FRAMING ACTION: ASSESSING THE IMPACT OF OBESITY FRAMING ON PROGRAM DESIGN IN BRITISH COLUMBIA

by

Lindsay Zibrik B.A. (Honors), Simon Fraser University, 2007

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APPROVAL

Name:	Lindsay Zibrik		
Degree: Master of Arts, Department of Political Science			
Title of Thesis:	Framing Action: Assessing the Impact of Obesity Framing on Program Design in British Columbia		
Examining Committee:			
Chair:	Dr. Eric Hershberg, Professor Department of Political Science		
	Dr. Michael Howlett, Professor Senior Supervisor Department of Political Science		
	Dr. Anthony Perl, Professor Supervisor Department of Political Science		
	Dr. Scott Lear, Professor Supervisor Department of Biomedical Physiology and Kinesiology		
	Dr. Alan Davidson, Associate Professor External Examiner Health Studies, Faculty of Health & Social Development University of British Columbia Okanagan		
Date Approved:	June 25, 2009		



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ABSTRACT

The percentage of Canadians who are overweight or obese has risen dramatically in the past twenty years, prompting federal and provincial governments to take action on obesity.

This thesis studies the impact of obesity framing on program design in BC. The focus of this thesis is two-fold. First, it is demonstrated how ideas and discursive processes are framing obesity as a health individualism construct. Second, it is shown how dominant obesity orthodoxy is impacting the design and creation of obesity intervention strategies in BC.

It is shown that antiobesity literature has been instrumental in framing obesity as a serious health problem for which individuals are ultimately responsible. Moreover, it is argued that obesity program design in BC has centered on obesity as a health individualism construct, which has had the effect of relegating Government to a resource-base, relying on nodality-based policy instruments such as self-serve e-health resources and information campaigns.

Keywords: obesity; British Columbia; program design; frame analysis; obesity framing; health individualism; discourse analysis; antiobesity; fat acceptance

To my parents

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CHAPTER 1: INTRODUCTION

1.1 Background and Justification

Obesity is "...one of today's most blatantly visible – yet most neglected – public health problems" (WHO 2008). Globally, more than 1 billion adults are overweight and at least 300 million are clinically obese, contributing to what the World Health Organization (WHO) calls a "global epidemic." By 2015, the World Health Organization projects that 2.3 billion adults will be overweight and more than 700 million of them will be clinically obese (WHO 2008).

Obesity accounts for 2-6 percent of total health care costs in several developed countries, though some experts estimate the figure could be as high as 7 percent (WHO 2008). The true costs of obesity are undoubtedly much higher as some obesity-related conditions are not accounted for. On average, obesity rates are much higher in developed countries than in developing countries. Among developed countries, Canada has one of the highest percentages of obesity – a 2007 study conducted by the Organization for Economic Co-operation and Development (OECD) estimates that 22.4 percent of Canadians are clinically obese (OECD 2007). At 22.4 percent, Canada has the fourth highest rate of obesity in the world, trailing only the United States, Mexico and the United Kingdom.

Almost 50 percent of the Canadian population - roughly 17.5 million people – is either overweight or obese, and statistics indicate that the incidence of obesity is on the rise. Many overweight Canadians are at increased risk of disability, disease and premature death because of their condition. Obesity is linked to heart disease, diabetes, hypertension, osteoarthritis, certain types of cancer, and a wide range of other illnesses. A Statistics Canada analysis found that obese Canadians are four times more likely to develop diabetes, 3.3 times more likely to have high blood pressure, and 56 percent more likely to suffer heart disease compared to those with healthy weights (Statistics Canada 2007). Obese individuals are also 50-100 percent more likely to die prematurely from all causes than those with healthy weights (Statistics Canada 2007). Obesity is now "...recognized as a major and rapidly worsening public health problem that rivals smoking as a cause of illness and premature death" (Statistics Canada 2005).

A 2001 study published by the *Canadian Medical Association Journal* estimates the costs of obesity at \$4.3 billion, including \$1.6 billion in direct costs, which include the cost of hospital care, drugs, physician care, care in other institutions, and additional direct health expenditures, and \$2.7 billion in indirect costs, which are measured in terms of the value of years of life lost due to premature death and the value of activity days lost due to short- and long-term disability (Starky 2005). The total economic costs of obesity represented 2.2 percent of total health care costs in Canada in 2001 (Katzmarzyk and Janssen 2004). The three largest contributors to these healthcare costs are hypertension, type 2 diabetes mellitus and coronary heart disease - all conditions that are caused and/or exacerbated by obesity.

It is estimated that more than 2,000 British Columbia residents die prematurely each year due to obesity-related illness, resulting in a cumulative loss of 8,000 years of life annually. Although obesity rates in British Columbia (BC) are among the lowest across provinces, the rate of increase in BC is sharper than the national average and the economic costs are overwhelming. The British Columbia Medical Association (BCMA) estimates that the total obesity costs in BC are approximately \$563 million dollars. By 2015, this figure is expected to rise to \$852 million. Obesity-related illnesses cost the British Columbia health care system an estimated \$380 million dollars annually, or 4.5 percent of total direct health care costs in the province. And, when productivity losses due to obesity, including premature death, absenteeism and disability, are added, the total cost of obesity to the BC economy is estimated between \$730 million and \$830 million per year, a figure that is equal to 0.8 percent of the province's Gross Domestic Product (BCMA 2007).

With obesity rates climbing, obesity is being prioritized as a global public health challenge that demands intervention. As governments step up to the task, obesity is increasingly becoming a matter of public policy. As such, there needs to be address for how obesity is being addressed as a policy issue. This thesis has chosen to study two research questions: 1) how is obesity being framed in British Columbia? And, 2) how is this frame impacting obesity program design in British Columbia?

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¹ These findings are included in a new study on *The Cost of Obesity in British Columbia*, produced by GPI Atlantic, a non-profit research group that is constructing an index of well-being and sustainable development in Canada (GPI Atlantic 2007).

² This figure assumes that obesity rates do not worsen (BCMA 2007).

The purpose of this thesis is to investigate the role of policy frames in the development of specific policies and programs addressing obesity in BC. This investigation is essentially twofold: first, this thesis will examine how obesity is being framed. Second, this thesis will assess how the 'framing' of obesity (ideas and discourse) is impacting obesity program design in BC.

Justification for this study is based on the following: (1) the economic and sociopolitical costs of obesity are real and adverse; (2) obesity data reflects an upward trend
since the 1980s in most jurisdictions, presenting a serious global health problem; (3)
obesity is a good example, as this study will show, of how program and policy design are
influenced by how issues are framed through discourse and how (and to whom) that
discourse is communicated; and (4) there is real potential for a study of this magnitude to
impact/influence policy design in BC.

CHAPTER 2: METHODOLOGY

2.1 Literature Review

The belief that "politics is very largely the use of language" has translated into "[theories] of language and politics" which examine how politics is constitutive of language (Chilton 2004, 14, 200). In the social sciences, the study of how 'language' shapes ideas and beliefs (see Fowler 1991; Lemke 1995; Fairclough 1999) has been around for some time, however, there is "renewed" interest in studying the relationship between ideas and policy (Jacobsen 1995; Legro 2000; Hay 2006; Bhatia and Coleman 2003). For some, this methodological shift represents a "turn to ideas" (Schmidt 2008; Blyth 2004; Laffey and Weldes 1997). There is a body of literature, often referred to as discourse analysis, which examines the impact of ideas and discourse on the formation and implementation of public policy (see for example Goldstein and Keohane 1993; Hall 1989; Hay 2001; Schmidt 2001, 2008; Chilton 2004; Campbell 1998; Beland 2005; Daugberg and Pedersen 2004). Discourse analysts tend to agree that there exists a complex interrelationship between interests, ideas and institutions (Hall 1997; Oliver 2001), however, there is growing interest amongst discourse analysts to study "the active marshalling of discourses for political purposes" (Bacchi 2000, 45). Discourse analysis expanded in the early 1980s drawing on insights from post-Marxism, post-structuralism, radical versions of interpretative analysis and pragmatist philosophy (Torfing 2007, 1). Discourse is commonly understood as a system of rules and norms created through

political struggle that constructs meaningful subject, object or action (Torfing 2007, 1). Or, as Hajer understands it, discourse is "...a specific ensemble of ideas, concepts, and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities" (Hajer 1995, 60).

Discourse analysis is, simply put, the study of "language-in-use" (Hajer and Versteeg 2005, 175). The basic assumption of this approach is that "language profoundly shapes one's views of the world and reality, instead of being only a neutral medium mirroring it" (Hajer and Versteeg 2005, 176). Discourse analysis can thus "...help us to better understand the discursive conditions of possibility for formulating particular policies, and it draws our attention to the role of identity construction and the negotiation of meaning in policy implementation" (Torfing 2007, 1). Moreover, discourse analysis offers insight into the way in which policy problems, policy solutions and government rationale or action are "discursively constructed" and thus contingent upon language (Torfing 2007, 1). This implies that "interests" are incomplete, ambiguous and are constructed by discourse, and that institutions constitute broad sets of values, symbols, rituals, knowledge and vocabularies that facilitate and guide political action: institutions are not only "...staging the choice and interaction of relevant policy actors, but also seem to be scripting their actions" (Torfing 2007, 1).

Discourse analysis, as an approach, has been taken up by a number of scholars, often from different theoretical and methodological backgrounds, including rational choice institutionalism, historical institutionalism, sociological institutionalism,

critical/Marxist perspectives, post-structuralism, and more recently, ideational or "discursive" institutionalism.

Rational choice (RC) institutionalists have been somewhat reticent in studying how ideas interact with self-interests and motivations to influence policy-making (Campbell 1998; Schmidt 2005); however, some RC scholars have theorized about the role of ideas and interests in policy formation. Ideas in RC theory have been studied as "hooks" upon which policy-makers hang interests (Schmidt 2005). For example, Judith Goldstein has shown how under certain conditions of uncertainty, ideas act like switches or "road maps" that guide interests into particular policy directions (Goldstein and Keohane 1993), Douglas North (1990) has developed the concept "shared mental modes" to explain ideas, and Paul Sabatier has argued that policy and political decisions are informed by competing "advocacy coalitions" that "...seek to translate their beliefs into public policies or programs" (Sabatier and Jenkins-Smith 1993, 28; Sabatier 1987).

Historical institutionalists have also taken up interest in studying the role of ideas and beliefs in policy. Historical institutionalists tend to view ideas (which replace interests) as vehicles of political action, and institutions as "constitutive" of ideas (Schmidt 2005). Desmond King (1999) has looked at the role of ideas and knowledge in policy making and Peter Hall's work on Keynesian economic policies suggests that the emergence of new ideas is contingent on three factors: the extent to which they respond to concrete policy problems, the extent to which the idea resonates with ideas and institutions of key/established actors, and whether they are put to the attention of

key/relevant public agencies that have the structural capacity to implement them (Hall 1989).

While a relatively new area of study in RC and Historical institutionalism, the study of ideas and beliefs has been long-standing in sociological institutionalism. Sociological institutionalists posit ideas as normative and cognitive frames and meaning systems that define a particular course of political action (Schmidt 2005, 12). Well-known sociological institutionalists include Katzenstein et al. (1996), Ruggie (1998) and Finnemore (1996).

