. **6.1** Comment votre perception sur les solutions de la problématique de l'obésité a évolué **à travers le temps** **Probe :** politiques à l'échelle de l'individu (améliorer le comportement, les services pour les personnes prises avec le problème du poids) vs politiques à l'échelle sociétale (améliorer les environnements) **6.2** Pourquoi ? **Probe :** information scientifique, l'exemple d'autres pays, autres **6. Avec qui vous vous entendez** sur les solutions de l'obésité et avec qui vous avez des différents ? Comment ceci peut-il affecter l'élaboration et l'adoption des politiques de prévention de l'obésité ? **7.** Quels sont les **instruments de politique** que vous privilégiez ou que vous trouvez prioritaires : **Probe :** lois, règlements, incitatifs financiers, taxation, crédits d'impôts, éducation, autres	• Situer l'informateur clé dans une **coalition d'acteurs** selon ses croyances de politiques. • Connaitre les « **goals** » des acteurs • Comprendre leurs préférences vis-à-vis les politiques à privilégier comme solution à l'obésité (qui représentent la « colle » de la coalition) • Comprendre si leurs croyances de politiques ont changé à travers le temps (**APPRENTISSAGE**) et le cas échéant les raisons du changement ; questionner le ROLE DE **L'INFORMATION SCIENTIFIQUE** • Connaitre les instruments de politique à privilégier • Connaître les **alliés et les opposants** de l'informateur clé
Coalitions plaidantes / ***croyances*** **(suite)**	Quel est le rôle que devra jouer le gouvernement et les divers secteurs de la société dans les solutions proposées et particulièrement votre secteur ? Quel est votre perception de la coordination de cet effort ?	**8.** Selon vous **qui peut rendre ces solutions possibles** ? Pourquoi ? **Probe :** perception du rôle du gouvernement, des institutions, société civile, groupes de pression, divers secteurs de la société (privé, public, associatif etc.) ; partage des rôles et des responsabilités 9.1 Que pensez-vous du rôle du gouvernement ? Quels sont les ministères concernés et à quel niveau de l'état ? Quel est le rôle des élus ? 9.2 Que pensez-vous du rôle du secteur privé ? de l'industrie ? 9.3 Que pensez-vous du rôle d'autres secteurs (associatifs, ordres professionnels, société civile, groupes d'intérêt, secteur académique, experts, média etc.) **9.** Que pensez-vous de l'importance de la coordination des actions de ces secteurs ? **10.** Comment pensez-vous que « votre ministère / organisme » doit être impliqué dans la prévention des PRP, la promotion d'une SA et d'un	Ces informations aident à : • Comprendre la perception de l'informateur clé du partage de l'autorité entre les différents niveaux et secteurs du gouvernement • Comprendre la perception de l'informateur clé du partage de l'autorité entre les différents secteurs de la société • Comprendre la perception de l'informateur clé sur l'importance de la coordination des actions/acteurs

		MDVPA ? pourquoi pensez-vous que c'est le rôle qui doit lui être attribué ?	• Comprendre la perception de l'informateur clé sur le rôle de son ministère / organisation
Coalitions plaidantes / *croyances* (suite)	Quel(s) est/ sont les groupes à prioriser dans les solutions propo-sées ?	**11.** Est-ce que selon vous les actions visant à la prévention des PRP, la promotion d'une SA et d'un MDVPA doivent viser un groupe en particulier ? **Probe :** jeunes, groupes vulnérables etc.	Permet d'identifier les groupes ou l'action est prioritaire selon l'informateur clé
Sous-système des politiques de prévention de l'obésité / *coalitions plaidantes : acteurs*	Qui sont les acteurs clés du PAG et quelles sont leurs préférences de politiques ?	**12.** **Qui** a déclenché l'intérêt dans un plan d'action gouvernemental ? Qui partageait l'intérêt pour un plan d'action gouvernemental ? **Probe :** individus attachés à différents secteurs et ministères (gestionnaires, professionnels de la santé publique etc..), premier ministre, ministres et sous-ministres, média, société civile (opinion publique), chercheurs, organismes communautaires, groupes d'intérêt, autres. **13.** Pouvez-vous me nommer les personnes qui selon vous avaient eu le plus d'influence dans le cheminement du PAG ? **Probe :** ministres, sous-ministres, premier ministre, employés ministériels, membres d'organismes communautaires ou provinciaux, de groupes d'intérêt, médias etc. 13.1. Pourquoi selon vous ces personnes avaient cette influence-là ? **Probe :** position de pouvoir ou d'autorité, leadership, ressources monétaires, popularité, crédibilité, connaissances, autres. **14.** Quelles politiques ces personnes-là essayaient-elles d'avancer ?	• Permet d'identifier les champions du PAG et les acteurs dominants du PAG. (Plus impliqués et / ou avec plus de pouvoir). A RECHERCHER dans tout le cheminement du PAG : du **plaidoyer pour le PAG, à l'élaboration, à l'adoption** du PAG • Permet d'identifier les « goals » des acteurs dominants / champions du PAG
Sous-système des politiques de prévention de l'obésité / *coalitions plaidantes : acteurs et coordination des acteurs*	Quel est votre implication initiale au PAG et comment avez-vous assuré une coordination avec les autres acteurs ?	**15.** Comment et pourquoi (dans quelle capacité) a-t-on fait appel à vous pour contribuer au PAG ? **Probe :** votre poste à ce moment ; l'organisme auquel vous appartenez ; et qui vous a contacté **16.** Qui sont les personnes, les organismes et les ministères avec qui vous avez collaboré pour le PAG ? **Probe :** équipe de travail (composition de l'équipe, membres de l'équipe), collaborateurs dans le même département, collaborateurs dans d'autres départements de la même organisation, collaborateurs dans d'autres organisations (public, privé, associatif), collaborateurs dans d'autres secteurs, partenariat, comité, tables nationales, autres. **17.** Comment étaient-ils engagés dans le processus du PAG ?	Les informations sur le mode d'implication de l'informateur clé dans le PAG et de son équipe de travail aident à : • Reconnaitre l'acteur/le groupe d'acteurs qui l'a engagé dans le PAG • Le situer dans une coalition d'acteurs selon sa profession et son organisation • Reconnaitre les collaborateurs et les alliés de l'informateur clé • Reconnaitre les éléments et les structures de coordination