Some discourse models have drawn on classical insights from Marxism and critical studies, arguing that the formation and implementation of public policy is shaped by structural power and hegemonic discourses. Michael Foucault has been a key figure in discourse analysis, studying the history and evolution of ideas, the framing debates, and the transfer of ideas from one context to another, or what Foucault has termed "genealogy" (Foucault 1997). Foucault's theory of "governmentality" examines how the organized practices of government (mentalities, rationalities and techniques), or "the art of government," translate(s) into specific "acts of government" (Foucault 1991). In other words, how knowledge and political discourse influence political action.

Critical discourse analysis (CDA), which has emerged as a reaction to traditional discourse analysis models, has also taken up study of "...the ways discourse structures enact, confirm, legitimate, reproduce, or challenge relations of *power* and *dominance* in society" (Schiffrin et al. 2003, 353; Van Dijk 1993). Within this model, language is often

seen as an "organ of control," which has impelled many CDA scholars to study the role of ideology in policy-making and the discursive construction of power relations and social action (de Beaugrande 2006, 31; Fairclough and Wodak 1997, 271-280).

Post-structuralism has examined the social construction of ideas, studying how "discourse" constructs "identity" (Schram 1993, 249). As part of their study, post-structuralists utilize a combination of concepts and methods to deconstruct ambiguity in language and discourse (Torfing 2007, 1). These have included "floating signifiers" (Levi-Strauss 1963; Derrida 1978), "articulation," (Laclau and Mouffe 2001) and "social antagonism" (Laclau and Mouffe 2001).

Ideational institutionalism, or "discursive" institutionalism is a "new" branch of institutionalism, which examines the substantive content of ideas as well as interactive processes through which ideas are generated and communicated (Hay 2001; Schmidt 2006). The relationship between ideas and discourse is such that discourse is used to legitimize particular ideas. Moreover, ideas are shaped by discourse which, in turn, are shaped by institutions that determine who talks to whom, about what, where and when (Schmidt 2001). Discursive institutionalists understand their "main explanatory task as that of demonstration the causal influence of ideas and discourse" (Schmidt 2009, 23). Discursive institutionalists see "...discourse not only as a set of ideas bringing new rules, values and practices but also as a resource used by entrepreneurial actors to produce and legitimate those ideas" (Schmidt 2005, 12-13). In a way, discursive institutionalism can be seen as part of the "turn" to "argumentative" approaches, which seeks to understand the constitutive role of discourse in politics and policy-making, and conceive of politics

as a "struggle for discursive hegemony" wherein actors attempt to secure support and validity for their position or particular definition of reality (Hajer 1995, 58-59; Fischer and Forester 1993). Concepts such as "epistemic communities" (Haas 1992); "advocacy networks" (Keck and Sikkink 1998); "entrepreneurs" (Finnemore and Sikkink 1998); "advocacy coalitions" (Sabatier and Jenkins-Smith 1993) and "discourse coalitions" (Hajer 1995) have been important to discursive institutionalism.

Because discursive institutionalism seeks to explain the causal influence of ideas (content) and discourse (interactive processes), discursive institutionalism can said to be synonymous with "frame analysis," which generally attempts to uncover the core values, beliefs and positions expressed on a particular issue. Frames are "the broadly shared beliefs, values, and perspectives familiar to the members of a societal culture and likely to endure in that culture over long periods of time, on which individuals and institutions draw in order to give meaning, sense, and normative direction to their thinking and action in policy matters" (Schon and Rein 1994, xiii). Framing serves as a "...process by which someone packages a group of facts to create a story" (Wallack et al. 1993, 68). Frames are part of a larger unit of public discourse called a "package" (Gamson and Lasch 1983; Gamson and Modigliani 1989; Ryan 1991; Winnett 1995). Packages include key frames and "signature elements" – "reasoning" or "framing" devices that describe representations of an issue and define issues in a way that conveys meaning (Chapman and Lupton 1994; Iyengar 1991; Entman 1993; Schon and Rein 1994; Ryan 1991; Wallack and Dorfman 1996; Wallack et al. 1993). Together, the package, key frames and signature elements make up the "framing matrix" or "signature matrix," and it is the analysis of these components that is the crux of framing analysis.

Framing analysis is an attempt to define "what is it that's going on here?"

(Goffman 1974, 25) or "what this issue is really about" (Chapman and Lupton 1994, 12) and has been effective in determining the instrumental role of frames in defining public issues. A wide body of literature has shown that frames can influence individual attitudes and public opinions about an issue (Krosnick and Alwin 1988), but more importantly, that frames can form "the basis by which public policy decisions are made" (Wallack et al. 1993, 68; Nelkin 1987). Frames not only define an issue, they prescribe solutions and a particular course of action: "if we alter the definition of problems, then the response also changes" (Wallack et al. 1993, 82; Ryan 1991; Watzlawick et al. 1974). To this end, frames are strategic instruments in political debate. Chapman and Lupton state it best: "political battles are seldom won only on the elegance of logic or by those who can best assemble rational arguments. These are mere strategies within a wider battlefront. The real issue is which are the overall framings of debates that best succeed in capturing public opinion and political will" (Chapman and Lupton 1994, 125).

Methods of framing analysis have been widely influential in the public health field, signifying the importance of studying health policy frames. To help health practitioners identify and evaluate ways of framing a public policy issue, Charlotte Ryan developed the "framing matrix," which "...characterizes frames by their core positions, metaphors, images, catch phrases, attribution of responsibility for the problem, and the solution implied by the frame" (Siegel and Lotenberg 2007, 255; Ryan 1991). This matrix was adapted from the previous work of Gamson and Lasch (1983), and was further adapted by Ryan and Gamson through work in their Media Research and Action Project (MRAP) for use by public health practitioners to outline and identify frames of

public health policy issues. Winett et al. further adapted these framing matrices into a "framing memo," which lists all potential ways an issue could be framed and then provides a basis for strategic analysis for each frame (Siegel and Lotenberg 2007, 255). The framing memo outlines the "arguments, images, and appeals to widely shared principles that many people use to define and discuss an issue" (Winett 1995, 1) in a matrix, identifying the core position, the metaphor (analogy used in the frame, with which the audience is familiar from another policy issue, catch phrases (phrases use repeatedly to describe the argument), symbols, images (visual images evoked by the argument), the source of the problem (who the frame implies is the source of the problem) and the core values and principles to which the frame's arguments appeal (adapted from Siegel and Lotenberg 2007, 256).

2.2 Methodology

The objective of this thesis is to investigate the role of policy frames in the development of specific policies and programs addressing obesity in British Columbia. To synthesize the link between obesity program design and larger policy frames, this thesis will use Vivian Schmidt's framework on "discursive" institutionalism. This theoretical framework was chosen on the basis that rational choice, historical, sociological, post-structuralist institutionalisms and critical/Marxist perspectives have offered limited consideration for the role of ideas in politics and policy making.

Specifically, these approaches have generally failed to take into account rather critical aspects of frame analysis, including the interactive processes of ideas and discourse e.g., where, when, to whom and by whom discourses are communicated, the 'rhetorical' and 'argumentative' framing of discourse, and "...what regulates the production and

advancement of particular ideas and beliefs," or as Vivian Schmidt reasons, why some discourses "succeed" and others "fail" (Torfing 2007, 2; Schmidt 2008, 307).

This investigation will be twofold: first, this thesis will examine how the issue of obesity is being framed. To do this, I will outline what obesity is, how it is measured, and the causes and health implications associated with obesity. Next, I will conduct a review of obesity literature in North America, and outline in a "framing memo" (Winnett 1995) the different framings of obesity in contemporary discussion and debate. The "framing" of obesity will be studied at two levels: the substantive content of the frame (ideas) and the interactive/communicative processes of the frame (discourse). This thesis will identify the types of ideas, the type of discourse and the level at which these ideas exist in order to identify the substantive content of the frame; in other words, "how obesity is being talked about" (Schmidt 2008, 306-307). This thesis will then examine the interactive processes (context) of how, why, where and why those ideas are being communicated and to whom, as well as the direction of communication (Schmidt 2008, 303, 311). Based on the work of Schmidt, who offers a framework to evaluate why some discourses "succeed" over others, I will argue that the dominant frame or orthodoxy in contemporary obesity debate is the "individualism" frame, which holds individuals responsible for their own body weight. It will be shown that this frame has succeeded because the discourse resonates with what many know or think about obesity, appeals to the appropriateness and certainty of the institutional context (science/medicine), necessitates few structural changes in the social environment and has been endorsed by a larger "discourse coalition."

Chapter 4 will connect this larger framing debate to BC, and will show how BC is not only "tuning" into contemporary obesity debate, but is reproducing the dominant orthodoxy through Government communications. This will be accomplished by conducting a survey of BC Government communications on obesity since 1994, and outlining how the core positions expressed in Government communications support values and beliefs of the dominant "individualism" frame. Next, this thesis will assess how the (dominant) obesity 'frame,' comprised of ideas ("what is said" about obesity) and discourse ("how, why, when, where and to whom" ideas about obesity are being communicated) is impacting program design in BC. To do this, a "framing memo" will be developed in order to assess the core positions of each Government program and the tools and resources offered. It will be shown that Government's framing of obesity as a "healthy living" and "health individualism" construct has shaped obesity program design in BC. Finally, this thesis will discuss the implications dominant obesity framing has had for Government's role in managing obesity as a public health issue. It will be argued that Government has been largely relegated to a resource-based role in obesity, relying on self-serve "nodality" based policy instruments such as "e-health" resources and information campaigns.

CHAPTER 3: FRAMING OBESITY

3.1 Defining Obesity

Overweight and obesity are defined medically as "...a state of increased body weight, more specifically adipose tissue, of sufficient magnitude to produce adverse health consequences" (Spiegelman and Flier 2001, 531). A person is considered overweight when his or her weight is 10 percent above normal weight. A person is considered obese when his or her weight is 20 percent or more above normal weight and a person is considered "morbidly obese" when his or her weight is between 50 and 100 percent above normal weight. While "normal weight" varies among individuals, a Body Mass Index (BMI) range of 18.5 to 24.9 is considered healthy or desirable (Wyatt et al. 2006, 166).

BMI is a crude population measure used to classify weight and evaluate health risks associated with both overweight and obesity (Starky 2005). The World Health Organization (WHO) weight classification system is based on the association between BMI and mortality risk, associating BMI categories with different levels of health risk (WHO 2008; Health Canada 2008). BMI categories and associated cut-off points for BMI were established by analyzing large data sets from both European and USA studies to determine BMI ranges and associated levels of mortality and morbidity (Health Canada 2008). Like the WHO weight classification system, the Canadian body weight classification system uses BMI to determine weight-related health risks (Health Canada

2008). BMI is calculated by dividing a person's weight (in kilograms) by the square of his or her height in meters (kg/m2). BMI can also calculated by multiplying weight (in pounds) by 705, then dividing by height (in inches) twice. For example, the BMI calculation for a person who weighs 68kg and whose height is 1.65m would read:

Example: Weight = 68 kg, Height = 165 cm (1.65 m)

Calculation: $68 \div (1.65)^2 = 24.98$

The WHO defines "overweight" as a BMI equal to or more than 25, and "obesity" as a BMI equal to or more than 30. A BMI of 40 or more indicates a person that is "morbidly obese" (WHO 2008). There are three different classes of "obesity" – Obese Class I, Obese Class II, and Obese Class III. The WHO associates each class with a different level risk - the higher the person's BMI, the greater the chance the individual will develop health problems. These cut-off points are internationally recognized and are used as "cut-off" points in national weight classification systems, including Canada. These cut-off points are a benchmark for individual assessment; however there is evidence that risk of chronic disease in populations increases progressively from a BMI of 21 (WHO 2008). Health Canada outlines the body weight classification for adults as follows:

Table 1: BMI and Associated Level of Health Risk				
	BMI Range	Risk of Developing Health Problems		
Underweight	<18.5	Increased		
Normal weight	18.5 to 24.9	Least		
Overweight	25.0 to 29.9	Increased		
Obese Class I	30.0 to 34.9	High		
Obese Class II	35.0 to 39.9	Very high		
Obese Class III	≥40.0	Extremely high		

Source: Statistics Canada 2005; Health Canada 2008

Often, BMI range is expressed as a weight range, so that individuals can easily identify whether they are overweight or obese. Examples of "healthy" and "at-risk" weight ranges are given below for two individuals:

Table 2: Examples of "Healthy" and "At-Risk" Weight Ranges for Individuals				
	Height 70''/ 1.78m		Height 64"/ 1.63m	
	Weight		Weight	
	(pounds)	(kg)	(pounds)	(kg)
Underweight	128 or less	58.4 or less	107 or less	49.0 or less
Normal weight	129 to 173	58.5 to 79.0	108 to 145	49.1 to 66.2
Overweight	174 to 208	79.1 to 94.8	146 to 174	66.3 to 79.5
Obese Class I	209 to 243	94.9 to 110.7	175 to 203	79.6 to 92.8
Obese Class II	244 to 278	110.8 to 126.5	204 to 232	92.9 to 106.1
Obese Class III	279 and over	126.6 and over	233 and over	106.2 and over

Source: Statistics Canada 2005; Health Canada 2008

The weight classification system above is intended only for adults over the age of 18 years. Currently, there is no definition of overweight and obesity for children that is used consistently internationally, however the International Obesity Task Force is developing a standard weight classification system for children and youth (Cole et al. 2000; Magarey et al. 2001; Starky 2005). Launched in April 2006, the WHO Child Growth Standards include BMI charts for infants and young children up to age 5. However, measuring overweight and obesity in children 5 to 14 remains challenging since there is no standard definition of childhood obesity used worldwide (Cole et al. 2000; Magarey et al. 2001; WHO 2008) In response to growing childhood obesity, the WHO is currently developing an international growth reference to be used for school-age children and adolescents (WHO 2008).

BMI "...provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults" (WHO 2008). BMI is an inexpensive and readily accessible assessment of overweight and obesity on two levels: population and individual. At the population level, BMI can be used to compare body weight patterns and associated health risks within populations and amongst populations to determine population trends in body weight patterns (Health Canada 2008). Specifically, "information derived from the application of the weight classification system can help to guide health policy decisions as well as provide a tool for the evaluation of public health intervention programs" (Health Canada 2008). As such, the weight classification system can have important bearing for public health policy. At the individual level, BMI can be a useful tool for individual benchmark and health assessment; however BMI is not a diagnostic measure.

BMI, alone, is unable to determine whether the excess body weight puts the individual at risk and is not an accurate measure for determining health risks. Therefore, it may still be necessary for a health practitioner to perform more direct measures of body fat such as underwater weighing, bioimpedance analysis or skinfold thickness measurements and evaluations of diet, physical activity and family history (Deurenberg et al. 1998; Wyatt et al. 2006; Aronne 2002). Also, because BMI does not account for body composition or fat distribution, it may not be an accurate predictor of health risk for certain groups. These groups include, youth who have not reached their full height, adults who are very lean and/or muscular, pregnant women and the elderly (Starky 2005; Willett et al. 1999; Dietz and Bellizzi, 1999; Aronne 2002; Douketis et al. 2005). In application, BMI may overestimate body fat in athletes and individuals who have a muscular build,

and my underestimate body fat in older persons and persons who have experienced muscle loss. Therefore, BMI "...should be considered as a rough guide because it may not correspond to the same degree of fatness in different individuals" (WHO 2008).

In general, health practitioners are not only concerned with how much fat mass a person has, but where that fat is stored on their body. For this reason, health practitioners rely on other measures to supplement the BMI, the most common being the Waist Circumference (WC) measure. Research has shown that excess fat in the abdominal region is an independent risk factor for disease (Douketis et al. 2005; Wyatt et al. 2006). Simply put, if an individual carries excess abdominal fat, he or she is more likely to develop obesity-related health problems (especially type 2 diabetes, hypertension or dyslipidemia). Studies have shown that the WC measure is directly associated with abdominal fat and can be used to assess the risks associated with overweight and obesity. For this reason, WC has been included as a standard measure in both the WHO and Canadian weight classification systems. WC is measured at the part of the trunk located midway between the lower coastal margin (bottom of lower rib) and the iliac crest (top of pelvic bone), while the individual is standing upright with his or her feet 25-30 cm/10-12 inches apart (Lemieux et al. 1996; Aronne 2002). Women with a WC of more than 35 inches and men with a WC of more than 40 inches may be at higher risk of obesityrelated health problems than individuals with a lower WC (Janssen et al. 2002; Aronne 2002).

WC is also an important determinant of a person's body shape. Body shape determines how a person carries excess weight and may be an important predictor for

health risk. Individuals who carry excess weight around their abdominal are said to be "apple" shape and individuals who carry excess weight around their hips and buttocks are said to be "pear" shape. Individuals with an "apple" shape are thought to be at greater risk of developing obesity-related health problems than those with a "pear" shape (Ashwell et al. 1985; Lebovitz 2003). Another measure to assess body fat distribution and abdominal fat is the measurement of Waist-to-Hip Ratio (WHR). WHR is the ratio of waist circumference to hip circumference. The WHR is calculated by dividing the waist circumference by the hip circumference. A WHR greater than 0.9 or 1.0 in men and a WHR greater than 0.8 in women indicates an increased risk of weight-related health problems (Reeder et al. 1992, 2010; Soloman and Manson 1997). However, these values are not precise and more research is needed to determine health risks associated with WHR (Soloman and Manson 1997, 1044S). Although the WHR can be a determinant of body fat distribution, the WHO emphasizes the use of the WC to identify individuals and groups at increased risk of obesity-related health problems as a result of excess abdominal fat: "...the WC is a more practical correlate of abdominal fat and is more closely related to health risk than the WHR" (WHO 2008; Health Canada 2008).

Used in combination, BMI, WC and WHR can be valuable measures of individual benchmark and the assessment of obesity-related health risks, however these measures are only part of a comprehensive health assessment of the individual (Douketis et al. 2005; Aronne 2002). Depending on age and other factors, individual health assessment may include an assessment of the presence of other risk factors such as hypertension, dyslipidemia, family history of disease and individual weight history (i.e., patterns of weight gain and/or weight loss). Individual health behaviours such as tobacco use,

alcohol consumption, eating habits, physical activity patterns, and weight-related psychological and social factors are also included in this assessment (Himes and Dietz 1994; Aronne 2002; Douketis et al. 2005).

3.1.1 The Causes of Obesity

It is widely agreed upon that overweight and obesity are caused by an imbalance between energy (i.e., food) consumed by the individual and energy the individual expends (Spiegelman and Flier 2001; Wyatt et al. 2006; Bray and Popkin 1998). Our bodies need calories to sustain levels of physical activity and life, however, to maintain a healthy body weight, individuals must balance caloric intake with energy expenditure (Spiegelman and Flier 2001). Weight gain occurs when an individual consumes more calories than he or she burns. When an individual consumes more calories than his or her body needs, the excess is converted and stored by the body as fat. Overweight and obesity are therefore the result of systematic weight gain over a period of time i.e., when an individual consumes more calories than his or her body burns over time.

Overweight and obesity, however, have many causes and the reason for the imbalance between caloric intake and energy expenditure can vary by individual. There is strong evidence that genetics (Bouchard and Perusse 1993), biology, set-point,³ age, gender, social class (Atrens 1988) and environmental (Beller 1977) and cultural factors all contribute to individual patterns of overweight and obesity:

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³ Set-point theory suggests that individuals have a predetermined or preferred body weight, regulated by a feedback control through metabolic rate adaptations (Harris 1990; Garrow 1987; Bennet and Gurin 1982; Nisbett 1972).mechanism. As such, individuals will revert easily and oppose changes to their natural set-point through metabolic rate adaptations (Harris 1990; Garrow 1987; Bennet and Gurin 1982; Nisbett 1972).

3.1.1.1 Genetic Factors

Research has shown that genetic predisposition may have a role in determining body size as well as increasing a person's susceptibility for weight gain (Wang and Brownell 2005). To date, more than 20 genes have been identified as linked to body fat in humans and chromosomal sites of genes associated with rare familial obesity syndrome have been discovered (Krauss et al. 1998; Wyatt et al. 2006). In the physiological system, the hormone leptin, which is thought to regulate food intake and body weight, has been linked to obesity in human subjects (Friedman 2000, 2004; Moran 1999; Grundy 1998; Kopelman 2000). The beta-adrenergic receptor has also been linked to obesity (Moran 1999). Genes regulating body weight, such as the *Ob* gene, have also been shown to affect appetite, satiety, metabolic rate and physical activity (Chisholm et al. 1998; Kopelman 2000).

Obesity has also been linked to heredity, suggesting the tendency of obesity to run in families. While having obese relatives does not guarantee that an individual will become obese, a study conducted by Paradis et al. found a strong relationship between dietary fat intake and obesity in individuals with familial history of obesity. The relationship is such that an individual's risk of developing obesity is higher if he or she has both a high dietary fat intake and a familial history of obesity (Paradis et al. 2009, 37). Even so, isolating genetic makeup/heredity from social or environmental influences can be difficult, since families share and/or influence diet and lifestyle habits that may contribute to individual overweight and obesity problems.

3.1.1.2 Biologic Factors

The basic biologic causes of obesity are still not fully understood; however research into the role of protein, receptors and neurotransmitters in obesity have made important strides in medicine. Research has shown the role of protein and receptors in regulating energy balance (Wyatt et al. 2006). Krauss et al. have shown that orphan receptors may be responsible for regulating body weight in humans (Krauss et al. 1998; Grundy 1998), and research into orphan receptors has revealed two neurotransmitters (Orexin A and B), which are thought to regulate fasting and feeding. Also, uncoupling proteins (UCP-2 and -3) have been linked to obesity as a result of their effect on metabolic rate (Krauss et al. 1998; Grundy 1998; Wyatt et al. 2006).

3.1.1.3 Environmental Factors

Diet and exercise are commonly linked to individual patterns of overweight and obesity. However, there is growing consensus that individual eating patterns and physical activity levels are not independent of environmental factors. For instance, researchers have documented basic dietary changes or "nutrition transitions" that have resulted from globalization, urbanization and technological advancements (Brody 2002, 1; Popkin & Larsen 2004; Finkelstein et al. 2005; Wyatt et al. 2006; Hill and Peters 1998).