		Probe : Engagement dans le plaidoyer, élaboration, rédaction, révision, adoption, évaluation, coordination, répondant ministériel, consultant, expert, autres.	
Sous-système des politiques de prévention de l'obésité / … (suite)	Comment se déroule la coordination entre vous et les autres acteurs ?	**18.** Comment pouvez-vous décrire votre relation avec vos collaborateurs / alliés ? **Probe :** relations INTERNES et EXTERNES (à l'interne dans le ministère/organisme ET à l'externe) **19.** Comment votre collaboration a évolué à travers le temps ? **Probe :** éléments favorisant la collaboration , obstacles, barrières et conflits, défis à relever, changement des éléments et des structures de coordination, de l'engagement des individus à travers le temps, autres.	Permet de chercher une information plus détaillée sur le niveau de coordination / conflit entre les acteurs, sur les règles et les structures de coordination, ainsi que l'évolution de la coordination et la volonté des acteurs à s'engager
Sous-système des politiques de prévention de l'obésité / ***coalitions plaidantes : ressources***	Qui a fourni les ressources financières pour permettre votre implication au PAG ?	**20.** Qui a financé votre travail sur le PAG ? Quels sont les coûts associés à ce travail ? **Probe :** l'organisme là où l'informateur clé travaillait, un financement ponctuel, autres.	Permet d'identifier les sources des ressources financières engagées dans l'embauche de l'informateur clé à travailler sur le PAG
Sous-système des politiques de prévention de l'obésité / … ***(suite)***	Quelles sont les ressources dont vous disposiez ? Quelles sont les ressources dont disposaient les acteurs du PAG (alliés et opposants) ?	**21.** De quel type de soutien vous avez bénéficiez pour faire avancer le PAG ? Quelles sont les ressources qui étaient à votre disposition ou que vous avez engagées pour vous soutenir dans votre implication dans le PAG ? Comment ces ressources ont-elles été utilisées et coordonnées, voire non utilisées ? **Probe :** soutien politique - personne ayant une autorité formelle juridique (législateur, responsable de l'agence, etc.), ressources financières (allocations spécifiques), experts, leadership, opinion publique (sondages d'opinion), troupes mobilisables (partisans, adversaires), informations, médias ; utilisation des ressources, coordination des ressources (centrale versus régionale ; sectorielle versus gouvernementale) **22.** Quelles sont les ressources dont disposaient vos partenaires et alliés (ou qu'ils ont engagées) ? Comment ces ressources ont-elles été utilisées et coordonnées, voire non utilisées ? **Probe :** les ressources financières (allocations spécifiques), experts, leadership, opinion publique (sondages d'opinion), troupes mobilisables (partisans, adversaires), personne ayant une autorité formelle juridique (législateur, responsable de l'agence, etc.),	Les informations sur les ressources des acteurs aident à connaitre : • Les ressources mises à la disposition ou développées ou utilisées pour le PAG • Comment ces ressources ont été engagées ou utilisées (STRATEGIES D'UTILISATION DES RESSOURCES) • Quelle coalition en bénéficiait le plus (POUVOIR) • Les CONTRAINTES et les OPPORTUNITES reliées aux ressources

Sous-système des politiques de prévention de l'obésité / … (suite)		connaissance, médias, utilisation des ressources, coordination des ressources (centrale versus régionale ; sectorielle versus gouvernementale) **23.** Quelles sont les ressources dont disposaient vos opposants (ou qu'ils ont engagées) ? Comment ces ressources ont-elles été utilisées et coordonnées, voire non utilisées ? **Probe :** les ressources financières (allocations spécifiques), experts, leadership, opinion publique (sondages d'opinion), troupes mobilisables (partisans, adversaires), personne ayant une autorité formelle juridique (législateur, responsable de l'agence, etc.), informations, médias ; utilisation des ressources, coordination des ressources (centrale versus régionale ; sectorielle versus gouvernementale)	
Evènements externes & évènements internes / contraintes et ressources	Y a-t-il eu un évènement qui a déclenché l'intérêt dans le PAG ? Autres facteurs qui ont favorisé, facilité ou qui ont contraint le PAG ?	**24.** Selon vous **qu'est-ce qui** a déclenché l'intérêt dans un plan d'action gouvernemental pour la promotion des saines habitudes de vie ? **Probe :** Taux d'obésité alarmant, préoccupation des gens, influence d'autres programmes ou politiques (provinciales, nationales ou internationales) santé des jeunes, médias, opinion publique, pression des groupes d'intérêt, d'organismes communautaires, préoccupation mondiale et nationale, événement spécifique au niveau international, national ou provincial etc. **25.** Quels sont les facteurs qui ont facilité le PAG ? Pouvez-vous me décrire comment ? **Probe :** contribué positivement au processus politique (plaidoyer, élaboration ou adoption du PAG) - changement au sein du parti au pouvoir, de l'opinion publique, de la technologie, d'autres sous-systèmes, influence d'autres programmes et politiques, autres **26.** Quels sont les facteurs qui ont entravé le PAG ? **Probe :** contribué négativement au processus politique (plaidoyer, élaboration ou adoption du PAG) - changement au sein du parti au pouvoir, de l'opinion publique, de la technologie, d'autres sous-systèmes, influence d'autres programmes et politiques, autres	Ces informations aident à connaitre les événements INTERNES ou EXTERNES qui ont influencé le PAG dans toutes ses étapes (SE CONCENTRER SUR LE PLAIDOYER, ELABORATION & ADOPTION) et à comprendre comment ces événements ont pu créer des contraintes ou des opportunités aux acteurs

Sous-système des politiques de prévention de l'obésité / *coalitions plaidantes : stratégies*	Comment avez-vous contribué au processus politique du plaidoyer, de l'élaboration, et de l'adoption du PAG et quels étaient les défis que vous aviez dû relever ? Qu'est-ce que vous auriez dû faire mieux ?	**27.** Pouvez-vous me décrire votre rôle ou votre implication dans le plan d'action gouvernemental 2006-2012 pour la promotion des saines habitudes de vie ? Comment pensez-vous avoir influencé le PAG ? **Probe :** plaidoyer, élaboration, adoption ou prise de décision, décideur, autres. **27.1** Quelles sont les actions auxquelles vous avez contribuées ou que vous avez entamées qui ont fait avancer le PAG ? **27.2** Quelles sont les actions auxquelles vous avez contribuées qui ont entravé le progrès du PAG ? **27.3** Quelles sont les actions que vous auriez dû faire mais n'aviez pas faites ? **27.4** Qu'est-ce qui vous a empêché de les faire ? **27.5** Pouvez-vous me décrire les actions qui ont été menées ou que vous avez menées dans le cadre du PAG pour prendre en considération les groupes à cibler en priorité dans la problématique de l'obésité ? **Probe :** plaidoyer ou élaboration de dispositions dans les politiques qui tiennent compte de ces personnes etc. **28.** Quels sont les arguments que vous avez utilisés pour faire avancer le PAG ? **29.** Quelles sont les informations que vous avez utilisées pendant votre implication dans le PAG et quelles étaient leurs sources ? **Probe :** littérature scientifique, autres plans d'action nationaux, experts, opinion publique, données sur le Québec, INSPQ, Statistiques Canada, ISQ, autres **30.** Quels étaient les difficultés, obstacles ou les défis majeurs que vous avez eus pendant l'élaboration du PAG ? pendant l'adoption du PAG ? Comment avez-vous fait face à/surmonter ces défis ? **Probe :** manque de ressources, changements de priorité, manque de coordination, changement de leadership, autres. **31.** Si vous souhaitez pouvoir influencer le PAG différemment comment l'auriez-vous fait et qu'est-ce que vous auriez changé ?	Ces informations permettent de rechercher et comprendre : • Les stratégies mises en œuvre par l'informateur clé pour le plaidoyer, l'élaboration et l'adoption du PAG (stratégies intentionnées, émergentes, réalisées, non réalisées, délibérées ; Stratégies gagnantes & perdantes) ; • Les CONTRAINTES et les OPPORTUNITES qui ont favorisé ou contraint l'action de l'informateur clé • Les arguments utilisés par l'informateur clé pour appuyer ses propos • Les sources d'information utilisées par l'informateur clé • Comment il/elle aurait pu faire mieux

Sous-système des politiques de prévention de l'obésité / *coalitions plaidantes : stratégies (suite)*	Comment est-ce que vos collaborateurs ont-ils contribué au processus politique du plaidoyer, de l'élaboration, et de l'adoption du PAG et quels étaient les défis qu'ils avaient dû relever ? Qu'est-ce qu'ils auraient dû faire mieux ?	**32.** Pouvez-vous me parler des actions auxquelles vos alliés ou collaborateurs ont contribuées ou qu'ils ont entamées qui ont contribué au PAG plus que d'autres ? qui ont entravé le progrès du PAG ? si oui lesquelles ? Quelles sont les actions qui, selon vous, vos alliés ou collaborateurs auraient dû faire mais n'avaient pas fait et qu'est-ce qui selon vous leur a empêché de le faire ? Quelle est votre perception de leurs actions ? **Probe :** plaidoyer, élaboration, adoption ou prise de décision, décideur, autres.	Ces informations permettent de rechercher et comprendre : • Les stratégies mises en œuvre par les alliés/collaborateurs de l'informateur clé (stratégies intentionnées, émergentes, réalisées, non réalisées, délibérées ; Stratégies gagnantes & perdantes) ; • Les CONTRAINTES et les OPPORTUNITES qui ont favorisé ou contraint les actions de ses alliés/ collaborateurs selon l'informateur clé
	Comment est-ce que vos opposants ont agi et comment avez-vous réagi en réponse ?	**33.** Quelles sont les stratégies que vos opposants ont utilisées pour influencer le plan d'action gouvernemental à travers le temps ? **Probe :** réduire les ressources : financières, effectifs en ressources humaines, autres. **34.** Quelles étaient vos réactions à leurs stratégies ?	Ces informations permettent de rechercher et de comprendre les stratégies mises en œuvre par les opposants de l'informateur clé ainsi que sa réaction à leurs stratégies
Sous-système des politiques de prévention de l'obésité / *Règles institutionnelles*	Quels sont les changements institutionnels que le PAG a favorisés ou empêchés ?	**35.** Quel changement le PAG (l'adoption du PAG) a-t-il favorisé au niveau des institutions ? Quel changement le PAG a empêché au niveau des institutions ? Que pensez-vous de cet effet ?	Cette question permet de connaitre la perception de l'informateur clé des changements institutionnels favorisés/empêchés par le PAG et sa perception de ces changements
Sous-système des politiques de prévention de l'obésité / *Impact de la politique*	En suivant votre définition du succès du PAG, est-ce que le PAG a réussi selon vous ?	**36.** Quelle est votre définition du succès du PAG et est-ce que le PAG a réussi selon vous ? **37.** Quelles sont les conséquences non voulues du PAG selon vous ?	Cette question permet de rechercher la perception de l'informateur clé sur • Le succès du PAG • Ce que le PAG a engendré comme effets non désirés

Sous-système des politiques de prévention de l'obésité / *Impact du sous-système (sur les évènements externes, contraintes et ressources des acteurs)*	Quelles leçons l'expérience du PAG vous a-t-elle appris (e)?	**38.** Quelles sont les leçons que vous avez apprises à travers le processus du PAG ? **39.** Comment est-ce que le PAG peut affecter les politiques futures en prévention de l'obésité (PRP, promotion d'une SA et d'un MVPA) ?	Cette question permet de rechercher et de comprendre la perception de l'informateur clé sur le processus politique global du PAG ; sa perception sur l'effet de ce processus sur les politiques futures