Researchers argue that modernization has replaced "traditional" diets which were rich in fruits and vegetables, high in grains and low in fat, with "Western" diets which are high in calories, sugar, refined grains and fat (Monteiro et al. 1992; Popkin et al. 1995;

Drewnowski and Popkin 1997; Friedman 2000; Fried and Nestle 2002; Wyatt et al. 2006; Hill and Peters 1998). Increased consumption of energy-dense foods has also been explained by availability and convenience. Anderson and Butcher have shown that

children are consuming more "empty calories" as a result of the availability of energydense, high-calorie foods and drinks (e.g., soft drinks) in schools (Anderson and Butcher 2006).

Despite increased consumption of energy-dense foods, physical activity levels are decreasing. Today, more people drive to work than walk or cycle, and children and adults are spending more time in front of the television and computer (Robinson 2001; Anderson and Butcher 2006; Hill and Peters 1998). Researchers readily point to our environment, suggesting that our environment does not encourage healthy lifestyle habits, or as Finlekstein et al. put it, we live in an "obesogenic environment" (Finkelstein et al. 2005).

3.1.1.4 Social Factors

Social determinants of obesity have received little attention in published research and popular media; however, a growing number of scholars are emphasizing the need to contextualize individually-based risks in the social environment (Link and Phelan 1995). It has been shown, for instance, that health inequalities reflect socioeconomic status (Eckersley 2001) and that socioeconomic status and social support are fundamental causes of disease (Link and Phelan 1995). Thus, social conditions, including poverty and lower levels of education, are recognized as contributing to overweight and obesity amongst populations. Scholars have identified a powerful inverse relationship between obesity and socioeconomic status (Wang 2001; Garn et al. 1977; Stunkard and Sorensen 1993). As well, a relationship has been found between education levels and obesity, such that higher education levels are associated with healthier diet and a lower prevalence of

overweight and obesity (Woo et al. 1999). These patterns have been explained by some as the result of social pressures in upper socioeconomic strata to be thin (Grundy 1998). Others have explained these patterns through socio-demographic conditions; for instance, research has shown a link between low socioeconomic status and a high density of fast-food outlets (Reidpath et al. 2002). To this end, researchers have argued that in many low-income areas, high-calorie processed foods often cost less and are more accessible than healthier foods, such as fresh vegetables and fruits (Drewnowski and Darmon 2005; Hill and Peters 1998; Anderson and Butcher 2006). Diminished opportunities for physical activity such as inadequate access to safe recreational facilities, the cost of gym memberships, and fewer physical education programs in these areas have also been cited as contributing to overweight and obesity (Wyatt et al. 2006).

Scholars have also studied these patterns on a macro-scale, examining government, business and larger social forces in the environment as factors that may contribute to the obesity epidemic (Lawrence 2003). Just as the broader global determinants of tobacco consumption (such as trade liberalization, the global marketing of tobacco and smuggling) are emphasized in anti-smoking debates, obesity researchers argue that we must examine collective social, economic, political and cultural structures and changes resulting from globalization and free-market transitions, and the interests involved in maintaining those structures (Sobal 2001). In fact, characteristics of global food systems, including the consolidation of agricultural, food and retail companies into transnational corporations and the large-scale production and marketing of high-energy dense foods, are often cited as contributing to the prevalence of overweight and obesity worldwide (Chopra and Darnton-Hill 2004; Sobal 2001). Analogous to the tobacco

debates in previous decades, scholars suggest the use of similar strategies⁴ to target overconsumption and the global food industry.

Obesity has also been examined as a network phenomenon; Christakis and Fowler (2007) have hypothesized a "person-to-person spread of obesity" as a possible factor contributing to the prevalence of overweight and obesity amongst populations.

3.1.1.5 Cultural Factors

Cultural differences in body size preference and tolerance offer another possible explanation for racial or ethnic variations in the prevalence of obesity (Wyatt et al. 2006; Grundy 1998). In some developing countries, for instance, obesity is a symbol of affluence. In many Western countries, however, obesity is regarded as "undesirable" (Grundy 1998, 567S).

3.1.1.6 Other Causes of Obesity

Certain medical conditions and medications may lead to or are associated with weight gain and obesity, including:⁵

- Hypothyroidism a condition in which the thyroid gland fails to produce enough thyroid hormone, often resulting in lowered metabolic rate and/or loss of vigour;
- Cushing's syndrome a hormonal disorder caused by prolonged exposure of the body's tissues to high levels of the hormone cortisol;

⁴ Many researchers suggest the use of a combination of strategies used in tobacco control, including health warnings, taxes, litigation, school/community programs, exposure of industry practices and marketing strategies, counter marketing, increased awareness of the impact and health effects of obesity, in order to address the obesity epidemic (see especially Chopra and Darnton-Hill 2004, 1559-1560; Mercer et al. 2003).

⁵ Aronne 2002; Barlow and Dietz 1998; Stunkard et al. 2003; Vgontzas et al. 2000; Gambineri et al. 2002; Kokkoris and Pi-Sunyer 2003; Dixon et al. 2003; Allison et al. 1999; Stunkard and Wadden 1992; WHO 2008.

- Pancreatic insulinoma, growth hormone deficiency, and hypothalamic insufficiency may also be associated with obesity;
- Polycystic ovary syndrome (PCOS) a condition characterized by high levels of androgens (male hormone), irregular and/or missed menstrual cycles, and small cysts (fluid-filled sacs) in the ovaries;
- Obstructive sleep apnea (OSA) a sleeping disorder characterized by pauses in breathing during sleeping;
- Psychosocial factors such as depression⁶ a chronic mental disorder where an individual experiences depressed mood, loss of interest and/or pleasure, feelings of guilt and low self-worth, disturbed sleep and appetite patterns, low energy and poor concentration; and
- Certain medications, such as antipsychotics, antidepressants, antiepileptics, insulin and steroids for autoimmune diseases, may have the effect of lowering the rate at which the body burns calories, stimulating appetite, or causing the body to retain excess water.

3.1.2 The Health Risks of Obesity

Health care professionals generally agree that the more excess weight an individual carries, the more likely he or she is to develop obesity-related health problems. Overweight and obesity are both risk factors in a number of chronic diseases, including type 2 diabetes, dyslipidemia, hypertension, coronary heart disease, stroke and cardiovascular disease (Després et al. 2001; Wyatt et al. 2006; Kushner 2003; Klein et al. 2004; Pi-Sunyer 1991; Aronne 2002; Visscher and Seidell 2001; Bray 2004). Obesity is also linked to higher rates of certain types of cancer. Men who are considered obese are more likely than men with a normal body weight to develop colon, rectum or prostate cancer and women who are considered obese are more likely than women with a normal body weight to develop cancer of the endometrium, gallbladder, uterus, cervix, or ovaries (Pi-Sunyer 1991). Esophageal cancer has also been linked to obesity.

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⁶ Little is known about the relationship between obesity and depression i.e., whether obesity causes depression, depression leads to obesity, or some independent factor accounts for both conditions. Antidepressants are known to cause weight gain; however, findings from Dixon et al. support the hypothesis that severe obesity aggravates depression (Dixon et al. 2003).

Other diseases and health problems linked to obesity include:⁷

- Gallbladder disease and gallstones;
- Fatty liver disease (also called non-alcoholic steatohepatitis or NASH);
- Gastroesophageal reflux (GERD);
- Osteoarthritis, a disease in which the joints deteriorate;
- Gout, a disease affecting the joints;
- Abnormalities of pulmonary function, including sleep apnea, which causes a person to stop breathing for a short time during sleep;
- Reproductive and gynecological problems (abnormal menses, impaired fertility); and
- Psychosocial consequences such as anxiety, depression and low selfesteem.

3.2 How is Obesity Being Framed?

The growing prevalence of obesity in North America has fostered media "frenzy" over the causes, effects and solutions of obesity. Despite growing media attention, however, obesity remains a highly contested scientific and social fact. Even though obesity has been an issue of debate in scientific research for decades, the issue of obesity has grown in size and proportion since the WHO declared obesity a "global epidemic" in the 1990s (WHO 2008). From this, a contemporary obesity debate has emerged that responds to the obesity problem: "what kind of problem is obesity, what should be done about it, and by whom?" (Lawrence 2004, 57; Lang and Rayner 2007). At the forefront of this debate are two camps of thought which dominate public discussion of obesity in media and scientific research: the antiobesity camp and the fat acceptance camp. ⁸ Each

⁷ Pi-Sunyen 1991, 1993; Friedman et al. 1966; Rim et al. 1975; Bray 1985, 2004; Kottke et al. 2003; Wyatt et al. 2006; Aronne 2002; Visscher and Seidell 2001; Pasquali et al. 2003.

⁸ Despite evidence of more systemic framings of obesity, such as family frames (Bruch and Touraine 1940; Bruch 1973) or the "family systems model" (Ganley 1986), environmental risk frames (Lawrence 2003) and free-market or "globalization of obesity" frames (Sobal 2001), the antiobesity and fat acceptance frames seem to be the only frames articulated in government policy-making and contemporary obesity debate. The presence of other obesity frames suggests that obesity debate is in fact made up of multiple groups and communities, but raises the question of which "interests" advance some frames over others, and why. This discussion lies outside the scope of this thesis, but is an area that should be investigated in future research.

camp elucidates a framework for the causes, consequences and solutions of obesity, specifying a "policy frame" through which to study and take action on the issue. Within each camp, there are two groups – researchers and activists – which engage in narrative roles and communicate the framework of each camp to policy-makers, industry and/or the general public. Abigail Saguy and Kevin Riley summarize these groups as antiobesity researchers, antiobesity activists, fat acceptance researchers, and fat acceptance activists (Saguy and Riley 2005, 869).

Drawing on the importance of studying "policy frames" in public policy (discussed in Chapter 2), the importance of studying competing obesity frames (and the actors involved in communicating these frames) is clear: obesity framing can educate and influence policy-makers, industry and the general public on issues, can dictate how to think about an issue (and how not to think about an issue), and can determine a specific course of action and/or limit the scope of possible options. In the case of obesity, "understanding competing obesity frames is substantively important not only because of the increasing prioritization of obesity as a health policy issue, but also because, in the case of body weight, medical frames compete with political rights frames" (Saguy and Riley 2005, 871). Understanding that, this section will examine, in detail, competing obesity frames in contemporary debate and public discussion. Following the work of Vivian Schmidt on "discursive institutionalism," this section will identify and examine the "institutional context" within which obesity is framed. In each camp, the "framing" of obesity will be studied at two levels: the substantive content of the frame (ideas) and the interactive/communicative processes of the frame (discourse). In each "frame," the following will be identified:

- a) the ideas and content of each frame i.e., "how obesity is being talked about" (the types of ideas "cognitive" ideas that outline "what is and what to do" and "normative" ideas that dictate "what is good or bad about what is" in light of "what one ought to do" (Schmidt 2008, 306-307);
- b) the "type" of discourse i.e., "rhetorical," "instrumental," "challenging," or "truth-seeking" (Bhatia and Coleman 2003, 719-722).
- c) "coordinative discourse," i.e., who communicates these ideas and to whom (the levels at which ideas and content exist policies (the specific policies or policy solutions proposed by policy makers), programs (the general programs that underpin the policy ideas) and/or public philosophies, defined as worldviews that "..undergird the policies and programs with organizing ideas, values, and principles of knowledge and society" (Schmidt 2008, 306-307);
- d) the direction of communication i.e., "top down," "bottom up" and non-directional (Schmidt 2008, 311); and
- e) the arena/context within which ideas and content are conveyed (e.g., academic/scientific research, activism, media etc.).