Appendix 9 – Key Informants' Demographics

i. Key informants by profession*:

Profession	Number of participants
Agriculture engineer	**1**
Dietitian	**8**
Engineer	**1**
Administration/management	**2**
Medical doctor	**4**
Public figure/Media chronicler	**1**
Physical educator	**6**
School educator	**1**
Sociologist	**2**

ii. Key informants by organizational or ministerial affiliation*:

Organization/ministry	Number of participants
Academic Institution	**2**
Association of public health directors	**1**
Association of Public Health of Québec	**3**
Institute of Nutrition and Functional foods	**1**
Media	**1**
Ministry of Agriculture, Fisheries and Food	**1**
Ministry of Education, Leisure and Sports	**6**
Ministry of Health and Social services	**5**
Ministry of Transportation	**1**
National Institute of Public Health	**4**
NGO (EquiLibre & Québec council on weight and Health)	**3**
Private sector (health services and sport facility)	**1**
Professional Order of Dietitians	**1**
Québec en forme	**3**
Regional public health agency	**1**
Sports Quebec	**1**

Some key informants are members of more than one organization - affiliations during GAP elaboration

iii. By workgroup memberships*:

Working group	Number of participants
GTPPP - Provincial working group on weight-related issues	
Members	**7**
Perrault Working Group	
Members	**3**
Direction, collaboration and support	**6**
GAP - Governmental action plan on weight-related problems	
GAP authors	**2**
GAP writing directors	**2**
GAP collaborators	**8**

Some key informants are members of more than one working group

iv. Key informants by position*:

Key informants by position	Number
Assistant deputy minister of health and social services & national public health director	**1**
Associate professor	**1**
Board member or chair NGO	**9**
Communication consultant	**1**
Director NGO	**1**
Director private sector	**1**
Director/manager and/or assistant deputy minister representative	**5**
Media (radio chronicler)	**1**
Medical assistant to the national public health director	**1**
President professional order	**1**
Professional	**8**
Regional public health director	**1**
Scientific consultant	**2**
Masters student	**1**

Some key informants have more than one position - positions during GAP elaboration

v. Key informants by education level:

Highest Education level	Number of participants
Bachelor's degree	**6**
Master's degree	**12**
Medical doctor	**4**
PhD	**3**

*: Total numbers by characteristic may exceed the number of key informants because some characteristics are not mutually exclusive

Appendix 10 – Letter of Invitation for Document Review

Lettre de sollicitation de quelques informateurs clés à communiquer leurs commentaires sur le document joint

Lieu, Date
Nom
Poste
Organisation
Adresse

Objet : *Commentaires et réactions sur le document intitulé : « Generating a National Plan on Obesity Prevention : an Advocacy Coalition Approach »* et *faisant partie de la thèse intitulée : « Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie ».*

Chère/cher Madame/Monsieur X,

Il y a quelques mois, vous m'avez aimablement accordé une entrevue qui porte sur le processus d'élaboration du PAG au Québec, et ceci dans le cadre du projet de recherche intitulé : « *Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie* ». Je tiens à réitérer mes remerciements pour votre participation et pour les informations pertinentes que vous m'avez fournies.

Dans ce qui suit, je vous ferai part du progrès de ce projet ainsi que de l'objet de cette lettre. En effet, les étapes de collecte et d'analyse des données sont achevées et la rédaction du rapport va bon train. La base de données est assez riche et volumineuse ; elle inclut plusieurs entrevues et une multitude de documents en relation avec le processus d'élaboration du PAG.

Les résultats de recherche ne sont pas à l'abri d'erreurs factuelles, d'omissions d'évènements ou de faits. Ainsi, je tiens à soumettre ce document préliminaire à votre examen. Ce document sera également partagé avec un groupe d'informateurs clés, qui, comme vous possèdent une connaissance approfondie du dossier du PAG.

Tout commentaire ou recommandation que vous me faites va être reçu avec grand intérêt. Je m'attends en particulier à ce que vos commentaires puissent porter sur les éléments suivants :

1- Les erreurs factuelles et omissions d'événements ou de faits qui seraient cruciaux pour cette recherche ;
2- Les éléments ou informations qui pourraient nuire aux personnages ou institutions, au cas où ces derniers seraient identifiés implicitement ou explicitement dans le document.

En vue d'apporter les corrections nécessaires, je vous prie de me signaler les informations erronées ou manquantes, et si possible la source que vous me recommandez pour effectuer la rectification. Afin de vous faciliter la tâche, et dépendamment de vos préférences, vous pourriez noter vos remarques directement sur le document joint ou m'envoyer un courriel. Vos commentaires seraient appréciés le plus tôt possible.

Finalement je réitère mes remerciements pour votre participation précieuse à ce projet de recherche, et particulièrement dans cette dernière démarche qui servira à augmenter la validité de cette recherche et permettra au Québec de rayonner encore une fois sur la scène internationale de par ses enseignements sur les politiques de prévention de l'obésité.

Dans l'attente de votre réponse, veuillez agréer Madame/Monsieur X l'expression de mes sentiments les plus respectueux.

Jacqueline Wassef, Dt.P., MPH
Candidate au PhD en santé publique
École de santé publique
Département de gestion, d'évaluation et de politique de santé
Université de Montréal
Téléphone : [redacted]
Courriel : jacqueline.wassef@umontreal.ca

P.j. *Version préliminaire du document intitulé « Generating a National Plan on Obesity Prevention : an Advocacy Coalition Approach »*

Appendix 11 – Institutional Review Board Approval

Université de Montréal

Comité d'éthique de la recherche en santé

18 September 2015

Objet: Approbation éthique – « Obesity prevention policies: The art and science of ending an epidemic »

Mme Jacqueline Wassef,

Le Comité d'éthique de la recherche en santé (CERES) a étudié le projet de recherche susmentionné et a délivré le certificat d'éthique demandé suite à la satisfaction des exigences précédemment émises. Vous trouverez ci-joint une copie numérisée de votre certificat; copie également envoyée à votre directeur/directrice de recherche et à la technicienne en gestion de dossiers étudiants (TGDE) de votre département.