3.2.1 The Antiobesity Camp

The antiobesity (AO) camp frames fatness and higher weights as risky behaviours which can result in chronic health problems (Saguy and Riley 2005, 870; Pi-Sunyer 1991, 1993; Must et al. 1999; Hu 2003; Fontaine et al. 2003; Mokdad et al. 2003; Kopelman 2007). Research stemming from this camp often advocates personal responsibility for body weight; in other words, a person's body weight is a matter of personal control and that person has a moral and medical responsibility to manage his or her weight. The AO camp frames obesity as a serious public health problem and/or epidemic with the goal of campaigning public awareness/attention. As part of this campaign, AO researchers and activists call for less social tolerance and more public awareness about the consequences

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⁹ In light of advances in obesity research, however, some AO scholars advance obesity as a multifactorial disease with multiple causes, including individual lifestyle habits (e.g., diet and exercise), genetic factors (see Bouchard and Perusse 1993; Krauss et al. 1998; Wang and Brownell 2005; Wyatt et al. 2006; Friedman 2000, 2004; Moran 1999; Grundy 1998; Kopelman 2000; Chisholm et al. 1998; Paradis et al. 2009), biologic factors (see Wyatt et al. 2006; Krauss et al. 1998; Grundy et al. 1998), cultural factors (see Wyatt et al. 2006; Grundy 1998) and increasingly, social and environmental factors (see Brody 2002; Popkin and Larsen 2004; Finkelstein et al. 2005; Wyatt et al. 2006; Hill and Peters 1998; Monteiro et al. 1992; Popkin et al. 1995; Drewnowski and Popkin 1997; Drewnowski and Darmon 2005; Fried and Nestle 2002; Friedman 2000; Anderson and Butcher 2006; Robinson 2001).

and health implications of obesity (Saguy and Riley 2005, 873; Bray and Macdiarmid 2000; Trent and Ludwig 1999; McIntyre 1998).

AO researchers are researchers who study obesity and argue in their research (very often in public forums) that obesity is a serious health problem/crisis. The dominant view among AO researchers is that overweight and obesity have serious health implications and that the incidence of obesity is increasing at an alarming or "epidemic" rate (Saguy and Riley 2005, 875; Abelson and Kennedy 2004; Prentice and Jebb 1995; Aronne 2002; Ebbeling et al. 2002; Bray 1996; Campbell 2003; Wellman and Friedberg 2002; Wyatt 2003; Strain 1999; Doak et al. 2006; McLellan 2002). AO researchers tend to dominate expert panels on obesity at the National Institutes of Health (NIH), Federal Drug Administration (FDA), and the WHO. AO researchers often participate in organizations that promote more federal funding for obesity research and that advocate the prioritization of obesity as a public health crisis. These include the International Association for the Study of Obesity (IASO), the American Obesity Association (AOA), the International Obesity Task Force (IOTF), the North American Association for the Study of Obesity (NAASO), the Association for the Study of Obesity (ASO) in the UK, the Strategies to Overcome and Prevent (STOP) Obesity Alliance in the US, and the Canadian Obesity Network. AO researchers tend to publish their findings in specialty journals dedicated to obesity, such as the *International Journal of Obesity*, the *International Journal of Pediatric Obesity*, the *Journal of Obesity*, *Obesity*, *Obesity* Reviews, Obesity Research etc., and other medical journals such as the British Medical Journal, the Journal of the American Medical Association and the Canadian Medical Association Journal to raise public awareness and concern over obesity. Books are also a

popular medium among AO researchers, including Robert Pool's (2001) Fat: Fighting the Obesity Epidemic and Francine Kaufman's (2005) Diabesity: The Obesity-Diabetes Epidemic that Threatens America – and What We Must Do to Stop It.

AO activists differ from AO researchers in that they do not conduct primary research; instead, AO activists promote AO research through other mediums. In general, AO activists support the same framework as AO researchers – they argue that obesity is a serious health problem that merits public intervention, private action and increased funding for research (Saguy and Riley 2005, 877). Well-known campaigns by AO activists, such as Eric Schlosser's (2001) Fast Food Nation, Greg Critser's (2003) Fat Land, Morgan Spurlock's (2004) Super-Size Me have relied on popular media to advance public opinion that obesity is a serious health risk (Saguy and Riley 2005, 877). Other AO activists have tried to advance obesity as a serious health problem through the legal system. John Banzhaf, professor of law at George Washington University, has used legal action against fast-food companies for contributing to obesity (Banzhaf 2008). While Banzhaf's activism is consistent with the AO camp in the sense that obesity is presented as a serious health problem, it differs from many AO researchers and activists in the sense that Banzhaf implicates fast-food companies as contributing to obesity. To this end, personal responsibility for food consumption is somewhat absorbed by the food industry and other agents in the social environment, and therefore, Banzhaf can be said to identify more with the "obesity as disease" frame.

AO researchers and activists promote two frames, often in combination, with the goal of communicating obesity to policy-makers, industry and the general public as a

serious health problem caused by personal responsibility and private health behaviours (diet and physical activity): the "obesity as risky behaviour" frame and the "obesity as epidemic" frame.

3.2.1.1 "Obesity as Risky Behaviour" Frame

The "obesity as risky behaviour" frame emphasizes the role of personal control in body weight and health, implying that overweight/obese individuals have unhealthy lifestyles, while thin individuals have adopted healthy eating habits and exercise regularly. This assumption has been criticized by researchers and activists in the fat acceptance (FA) camp as overlooking cases where overweight or obese individuals who are active and make healthy choices, and thin individuals who are sedentary and consume junk food and/or resort to anorexia and bulimia to manage their weight (Goldberg and Ashbee 2006, 2; Aphramor 2005; Burgard and Lyons 1994).

AO researchers often compare the "obesity as risky behaviour" frame to the "risky behaviour frame" used to stop and prevent smoking, attributing individual blame for the failure to modify the "risky behaviour." In general, this frame explains the failure of diets and long-term weight-loss through individual failure: the individual was not committed to long-term weight loss or their diet, the individual refused to make the necessary dietary changes or commit to a physical activity regimen etc. To this end, fatness and the risky behaviours associated with fatness – overeating and inactivity – are considered evidence of preventable illness and "individual failing" (Evans 2006, 262; Throsby 2007; Saguy and Riley 2005). Also, those who adopt this frame see it as their moral responsibility to raise public awareness to and prevent further cases of obesity. As

a result, the "obesity as risky behaviour" frame has been criticized of presenting fatness as a 'sin' or immorality, contributing to the rise in social stigma and discrimination associated with body weight.

3.2.1.2 "Obesity as Epidemic" Frame

Since the 1990s, obesity rates have been framed by AO researchers, AO activists, popular media and government agencies as "epidemic." Many AO researchers feel that the term "epidemic" is appropriate if not necessary to characterize rising obesity levels (Stevens et al. 2006; Mokdad et al. 2001; Kim and Popkin 2006). Others, including FA activist Paul Campos, feel that claims about the "obesity epidemic" are overblown (Campos et al. 2004, 2006; Oliver 2006), arguing that policy makers and popular media use the term as an "emotionally charged metaphor" to guide political action: "these clichéd usages are disembodies but at the same time tied to specific rhetorical and policy goals. The intent is clear enough: to clothe certain undesirable yet blandly tolerated social phenomena in the emotional urgency associated with a 'real' epidemic" (Saguy and Riley 2005, 892).

FA activists give little focus to undermining the "obesity as epidemic" frame, and focus instead on presenting fatness/obesity as a form of natural diversity rather than a serious health risk. For FA scholars, this is most logical: if obesity is not considered a health risk, then the prevalence or "epidemic" rates of obesity is of little consequence. However, FA activists do stress that signalling obesity as an epidemic further stigmatizes fatness and reads as a "...warning of what the entire society will become if the epidemic is allowed to continue" (Saguy and Riley 2005, 893).

3.2.2 The Fat Acceptance Camp

Proponents of the FA camp embrace a "body diversity frame," implying that fatness is a natural and inevitable form of diversity (Saguy and Riley 2005, 870; Jalongo 1999; International Size Acceptance Association; National Association to Advocate Fat Acceptance: Association for Size Diversity and Health). FA scholars contend that concern over obesity is distracting public attention from more important health concerns, such as poor nutrition and sedentary lifestyles. As such, many researchers reject the idea of weight being a priority for public health, arguing instead that individuals should work on improving personal lifestyles with the ultimate goal of improving health (see Aphramor 2005, 321; Campos 2004; Campos et al. 2006; Ernberger and Haskew 1987; Gaesser 1996; Oliver 2005). The FA movement advocates that individuals can be healthy at any size, arguing that "claims about obesity being a health risk are simply overblown" (Saguy and Riley 2005, 870; Campos et al. 2006; Campos 2004; Oliver 2006). In many ways, the FA movement has fostered a "fat pride movement" which encourages individuals to "speak" about fatness or "come out" as fat and strives to reclaim the word "fat," much like the homosexual/gay rights community has claimed the word "gay" (Murray 2005; Saguy and Riley 2005). Increasingly, fatness is associated with beauty in campaigns for "real beauty." FA activists have often used language such as "big is beautiful" and "big beautiful woman" (BBW) to show that body diversity is something to be valued. Not surprisingly, the FA movement calls for less public awareness and intervention in obesity than the AO camp. Instead, the movement calls for diversity training, greater social tolerance/acceptance, and less discrimination on the basis of size/weight (Saguy and Riley 2005, 873). Advocates of the FA paradigm sometimes

emphasize the risks associated with weight-loss treatment; specifically, they argue that individuals who focus on weight-loss often experience cycles of weight loss and weight gain and may be more inclined to turn to risky weight-loss treatments such as starvation diets, weight-loss pills, weight-loss surgery, exercise addiction and eating disorders (Gaesser 2002; Campos 2004; Mussell et al. 2006; Fisher and Drenick 1987; Ogden 1992; Saguy and Riley 2005). FA researchers readily point to societal obsession with weight-loss and social pressures to be thin, encouraging instead "intuitive," mindful eating, where a person responds to internal cues (hunger cues) rather than external cues such as calorie-counting and calorie-restricted diets (Miller and Robison 2006, 56; Bacon et al. 2005; Robison 2005; Smith and Hawks 2006). The FA movement also underscores how negative attitudes and discrimination toward obese individuals as well as inadequate healthcare facilities and equipment compromise the health of individuals struggling with overweight and obesity (Saguy and Riley 2005, 901; Flanagan 1996; Puhl 2009; Puhl & Brownell 2006; Murray 2005; Puhl, Moss-Racusin et al. 2007).