Notez qu'il y apparaît une mention relative à un suivi annuel et que le certificat comporte une date de fin de validité. En effet, afin de répondre aux exigences éthiques en vigueur au Canada et à l'Université de Montréal, nous devons exercer un suivi annuel auprès des chercheurs et étudiants-chercheurs.

De manière à rendre ce processus le plus simple possible et afin d'en tirer pour tous le plus grand profit, nous avons élaboré un court questionnaire qui vous permettra à la fois de satisfaire aux exigences du suivi et de nous faire part de vos commentaires et de vos besoins en matière d'éthique en cours de recherche. Ce questionnaire de suivi devra être rempli annuellement jusqu'à la fin du projet et pourra nous être retourné par courriel. La validité de l'approbation éthique est conditionnelle à ce suivi. Sur réception du dernier rapport de suivi en fin de projet, votre dossier sera clos.

Il est entendu que cela ne modifie en rien l'obligation pour le chercheur, tel qu'indiqué sur le certificat d'éthique, de signaler au CERES tout incident grave dès qu'il survient ou de lui faire part de tout changement anticipé au protocole de recherche.

Nous vous prions d'agréer, Madame, l'expression de nos sentiments les meilleurs,

Dominique Langelier, présidente
Comité d'éthique de la recherche en santé (CERES)
Université de Montréal

DL/GP/gp
c.c. Gestion des certificats, BRDV
François Champagne, professeur titulaire, École de santé publique - Département d'administration de la santé
Lambert Farand, professeur agrégé, École de santé publique - Département d'administration de la santé
TGDE - PhD Santé publique
p.j. Certificat #15-094-CERES-D

adresse postale
C.P. 6128, succ. Centre-ville
Montréal QC H3C 3J7

3744 Jean-Brillant
4e étage, bur. 430-11
Montréal QC H3T 1P1

Téléphone : 514-343-6111 poste 2604
ceres@umontreal.ca
www.ceres.umontreal.ca

Université de Montréal

N^{O} de certificat
15-094-CERES-D

Comité d'éthique de la recherche en santé

CERTIFICAT D'APPROBATION ÉTHIQUE

Le Comité d'éthique de la recherche en santé (CERES), selon les procédures en vigueur, en vertu des documents qui lui ont été fournis, a examiné le projet de recherche suivant et conclu qu'il respecte les règles d'éthique énoncées dans la Politique sur la recherche avec des êtres humains *de l'Université de Montréal.*

Projet	
Titre du projet	**Obesity prevention policies: The art and science of ending an epidemic**
Étudiante requérante	**Jacqueline Wassef** [redacted], Candidate au Ph. D. en santé publique (Organisation des soins), École de santé publique - Département d'administration de la santé
Sous la direction de	François Champagne, professeur titulaire, École de santé publique - Département d'administration de la santé, Université de Montréal & Lambert Farand, professeur agrégé, École de santé publique - Département d'administration de la santé, Université de Montréal.

Financement	
Organisme	Non financé
Programme	
Titre de l'octroi si différent	
Numéro d'octroi	
Chercheur principal	
No de compte	

MODALITÉS D'APPLICATION

Tout changement anticipé au protocole de recherche doit être communiqué au CERES qui en évaluera l'impact au chapitre de l'éthique.

Toute interruption prématurée du projet ou tout incident grave doit être immédiatement signalé au CERES

Selon les règles universitaires en vigueur, un suivi annuel est minimalement exigé pour maintenir la validité de la présente approbation éthique, et ce, jusqu'à la fin du projet. Le questionnaire de suivi est disponible sur la page web du CERES.

[redacted]

Dominique Langelier, présidente
Comité d'éthique de la recherche en santé
Université de Montréal

18 septembre 2015
Date de délivrance

1er février 2017
Date de fin de validité

adresse postale
C.P. 6128, succ. Centre-ville
Montréal QC H3C 3J7

3744 Jean-Brillant
4e étage, bur. 430-11
Montréal QC H3T 1P1

Téléphone : 514-343-6111 poste 2604
ceres@umontreal.ca
www.ceres.umontreal.ca

Université de Montréal

Comité d'éthique de la recherche en santé

N° de certificat
15-094-CERES-D(1)

CERTIFICAT D'APPROBATION ÉTHIQUE
- 1er renouvellement -

Le Comité d'éthique de la recherche en santé (CERES), selon les procédures en vigueur et en vertu des documents relatifs au suivi qui lui a été fournis conclu qu'il respecte les règles d'éthique énoncées dans la Politique sur la recherche avec des êtres humains *de l'Université de Montréal*

Projet	
Titre du projet	**Obesity prevention policies: The art and science of ending an epidemic**
Étudiante requérante	**Jacqueline Wassef** [redacted], Candidate au Ph. D. en santé publique (Organisation des soins), École de santé publique - Département d'administration de la santé
Sous la direction de	François Champagne, professeur titulaire, École de santé publique - Département d'administration de la santé, Université de Montréal & Lambert Farand, professeur agrégé, École de santé publique - Département d'administration de la santé, Université de Montréal.

Financement	
Organisme	Non financé
Programme	
Titre de l'octroi si différent	
Numéro d'octroi	
Chercheur principal	
No de compte	

MODALITÉS D'APPLICATION

Tout changement anticipé au protocole de recherche doit être communiqué au CERES qui en évaluera l'impact au chapitre de l'éthique. Toute interruption prématurée du projet ou tout incident grave doit être immédiatement signalé au CERES.