FA researchers are researchers who challenge conventional wisdom that overweight and obesity are serious health risks. Some FA researchers who embrace this perspective also refer to this approach as the Health at Every Size (HAES) model. HAES encourages the adoption of good health habits with the goal of improving health and general well-being, without focusing on weight reduction. The model attempts to replace the traditional question, "how can fat people lose weight?" with "how can people who are large be healthy?" (Spark 2001, 69; Burgard and Lyons 1994; Aphramor 2005). HAES is based on the following principles: good health is the result of physical, mental and social well-being, acceptance and respect for natural diversity of body sizes and shapes (the

HAES model rejects the idea that there is an ideal body shape, size or BMI that individuals should work towards), developing eating habits that honour the body and respond to internal cues of hunger, satiety and appetite, increasing pleasure-based movement and improving physical vitality, individuals are responsible for taking care of their own bodies, and stereotyping and/or discrimination based on appearance and weight is wrong (Spark 2001, 69; Robison 1999, 2005; Lyons and Burgard 2000; Miller and Jacob 2001; Bacon et al. 2005; Ikeda 2000). HAES is advocated by a variety of scholars and networks, including Linda Bacon (Ph.D.), author of *Health at Every Size: The Surprising Truth About Your Weight*; Jon Robison (Ph.D.), adjunct professor at Michigan State University, the *Healthy Weight Network*, *Body Positive*, and the *Health at Every Size Journal*.

The HAES model has also been embraced by the Trans Care Project, a joint initiative of Transcend Transgender Support & Education Society and Vancouver Coastal Health's Transgender Health Program in BC. Trans Care suggests that health information that focuses on losing weight or achieving an ideal weight is "missing the point" – weight does not necessarily translate into a healthy diet and/or physical fitness (Goldberg and Ashbee 2006, 2). People who are overweight can be physically active, follow a healthy diet and be considered in good health i.e., it is possible to be "fat" and "healthy" (Aphramor 2005, 320; Sternhell 1994; Burgard and Lyons 1994). On the other hand, thin people can be unfit, eat a lot of junk food, struggle with anorexia/bulimia or compulsive exercise, or may have other health problems (Goldberg and Ashbee 2006, 2).

FA activists have largely rejected the term "fat," arguing that the term stigmatizes fatness. These activists tend to promote fat acceptance in the political arena, contending that weight should be a political, rather than medical, issue (Saguy and Riley 2005, 877). Often, FA activists belong to or participate in FA organizations that work to improve rights for fat people. One such organization is the National Association to Advance Fat Acceptance (NAAFA), a "non-profit human rights organization dedicated to improving the quality of life for fat people" (NAAFA 2008). The NAAFA works against discrimination in the healthcare setting, workplace, education setting and speaks out about discrimination in advertising and popular media. The NAAFA also works to reduce weight-related stigma by advocating and raising awareness about the FA/HAES model (NAAFA 2008). The International Size Acceptance Association (ISAA), The Council on Size and Weight Discrimination and the Association for Size Diversity and Health are examples of other FA organizations.

In the political rights arena, the "one person, one fare" ruling in Canada represents a victory for the FA movement. In November 2008, the Supreme Court of Canada upheld a regulatory ruling requiring all Canadian airline carriers (Air Canada, West Jet etc.) to offer the "one person, one fare" policy, which permits an extra seat to certain disabled people and individuals who are disabled as a result of obesity (CBC News 2008).

Although some controversy surrounds what constitutes disability as a result of obesity, airlines are encouraged to develop process to assess eligibility. Canada is the first country in the world to have adopted a policy like this. Rebecca Puhl (Ph.D.) of the Rudd Center for Food Policy and Obesity (RCFPO) comments: "I applaud the Canadians in their efforts to make travel more accessible to those who face obstacles because of their size or

disability. Hopefully the American airline industry will take notice of the philosophy of our neighbors in the North and implement similar policies" (RCFPO 2008).

In general, FA researchers and activists promote two frames, with the goal of challenging conventional wisdom about obesity. The first frame, "fatness as body diversity," understands obesity as a natural form of identity and diversity. The second frame, "obesity as disease," challenges conventional wisdom that individuals are responsible for their body weight, elucidating genetic, biologic and social and environmental determinants of obesity.

3.2.2.1 "Fatness as Body Diversity" Frame

The "fatness as body diversity" frame maintains that body size and shape is a form of diversity. In this way, fatness is compared to other "immutable forms of identity" such as race, gender and disability (Saguy and Riley 2005, 882). Bennet and Gurin argue, "being fat…is a biological fact of life, an aspect of the human species' inherent variability" (Bennet and Gurin 1982, 4; extracted from Saguy and Riley 2005). Thus, researchers argue that elucidating the health risks associated with obesity may serve only to worsen stigma and discrimination toward obese individuals (Saguy and Riley 2005, 883). AO researchers and activists undercut claims about body diversity and widely reject the idea that an individual can be "fit-but-fat" or "fat and healthy," citing studies that show that excess weight puts an individual at serious risk for obesity-related diseases.

3.2.2.2 "Obesity as Disease" Frame

Within recent, there has been a move to assert "...obesity as a disease in its own right rather than as a risk for other illnesses" (Saguy and Riley 2005, 889). This move has been substantiated by research that suggests there may be genetic, biologic, social, cultural and environmental determinants of obesity and has been of particular interest to some FA scholars. Since 'disease' is often thought to be outside of individual control, many FA scholars downplay the role of personal responsibility in obesity (emphasizing instead the genetic, biologic, cultural, and increasingly, the social and environmental factors 10 that contribute to obesity) and advocate funding, tax breaks, and/or medical coverage for weight-loss treatments and surgery. FA scholars, however, are mindful that framing obesity as a disease also suggests that individuals struggling with overweight and obesity should seek medical treatment, despite the risk or probability of success. In other words, framing obesity as a disease implies biological flaw and/or "...the obligation of the sick person to get well" (Saguy and Riley 2005, 891). In this way, the "obesity as disease" frame is rather antithetical to the HAES model promoted by many FA scholars (Saguy and Riley 2005, 891).

3.3 The Politics of Obesity

The shared beliefs and values of and the interactions between societal, institutional and state actors have been characterized by scholars as "subgovernment," (de Haven-Smith and Van Horn 1984), "issue networks" (Heclo 1978), "iron triangles" (Cater 1964), "discourse communities" (Chilton 2002), "policy communities," (Pross

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¹⁰ See "Causes of Obesity." pg. 21-26.

1986; Homeshaw 1995; Atkinson and Coleman 1992) "policy networks," (Rhodes and Marsh 1992; de Bruijn 1995, 2000) "advocacy networks," (Keck and Sikkink 1998) "epistemic communities," (Haas 1992; Alder and Haas 1992; Sundstrom 2000), "discourse coalitions" (Hajer 1993, 1995) and "advocacy coalitions" (Sabatier and Jenkins-Smith 1993). The shared beliefs and values of and the interactions among actors in both the AO camp and the FA camp are perhaps best captured by what Peter Haas terms "epistemic communities." Both camps – the AO camp and the FA camp – entail a broad network of knowledge-based experts and groups that have authoritative claim to and policy-relevant knowledge within the domain of obesity (Haas 1992, 3). Experts and groups stemming from each camp vary in their background and discipline, however, each community shares a common commitment to set of normative and principled beliefs, causal beliefs, notions of validity and a common policy enterprise which form a basic "core belief" structure (Haas 1992, 3; Sabatier and Jenkins-Smith 1993, 112; see **Appendix A).** And while professionals and groups within each community somewhat differ in or diverge from their commitments to the "core belief" structure, this structure can be said to operate as an argumentative "storyline" which unites actors and offers a platform to persuade policy-makers of a particular policy direction (Hajer 1995, 13). For each community, the "core belief" structure can be expressed in terms of cognitive and normative ideas.

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¹¹ The concept of "epistemic communities" was chosen on the basis that it captures the essence of unity and coherence within each community but is still a loose enough concept to explain overlap between the AOC and the FAC (that is, experts and groups that find common ground in either community or do not fit exclusively in one community or the other) and can account for the differences within each community. In particular, it can explain the epistemic divisions between those who uphold a "fatness as diversity" frame and those who maintain obesity as a "disease" in its own right in the fat acceptance community.

Each community contains identifiable cognitive ("what is and what to do") and normative ("what is good or bad about what is" in light of "what one ought to do") ideas. The cognitive ideas of the antiobesity community (AOC) can be summarized as this: obesity is a serious health problem/epidemic that is caused by private health behaviours, such as overeating and limited physical activity. In this view, individuals have a medical and moral responsibility to reduce body weight and improve their own health, however, the general public should be made more aware of the health implications associated with obesity, and should express less tolerance for fatness. In contrast, the cognitive ideas of the fat acceptance community (FAC) can be summarized as this: fatness is an "immutable" identity and a natural and inevitable form of diversity, and therefore, obesity should not be the target of public awareness and intervention. While individuals are ultimately responsible for their personal health, fat or obese individuals should work towards improving overall health rather than focus on weight-loss or weight reduction. The cognitive ideas presented in the "obesity as disease" frame somewhat differ from the FAC. In this frame, obesity is advanced as a disease that is the result of biologic, genetic and larger social or environmental factors (such as food industry practices, media advertising) and is, therefore, largely outside of personal control.

The normative ideas of the AOC can be expressed in terms of pros and cons. One pro is the goal of reducing ill-health through weight-loss, which can be considered a benefit on both the individual level and the population health level. Another pro is the emphasis the community puts on individual responsibility for the causes and solutions of obesity. To this end, individuals are seen as the primary agents for change/modification, requiring little or no structural changes in industrial practices, government and the

environment. This has been cited as a pro insofar that obesity-prevention strategies are relegated to the individual and are thus cost-effective and do not require oversight. A pro specific to the "obesity as epidemic" frame might be that it communicates the severity/seriousness of obesity and the "urgency" with which policy-makers need to take action. As such, the "obesity as epidemic" frame may encourage more public awareness and necessitate "immediate action" from policy-makers. The cons of this frame have been summarized by the FAC as an insult to identity and diversity; namely, emphasis on weight-loss and weight reduction supports the popular perception that "thinness" is ideal. As well, the over exaggeration of obesity and associated health risks in media and literature has been cited as a con insofar that it stigmatizes fatness, associates obese individuals with sinful/shameful private behaviours, and creates opportunities for discrimination based on body weight.

The normative ideas of the FAC can also be expressed in terms of pros and cons. One pro of the FAC is its deconstructive framework, which aims to challenge conventional notions and public perceptions about obesity. As a result, the model advocates greater social tolerance and acceptance for fatness, and encourages the public to question socially constructed ideals of weight and beauty. Within the "obesity as disease" frame specifically, the appeal to biology, genetics and larger social and environmental factors has been cited as a pro to the end that including these factors as causes of and/or potential solutions to obesity absolves the individual of absolute responsibility and, more importantly, blame for their condition. This may have the effect of reducing negative attitudes toward overweight or obese individuals. Also, framing

obesity as a 'disease' may effectively communicate the severity and seriousness of carrying excess weight.

The cons of the FAC have been summarized by the AOC as neglecting both the severity of obesity and the role of the individual in obesity. Specifically, AO researchers argue that denying the health risks associated with obesity suggests that fat bodies are healthy i.e., that an individual can be "fit-but-fat" or "fat but healthy." AO researchers cite hundreds of scientific studies and research that counter the "fat but healthy" paradigm, and clearly document the health risks associated with excess body weight. AO researchers argue that neglecting this information is a fatal error with severe implications for individual and public health. AO researchers have also identified cons specific to the "obesity as disease" frame. One such con is the idea that framing obesity as a 'disease' outside of personal control relinquishes individuals of personal blame and responsibility for their condition. While many AO researchers recognize that obesity is a complex problem caused by interrelated factors (biology, genetics, environment, personal lifestyle etc.), it is generally agreed that neglecting the role of personal responsibility in obesity creates an environment where obese individuals might focus more on "who is to blame" rather than improving their health. This "shift in responsibility" explains the dramatic rise in lawsuits brought against fast-food companies by individuals who claim the company's food contributed to their obesity, for instance, two obese teenage girls who waged a lawsuit against a McDonald's chain in New York (Fox News 2002). AO researchers and activists argue that this shift is problematic since it tells individuals that they should not be held responsible for their condition. Also, diminishing the role of personal responsibility in obesity can lead to public health interventions that are costly e.g., tax

breaks and medical coverage for weight-loss treatments and surgery, and, therefore, simply unrealistic for the number of individuals who are considered overweight or obese. A final con of the FAC is expressed as inconsistencies of argument. Some FA researchers (not isolated to the "obesity as disease" frame) often present obesity as a 'disease,' emphasizing the genetic and biological causes of obesity. Framing obesity in this way communicates obesity as a "health problem" over which individuals have little control. At the same time, FA researchers promote fat as diversity, and "personal responsibility" for overall health. It might be said that the FAC contradicts itself in two ways: first, by communicating obesity as a 'disease,' the FAC implies that obesity is something that is "abnormal" and needs to be medically treated, which directly contradicts the FA argument that "fatness is diversity." Simply put, it cannot be argued that obesity is both a 'disease' and a form of diversity. Another contradiction becomes apparent in the way the FAC perceives individual responsibility in obesity: FA researchers emphasize that obesity is caused by genetic, biologic and social/environmental factors that are outside of personal control, yet simultaneously argue through the HAES/size acceptance model that individuals are responsible for their overall health. If it is true, as AO researchers suggest, that "weight" and "health" are interrelated (i.e., that excess weight puts an individual at risk for health problems), then "personal responsibility" for "overall health" includes "personal responsibility" for "overweight" and "obesity."

Analyzing the content of a frame also involves understanding the "type" of discourse that is being studied. Bhatia and Coleman (2003) outline four ideal "types" of discourse: rhetorical, instrumental, challenging and truth-seeking. The cognitive and normative values of AO discourse suggest that it is a "rhetorical" discourse: a discourse

that is "...used to reinforce and to further institutionalize a dominant policy frame" (Bhatia and Coleman 2003, 719). To this end, the language used in AO discourse is "authoritative," relies on exhortation to support the dominant frame, and validates "establishes beliefs and strengthens the authority structure of the polity or organization in which it is used" (Bhatia and Coleman 2003, 719). In contrast, FA discourse can be understood as "challenging" insofar that it is "...directed outward, seeking to persuade more diverse audiences both to think differently about policy and to switch allegiances to those proposing new ideas" (Bhatia and Coleman 2003, 719). FA discourse might also be characterized as "challenging" since "disagreements centre on which facts are accurate, which ones are relevant and how a given set of facts ought to be interpreted" (Bhatia and Coleman 2003, 719).

"Coordinative discourse," i.e., who communicates ideas (cognitive and normative) and to whom, is also important in frame analysis. The role of researchers and activists in promoting specific obesity frames does not vary greatly among the two communities. Generally, researchers speak to and try to influence government, industry, policy-makers, other researchers, and the general public. Common venues for researchers include academia (ideas are conveyed through scientific/specialty journals, books, conferences etc.), organizations that educate the public through scholarship and membership, and expert panels/special committees that debate and research obesity. Activists, on the other hand, speak to and try to influence the general public. Common venues for activists include popular media (ideas are conveyed through news, newspapers, magazines, videos/documentaries etc.), and non-profit organizations, which educate the general public through scholarship, membership and activism. Notable

exceptions are FA activists, who often operate in the political and legal arenas (for instance, the NAAFA) fighting for political rights and social justice for obese individuals.

The direction of communication is also important to consider. Schmidt (2008) classifies communicative direction into three categories: "top down" (discourse extends from policy-makers to the general public), "bottom-up" (discourse extends from the general public to policy-makers), and non-directional (there is no apparent direction in discourse). Discourse (understood as ideas and the ways in which ideas are conveyed) takes on a different form depending on whether the person is a researcher or an activist. Because the obesity debate is often framed and discussed in medical and/or scientific language, discourse among researchers can be classified as "top down," though not in the strict sense that Schmidt outlines. Discourse among researchers can be understood as "top down" in the sense that researchers conduct primary research/studies, which educate industry, government, media and the general public. Although government conducts research and studies of its own (through special committees, commissions, task forces etc.), when it comes to obesity, government largely relies on scientific debate/studies generated by researchers, and to a lesser extent activists. As such, researchers can be understood as the primary agents of debate/discussion and issue-framing in that they distribute information to other political and non-political actors. Appealing to a strict sense of Schmidt's definition of communicative discourse that is "bottom up" (discourse that extends from civil society to policy-makers), obesity discourse is, for the most part, "bottom up." This is evidenced by the reliance of government on other actors in civil society (mostly scientific researchers) to not only generate information about obesity, but to "set the agenda" as well.

Discourse among activists can also be viewed as "top down" in the sense that activists try to educate and influence the larger population; however, a key difference between researchers and activists is that activists tend to appeal to the general population rather than industry, government and other institutions. As such, activists often rely on discourse that frames the issue in simple/non-scientific terms, so that the general public can understand and better respond to the issues. Though, discourse among activists tends to occur largely "bottom up." This is because activists rely in large part on membership in and support of non-profit or private organizations. In other words, activists often rely on "grassroots" debate and/or activism stemming from the general public. Although much more subtle, the same reliance could be said to exist when activists appeal to popular media; activists rely on the general public to promote and "carry" ideas expressed in newscasts, documentaries, movies, magazines and books to social networks e.g., community, family and friends.

Both communities appeal to public philosophies i.e., worldviews that "...undergird the policies and programs with organizing ideas, values, and principles of knowledge and society," that translate into specific policies and programs (Schmidt 2008, 306-307). The AOC promotes a public philosophy of health individualism; in other words, individuals are responsible for their own health. As such, the AOC tends to support obesity-related strategies (policies and programs) that encourage individuals to adopt a healthy lifestyle e.g., eating well and exercising regularly. Generally, these policies and programs rely on individuals as the agents for change and diet modification, and involve little or no direct intervention from government. In other words, government's role in obesity-related strategies is generally limited to the distribution of

information, and programs that encourage individuals to eat healthy and exercise. The FAC tends to appeal to a public philosophy of social tolerance and acceptance ("let be"), supporting even less government intervention than AO initiatives. Thus, FA policies and programs might be relegated to non-profit organizations and social support networks (such as family, friends etc.), which educate individuals on ways to improve and maintain good health, without emphasizing weight-loss. Though, like the AOC, FA policies hold the individual accountable for his or her overall personal health. FA policies and programs also take the form of social justice organizations that fight for the political rights and social justice of obese individuals. The "obesity as disease" frame, on the other hand, upholds a public philosophy of "right to health" and "responsibility to help." Because the "obesity as disease" frame maintains that obesity is outside of personal control, policies and programs stemming from this framework might identify biologic, genetic, social and environmental factors that contribute to obesity and call for structural changes in industrial practices, government and environment. Understanding that obesity is not under personal control, policies and programs in this frame might translate into a government that has a "responsibility to help" overweight and obese individuals through public funding, tax breaks, and medical coverage for weight-loss treatment and surgery.

3.4 The Struggle for Obesity Framing

As with most public health issues, competing influences (identified in this thesis as epistemic communities) are engaged in a struggle for control over obesity framing. This struggle has largely revolved around "who is responsible for causing and fixing the problem" (Kim and Willis 2007, 359). In both communities, researchers and activists

attempt to undermine the claims of their opponents on the basis of science, academic prestige and conflict of interest.

Researchers in the AOC readily question the academic standing and/or the "science" behind research stemming from the FA camp. AO researchers cite the academic prestige of researchers, and the number of articles published that support scientific claims that obesity is associated with health risks, as evidence that obesity is a serious health problem (Saguy and Riley 2005, 902; Strain 1999). Also, AO researchers often criticize FA researchers/activists as having no medical training or credentials, and denounce FA activists as lacking advanced degrees. In fact, this is common of "rhetorical" discourses, which "... attempt to label supporters or opponents based on their merit, competence or other characteristics" (Bhatia and Coleman 2003, 719). Wellknown AO researcher, Michael Fumento, author of *The Fat of the Land*, denounces the "fit-but-fat" theory that Paul Campos presents in his book (*The Obesity Myth*): "Campos knows he's swimming against a tsunami of peer-reviewed medical literature and has no health background" (Fumento 2008). FA researchers and activists, on the other hand, attempt to deconstruct conventional "science" and often emphasize the importance of narrative, using personal experiences of weight-loss and prejudice as an alternate source of expertise (Murray 2005b, 157; Evans 2006, 260; Saguy and Riley 2005, 902). FA researchers emphasize the conflict of interest stemming from the AOC, arguing that AO researchers often receive funding and research grants from pharmaceutical companies, run weight-loss clinics (such as the Dr. Bernstein Clinic or HCG Medical) and advise the weight-loss industry. In turn, AO researchers reveal a more subtle, but nonetheless important conflict of interest in the FAC: many AO researchers point to the physical

bodies of individuals in the FAC (many of which AO researchers claim are either overweight or obese) as evidence that denying the health risks associated with obesity is an "excuse" for personal fatness and unhealthy lifestyle (Saguy and Riley 2005, 902).

3.4.1 "Individualism" as Dominant Obesity Orthodoxy

In contemporary obesity debate, "...fat acceptance research has been less influential than antiobesity research" (Saguy and Riley 2005, 879). Moreover, the dominance or hegemony of the "risky behaviour" frame (herein referred to as the "individualism" frame) promoted by AO research has been well-established in obesity literature (see Aphramor 2005; Brownell 2005; Murray 2005; Saguy and Riley 2005; Throsby 2007; Gard and Wright 2001; Oliver and Lee 2005; Lawrence 2004; and Saguy and Almeling 2008). Saguy and Riley (2005) note: the "...risky behaviour framing dominates antiobesity literature...especially in discussions of remedies for obesity" (884). This begs the question, why has AO research, in particular the "individualism" frame, succeeded as a discourse? For this discussion, we turn to the works of Vivian Schmidt, who takes up "why discourse matters" (Schmidt 2001) and offers a comprehensive explanation of why some discourses "succeed" and others "fail" (Schmidt 2008, 307). Schmidt argues that the ideational success of a discourse can be attributed to a number of factors, including relevance to the issues at hand, adequacy, applicability, appropriateness, and resonance (Schmidt 2008, 311-312). According to Schmidt, the credibility of a discourse is enhanced by coherence and consistency across policy sectors. As well, the success of a discourse is contingent on the formal institutional context within which it appears (Schmidt 2008, 312). Together with Maarten Hajer's work on "discourse coalitions," Schmidt's work will be used to explain why AO research and the "individualism" frame have been dominant in contemporary obesity debate.