Selon les règles universitaires en vigueur, un suivi annuel est minimalement exigé pour maintenir la validité de la présente approbation éthique, et ce, jusqu'à la fin du projet. Le questionnaire de suivi est disponible sur la page web du CERES.

[redacted]

Guillaume Paré
Conseiller en éthique de la recherche.
Comité d'éthique de la recherche en santé
Université de Montréal

19 septembre 2016
Date de délivrance du renouvellement ou de la réémission*

1er octobre 2017
Date du prochain suivi

18 septembre 2015
Date du certificat initial

1er octobre 2017
Date de fin de validité

*Le présent renouvellement est en continuité avec le précédent certificat

adresse postale
C.P. 6128, succ. Centre-ville
Montréal QC H3C 3J7

3744 Jean-Brillant
4e étage, bur. 430-11
Montréal QC H3T 1P1

Téléphone : 514-343-6111 poste 2604
ceres@umontreal.ca
www.ceres.umontreal.ca

Université de Montréal

Comité d'éthique de la recherche en santé

N° de certificat
15-094-CERES-D(2)

CERTIFICAT D'APPROBATION ÉTHIQUE

- 2ième renouvellement -

Le Comité d'éthique de la recherche en santé (CERES), selon les procédures en vigueur et en vertu des documents relatifs au suivi qui lui a été fournis conclu qu'il respecte les règles d'éthique énoncées dans la Politique sur la recherche avec des êtres humains *de l'Université de Montréal*

Projet	
Titre du projet	**Obesity prevention policies: The art and science of ending an epidemic**
Étudiante requérante	**Jacqueline Wassef** [redacted], Candidate au Ph. D. en santé publique (Organisation des soins), École de santé publique - Département d'administration de la santé
Sous la direction de	François Champagne, professeur titulaire, École de santé publique - Département d'administration de la santé, Université de Montréal & Lambert Farand, professeur agrégé, École de santé publique - Département d'administration de la santé, Université de Montréal.

Financement	
Organisme	Non financé
Programme	
Titre de l'octroi si différent	
Numéro d'octroi	
Chercheur principal	
No de compte	

MODALITÉS D'APPLICATION

Tout changement anticipé au protocole de recherche doit être communiqué au CERES qui en évaluera l'impact au chapitre de l'éthique. Toute interruption prématurée du projet ou tout incident grave doit être immédiatement signalé au CERES.

Selon les règles universitaires en vigueur, un suivi annuel est minimalement exigé pour maintenir la validité de la présente approbation éthique, et ce, jusqu'à la fin du projet. Le questionnaire de suivi est disponible sur la page web du CERES.

[redacted]

Guillaume Paré
Conseiller en éthique de la recherche.
Comité d'éthique de la recherche en santé
Université de Montréal

11 décembre 2017 — Date de délivrance du renouvellement ou de la réémission*
1er janvier 2019 — Date du prochain suivi
18 septembre 2015 — Date du certificat initial
1er janvier 2019 — Date de fin de validité

*Le présent renouvellement est en continuité avec le précédent certificat

Appendix 12 - Information and Consent Form

Formulaire d'information et de consentement

Les Politiques de Prévention de l'Obésité : l'Art et la Science de Mettre Fin à une Épidémie

FORMULAIRE D'INFORMATION ET DE CONSENTEMENT

LES POLITIQUES DE PRÉVENTION DE L'OBÉSITÉ: L'ART ET LA SCIENCE DE METTRE FIN À UNE ÉPIDÉMIE

Chercheure	Jacqueline Wassef Candidate au PhD en santé publique Dt.P., MPH École de santé publique, Département d'administration de la santé, Université de Montréal Téléphone : [redacted] Courriel : jacqueline.wassef@umontreal.ca
Directeur de recherche	Francois Champagne, PhD Professeur titulaire École de santé publique, Département d'administration de la santé, Université de Montréal Téléphone : (514) 343-2226 Courriel : francois.champagne@umontreal.ca
Co-directeur de recherche	Lambert Farand, MD, PhD Professeur agrégé École de santé publique, Département d'administration de la santé, Université de Montréal Téléphone : (514) 343-6111 poste : 1374 Courriel : lambert.farand@umontreal.ca

Ce projet n'est pas financé.

Vous êtes invité(e) à participer à un projet de recherche. Avant d'accepter d'y participer, veuillez prendre le temps de lire ce document présentant les conditions de participation au projet. N'hésitez pas à poser toutes les questions que vous jugerez utiles à la personne qui vous présente ce document.

Description du projet de recherche

Cette recherche a pour objectif d'expliquer le processus d'élaboration des politiques de prévention de l'obésité au Québec. Ainsi, elle permettrait d'identifier les facteurs qui facilitent ce processus et ceux qui le contraignent, en plus d'identifier les stratégies qui contribuent à un climat politique favorable à l'apprentissage et au changement. Plusieurs répondants impliqués dans les politiques de prévention de l'obésité seront sollicités à participer à cette étude. Ces intervenants appartiennent au réseau de la santé publique au Québec, aux ministères et organismes gouvernementaux, aux organismes non-gouvernementaux, aux institutions académiques, aux médias, au secteur privé et au monde politique. Les entrevues réalisées ainsi que d'autres sources documentaires d'information serviront à analyser d'une manière approfondie ce processus en se basant sur un cadre d'analyse retenu en politiques publiques.

Les résultats de cette étude pourraient servir à faire avancer les connaissances à l'égard des contextes et des stratégies qui favorisent l'adoption des politiques de prévention en santé publique. Ils pourraient servir également à informer les décideurs, les professionnels de la santé publique et autres professionnels intéressés à faire progresser le processus d'élaboration des politiques de prévention de l'obésité. Cette étude pourrait permettre l'avancement des connaissances sur un champ moins exploré, celui de l'application d'un cadre d'analyse du processus des politiques publiques sur le champ de la promotion de la santé, notamment sur les politiques de prévention de l'obésité.

Nature, durée et conditions de la participation

Dans le cadre de votre participation, vous êtes invité(e) à me faire part de votre rôle dans le processus d'élaboration des politiques de prévention de l'obésité au Québec ainsi que de votre avis sur les facteurs qui facilitent et qui contraignent ce processus et sur ce que, selon vous, représenterait des politiques adéquates pour prévenir l'obésité. Vous allez être invité(e) à passer une entrevue à la date et au lieu qui vous conviennent. Cette entrevue sera d'une durée d'une heure et demie. L'entrevue pourrait être enregistrée suite à votre consentement. Vous pourriez par la suite être sollicité(e) à apporter des précisions aux informations collectées ou pour combler quelques lacunes dans la base de données. Vous pourriez aussi être invité(e) pour trois autres formes de participation :

(1) Une rencontre de validation des données : il s'agit d'avoir votre avis sur la justesse de la description des événements et des stratégies et de leur apporter les correctifs, le cas échéant.

(2) Une rencontre de validation des résultats : il s'agit d'avoir vos commentaires sur les résultats de l'analyse afin d'en tenir compte avant la diffusion des résultats.

(3) Une recommandation à l'égard des documents à consulter, dans le but de m'aider à mener mon analyse, ainsi qu'une recommandation à l'égard d'autres informateurs clés.

Risques et inconvénients

Un risque anticipé que comporte cette recherche est le risque de réidentification au cas où vous présentez un profil particulier ou unique, et ceci même si l'équipe de recherche prend soin de ne pas publier votre nom. Un désagrément anticipé serait dû au temps investi dans la conduite de l'entrevue et le suivi ainsi que le repérage des documents. Pour ce, je vous prie de bien vouloir choisir l'horaire le plus propice à l'égard de vos fonctions et de vous assurer d'avoir l'/les approbation/s de votre/vos employeur/s au cas où l'entrevue sera menée sur le temps de votre travail.

Avantages et bénéfices

Cette recherche pourrait présenter des avantages au niveau du participant, de son groupe de travail et de la société en général. En effet, les retombées de cette étude pourraient aider à améliorer les connaissances à l'égard des stratégies et des contextes qui favorisent l'adoption des politiques en promotion de la santé en particulier les politiques de prévention de l'obésité. Ceci pourrait possiblement améliorer le processus actuel d'élaboration de ces politiques, voire une meilleure prise en charge des politiques adoptées ainsi qu'une meilleure implantation.

Compensation

Aucune compensation n'est prévue.

Confidentialité, protection et conservation des données

Cette recherche se déroulera dans le plus strict respect du principe de confidentialité. Un code d'identification vous sera attribué et votre entrevue sera uniquement identifiée à travers ce code. Seule la chercheure aura accès aux fichiers d'enregistrements et assurera la transcription des entrevues. Tous les fichiers d'enregistrements, les transcriptions des entrevues et les documents recueillis seront gardés sous clé et seront conservés pour une période de sept ans après la fin de l'étude. Les données et les renseignements identificatoires associés seront détruits après la période de sept ans. Les résultats publiés ne feront pas référence à vous que sous forme agrégée d'une catégorie d'acteurs, à titre d'exemple les professionnels en santé publique. Cependant, il est à noter qu'il sera possible d'identifier certains informateurs à profils particuliers ou uniques et ce, même si l'équipe de recherche prend soin de ne pas publier leurs noms.

Si vous acceptez que vos propos soient reportés de manière nominative dans les publications, veuillez cocher la case suivante :

❑ J'accepte que mon identité, mon titre et mes fonctions soient divulgués en lien avec mes propos dans les diverses publications.

Retour des résultats

Un résumé des résultats vous sera acheminé par courriel à la fin de l'étude.

Participation volontaire et droit de retrait

Vous êtes libre d'accepter ou de refuser de participer à ce projet de recherche. Vous pouvez vous retirer de cette étude à n'importe quel moment, sans avoir à donner de raison et sans conséquence pour vous. Vous n'avez qu'à en informer la personne-ressource de l'équipe de recherche et ce, par simple avis verbal.

En cas de retrait, vous pouvez demander la destruction des données ou du matériel vous concernant. Cependant, il sera impossible de retirer vos données ou votre matériel des analyses menées une fois ces dernières publiées ou diffusées.

Responsabilité de l'équipe de recherche

En acceptant de participer à cette étude, vous ne renoncez à aucun de vos droits ni ne libérez les chercheurs, le commanditaire ou l'établissement de leurs responsabilités civiles et professionnelles.

Personnes-ressources

Si vous avez des questions sur les aspects scientifiques du projet de recherche, vous pouvez contacter : Jacqueline Wassef, Dt.P., MPH, candidate au PhD en santé publique, École de santé publique, Département d'administration de la santé, Université de Montréal, téléphone : [redacted], courriel : jacqueline.wassef@umontreal.ca**.**

Si vous voulez vous retirer de l'étude, vous pouvez contacter la même personne aux coordonnées citées ci-haut.

Pour toute préoccupation sur vos droits ou sur les responsabilités des chercheurs concernant votre participation à ce projet, vous pouvez contacter le conseiller en éthique du Comité d'éthique de la recherche en santé (CERES): Comité d'éthique de la recherche en santé (CERES) par courriel à l'adresse ceres@umontreal.ca ou par téléphone au (514) 343-6111 poste 2604 ou consulter le site http://recherche.umontreal.ca/participants.

Toute plainte concernant cette recherche peut être adressée à l'ombudsman de l'Université de Montréal, au numéro de téléphone (514) 343-2100 ou à l'adresse courriel ombudsman@umontreal.ca. L'ombudsman accepte les appels à frais virés. Il s'exprime en français et en anglais et prend les appels entre 9h et 17h.

Consentement

Déclaration du participant

Je comprends que je peux prendre mon temps pour réfléchir avant de donner mon accord ou non à participer à la recherche.

Je peux poser des questions à l'équipe de recherche et exiger des réponses satisfaisantes.

Je comprends qu'en participant à ce projet de recherche, je ne renonce à aucun de mes droits ni ne dégage les chercheurs de leurs responsabilités.

J'ai pris connaissance du présent formulaire d'information et de consentement et j'accepte de participer au projet de recherche.

Prénom et nom du participant (caractères d'imprimerie)	Signature du participant Date :

Engagement du chercheur

J'ai expliqué les conditions de participation au projet de recherche au participant. J'ai répondu au meilleur de ma connaissance aux questions posées et me suis assurée de la compréhension du participant. Je m'engage, avec l'équipe de recherche, à respecter ce qui a été convenu au présent formulaire d'information et de consentement.

Prénom et nom du chercheur (caractères d'imprimerie)	Signature du chercheur Date :

Appendix 13 – Invitation Letter

Lettre d'invitation à participer à une étude sur le processus d'élaboration des politiques de prévention de l'obésité

Lieu, Date
Nom
Poste
Organisation
Adresse

Objet : *Invitation à participer à une étude sur le processus d'élaboration des politiques de prévention de l'obésité*.

Chère/er Madame/Monsieur X,

J'espère que vous vous portez bien et que toutes vos activités avancent tel que prévu.

Ce courriel vous est adressé afin de vous inviter à participer à une étude sur le processus d'élaboration des politiques de prévention de l'obésité intitulée : « Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie ».

Au cours des dernières décennies, la hausse des taux d'obésité a préoccupé les intervenants nationaux et internationaux et a engagé divers acteurs à joindre leurs efforts afin de réduire les taux d'obésité. Étant un phénomène complexe résultant de multiples facteurs interdépendants, l'obésité ferait appel à plusieurs solutions concertées nécessitant l'implication de nombreux secteurs et à tous les niveaux. Selon l'Organisation Mondiale de la Santé, OMS, l'obésité est surtout une « maladie sociale et environnementale ». En tant que tel, et toujours selon l'OMS, le principe directeur d'une réponse à l'obésité serait de « rendre les choix santé faciles à faire ».

Alors, comment notre gouvernement a relevé le défi de « rendre les choix santé faciles à faire » ?

Cette recherche a pour objectif d'expliquer le processus d'élaboration des politiques de prévention de l'obésité au Québec, notamment le Plan d'action gouvernemental de promotion des saines habitudes de vie et de prévention des problèmes reliés au poids 2006-2012. Ainsi, elle permettrait d'identifier les facteurs qui facilitent ce processus et ceux qui le contraignent, en plus d'identifier les stratégies qui contribuent à un climat politique favorable à l'apprentissage et au changement. Plusieurs répondants impliqués dans les politiques de prévention de l'obésité seront sollicités à participer à cette étude. Ces intervenants appartiennent au réseau de la santé publique au Québec, aux ministères, aux organismes non-gouvernementaux, aux institutions académiques, aux médias, au secteur privé et au monde

politique. Vu votre implication dans le dossier des politiques de prévention de l'obésité au Québec, je souhaite par la présente vous inviter à participer à ce projet de recherche.

Les résultats de cette étude pourraient servir à faire avancer les connaissances à l'égard des contextes et des stratégies qui favorisent l'adoption des politiques de prévention de l'obésité. Ils pourraient servir également à informer les décideurs, les professionnels de la santé publique et autres professionnels intéressés à faire progresser le processus d'élaboration des politiques de prévention de l'obésité. Les retombées de cette étude pourraient aussi améliorer le processus actuel d'élaboration de ces politiques, voire une meilleure prise en charge des politiques adoptées ainsi qu'une meilleure implantation.

Je vous prie alors de bien vouloir m'accorder une rencontre à la date et à l'endroit qui vous conviennent et ceci afin de discuter avec vous des aspects scientifique et éthique de cette recherche. Je compte sur votre participation précieuse pour contribuer à ce projet de recherche et faire rayonner notre expérience québécoise sur la scène nationale et internationale.

Dans l'attente de votre réponse, veuillez agréer Chère/er Madame/Monsieur X, l'expression de mes sentiments les plus respectueux.

Jacqueline Wassef, Dt.P., MPH
Candidate au PhD en santé publique
École de santé publique
Département de gestion, d'évaluation et de politique de santé
(Nouvelle appellation du Département d'administration de la santé)
Université de Montréal
Téléphone : [redacted]
Courriel : jacqueline.wassef@umontreal.ca

Appendix 14 – Thank You Letter

Lettre de remerciement pour participation à l'étude intitulée : « Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie »

Lieu, Date
Nom
Poste
Organisation
Adresse

Objet : *Lettre de remerciement pour participation à l'étude intitulée : « Les Politiques de Prévention de l'Obésité : l'Art et la Science de Mettre Fin à une Épidémie ».*

Objet : Lettre de remerciement pour votre participation à l'étude intitulée : « Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie ».

Chère/er Madame/Monsieur X,

Il y a quelques semaines, vous m'avez aimablement accordé une entrevue dans le cadre du projet de recherche intitulé : « Les politiques de prévention de l'obésité : l'art et la science de mettre fin à une épidémie ». La présente lettre vous est adressée afin de vous remercier de votre participation et des informations pertinentes que vous m'avez fournies. Votre précieuse participation a contribué à rendre mes données plus riches et par la suite mon analyse plus intéressante et mes résultats plus valides. Pour ce, je vous remercie sincèrement d'avoir contribué à ce projet, à la promotion de la recherche en santé publique au Québec et à l'avancement des connaissances. En guise de suivi, un résumé des résultats vous sera acheminé une fois ces résultats seront prêts.

En vous souhaitant du succès dans vos projets et une bonne continuité, veuillez agréer Madame/Monsieur X l'expression de mes sentiments les plus respectueux.

Jacqueline Wassef, Dt.P., M.P.H.
Candidate au PhD en santé publique
École de santé publique
Département de gestion, d'évaluation et de politique de santé
(Nouvelle appellation du Département d'administration de la santé)
Université de Montréal
Téléphone : [redacted]
Courriel : jacqueline.wassef@umontreal.ca