Hegemony of the "individualism" frame in obesity discourse might be explained by the fact that the normative and cognitive content expressed by each discourse underpins the common "philosophy" or "worldview" that people are responsible for their own health. This is consistent with the idea that health individualism has long been the dominant model when it comes to food and fitness (Frameworks, 1). Despite evidence that recognizes obesity as a "multifactorial disease." (Paradis et al. 2009, 37; Lyznicki 2001) the public perception is that individuals have a personal responsibility to make healthy choices, and that these choices impact the individual: people choose to smoke; people choose to eat healthy (or not eat healthy); people choose to be active (or sedentary); and people choose to be overweight or obese. In other words, people believe that "it's up to you to be healthy, and, if you're not, you may suffer the consequences" (Frameworks, 1). Lawrence argues that the most conventional way of thinking about obesity is the "individual" frame (Lawrence 2004, 62). In other words, the "individualism" frame upholds the "dominant orthodoxy" (collective ideas and beliefs) in society (Legro 2000, 420). Oliver and Lee have confirmed these findings in a 2001 study which examined public attitudes on obesity and obesity-targeted policies in the United States. Oliver and Lee found that "most Americans viewed obesity primarily as a case of individual moral failure rather than the result of the food environment" (Oliver and Lee 2005, 925). The most commonly cited explanation for obesity in this study was "lack of individual willpower" to diet or exercise, an explanation supported by 65 percent of respondents (Oliver and Lee 2005, 933). Although some researchers reject these findings

on the basis that more recent data needs to be surveyed (Brownell 2005, 956), it can be said that the "individualism" frame and AO research in general "resonate" with the core "...values of individualism and limited government that define [North American] political culture" (Lawrence 2004, 58).

The "individualism" frame also "resonates" with other public health issues such as smoking, ¹² drinking alcohol or doing drugs, which are founded on similar belief that individuals can be held responsible for "risky behaviours." In fact, framing obesity as a "lifestyle disease" (Gard and Wright 2001, 535-536) has strong parallels with personal behaviour theories of illness, which have long been the dominant models in healthcare, suggesting that the "ideational setting" in public healthcare emphasizes personal responsibility and control over health (Schmidt 2008, 313). To this end, it can be argued that the dominant "individualism" obesity frame is consistent across policy sectors, and it "makes sense" within this particular "ideational setting." Also, it can be said that the frame is "patterned" in such a way that the frame is "...following rules and expressing ideas that are socially constructed and historically transmitted," i.e., it reiterates what we already know or think about these types of health issues (Schmidt 2008, 313). This supports the findings of Oliver and Lee that suggest that people tend to apply "attitudinal frameworks" of smoking to obesity (Oliver and Lee 2005, 942).

The "individualism" frame has also been perpetuated by policy-makers in the public health field. The introduction of the Personal Responsibility in Food Consumption

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¹² According to Richard Daynard, obesity and tobacco share common elements of "false consciousness," (smoking or obesity is the result of consumer's choices) as well as a "...powerful industry whose interests are best served if consumers smoke/overeat..." (Daynard 2004, 295).

Act (otherwise known as the "Cheeseburger Bill") in the United States suggests that the "individualism" frame has, to some degree, become "institutionalized" in public policy. The Act, introduced in 2004, bans lawsuits against the food industry for contributing to individual obesity (BBC News 2005). The Act was supported on the basis that, "…consumers have to realize they cannot blame others for the consequences of their actions" (BBC News 2005). However, the relationship between "ideas" and "policy" is not clear in this instance i.e., whether "public ideas" about obesity have influenced policy-makers (Yishai 1993) or whether policy-makers have influenced "public ideas" about obesity through "interests."

The popularity of AO research and the "individualism" frame might be the result of how the obesity debate is talked about; because "...body weight is generally discussed in medical (as opposed to political, sociological, or legal) terms, medical doctors have an automatic advantage in credibility struggles" (Saguy and Riley 2005, 903). In large part, the fat acceptance movement has been with resistance from "...medical researchers who argue that what they claim to be a largely immutable identity (fatness) is actually a preventable health risk (obesity)" (Saguy and Riley 2005, 878). The "medicalization" of obesity has forced the FA perspective into "scientific debates" over obesity, where medical claims have been used by AO researchers to undercut political and social justice claims made by the fat acceptance camp (Saguy and Riley 2005, 878; Evans 2006; Gard and Wright 2005; Sobal 1995). The fact that obesity debate occurs primarily in the scientific "institutional context," credits AO discourse in two ways: first, the formal "institutional context" within which debate is exchanged grants "credibility" to "science," data (particularly in terms of measuring obesity and determining the associated health

risks)¹³ and "scientific knowledge" about obesity, and therefore automatically credits AO research/frames that rely on science, data and scientific knowledge of obesity (Schmidt 2008, 312). Second, the "institutional context" within which obesity is debate also lends credibility to those with relevant training or credentials and discredits those who do not. This enables AO researchers to secure confidence and "trust" in their position (Hajer 1995, 59). It can thus be argued that not only does AO discourse "makes sense" within the scientific "ideational setting" (Schmidt 2008, 313), but AO discourse, which relies on the "persuasive power" of "medical narrative," can use this institutional context to persuade others of the necessity and appropriateness of a particular course of action (Murray 2005, 111; Schmidt 2008, 312). In turn, this explains why fat acceptance discourse, which often relies on personal experience and qualitative studies, is infrequently published in leading medical journals: the discourse is mal-aligned with the formal "institutional context" (science) and ideas are exposed as lacking credibility and science. This further explains why many FA researchers are criticized for their lack of advanced degrees, lack of medical training and reliance on personal experiences and knowledge about obesity.

Similarly, there is an assumption in public health, perhaps stemming from enlightenment thinking, that science is trustworthy and based on "truth," certainty and fact: "...science provides clear answers to guide personal and public health policy"

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¹³ To a certain extent, scientific and health measures of obesity have strengthened antiobesity discourse since they define obesity as both a "health risk" and a quantifiable condition. These measures also strengthen antiobesity discourse since they determine the percentage of the population that is considered "at-risk" (Kuczmarski and Flegal 2000), which can be used to draw attention to a problem and initiate public action. The fact that these measures (see "Defining Obesity," pg. 15-21), particularly BMI, constitute international "standards" and have been endorsed by global and national institutions (such as the WHO and Health Canada) suggests that antiobesity discourse has been somewhat institutionalized (Kuczmarski and Flegal 2000).

(Schettler 1999, 1). The hegemony of AO research, then, might be explained by the fact that it is a discourse of "conviction" and "certainty": "...the construction of certainty around weight, exercise and health conceals a desire to be certain about the human body; to see it as quantifiable and controllable" (Gard and Wright 2001, 546; Evans 2006). This implies that AO discourse seeks to "erase uncertainty," with a clear problem definition, associated costs, and a strategic policy direction (Gard and Wright 2001, 546). In other words, framing obesity as a "risk" implies that it is manageable (Gard and Wright 2001, 538). In contrast, FA discourse is much more "deconstructive" in its approach; it seeks "denaturalize" or "debunk" the "certainty" of scientific claims about obesity as well as highlight the social production of fatness as ill health (Murray, 157; Evans 2006, 259; Warin 2008, 98). The construction of "certainty" is particularly important because of the way obesity is often talked about. Obesity is discussed through scientific measures (such as BMI and WC), which presents obesity as a condition that can be quantified and modified. Also, obesity is often cited as causing a number of economic and social costs to society, particularly for the healthcare system. As a result, if the science on which the "individualism" frame is based is sound, then the frame might offer an effective way of reducing growing health care costs and rising obesity rates (Saguy and Riley 2005, 887). In this way, the scientific "certainty" expressed by this frame translates into a framework that might appear "more adequate to the task" or more "attractive or necessary" (Schmidt 2008, 307; Hajer 1995, 59).

Another explanation for why the "risky behaviour" frame dominates the obesity debate might be that it emphasizes personal control over illness as opposed to requiring more substantive changes in industrial practices, the economy and government (Saguy

and Riley 2005, 887). Characterizing physical activity and eating as private behaviours rather than public health behaviours puts onus on the individual to modify behaviour (Brownell 2005, 961). If obesity is framed as a private issue, "...it stands to reason that little should be done beyond minor efforts to persuade people to be responsible" (Brownell 2005, 961). In other words, the only change that is required stems from the individual. This approach might be more favourable for governments because it requires few structural changes (delimiting the role of government intervention and associated costs), instead, relying on the individual as the locus for change.

Finally, the dominance of the "individualism" frame might be explained by the extent to which it has become "institutionalized" in the social environment. It has been shown that "individualism" framing has largely penetrated public perception and to some extent policy-making, but how has obesity been represented in popular media? Roy et al. argue that media has been a powerful social force in obesity framing (Roy et al. 2007, 576; Kim and Willis 2007). In fact, media has tended to predominantly report "alarmist" and "individual-blaming" science of obesity, which scholars argue perpetuates dominant "individualism" framing (Saguy and Almeling 2008, 67; Bonfiglioni and King 2007; Rich and Evans 2005). As a result, it can be said that, together, popular media, actors within the AOC and (to a lesser extent) policy-makers, form a "discourse coalition" – a "group of actors that...shares the usage of a particular set of storyline..." (Hajer 2008, 1995). According to Hajer, discourse coalitions develop and sustain a particular discourse - a particular way of thinking about and talking about an issue (Hajer 1995, 13). The formation of a "discourse coalition" has strengthened the antiobesity community in an important way: social actors (especially powerful social actors) that reproduce a shared

"storyline" in different social settings offers coherence/consistency and reinforces dominant ideas about obesity. While a "discourse coalition" can exist outside of an epistemic community, it seems to take on more attributes of a "coalition" when it exists within a community that shares a core belief structure and a common policy direction. In contemporary obesity debate, the existence of a "discourse coalition" appears to be evident only in the antiobesity community, where larger social actors and institutions (including policy-makers, popular media, medical practitioners, and the research community) have joined to advance a particular set of ideas and beliefs about obesity and translate those ideas and beliefs into governmental policy. While the fat acceptance community shares common belief structures and policy directions that form a "discourse," this discourse has been unable to penetrate institutions or agencies beyond the fat acceptance community. In fact, much of fat acceptance research is ignored in governmental policy-making, published literature and popular media. This has the effect of "naturalizing" or "normalizing" the dominant "individualism" frame and reproducing it as "given" knowledge (Aphramor 2005, 325; Gard and Wright 2001, 539-540).

The "individualism" frame has become so "naturalized" in public perception, some scholars argue, that it offers grounds upon which people can make moral assumptions about individuals who are overweight or obese: fatness "speaks of gluttony, lack of self-discipline, hedonism, self-indulgence, while a slim body signifies a high level of control, an ability to transcend the desires of the flesh" (Lupton 1996, 16). The perseverance of this frame in news and media, policy and popular perception has sparked an entire body of literature examining negative weight-related attitudes towards individuals who are overweight or obese, or "weight stigma," (see Puhl and Brownell

2006; Puhl 2009; Jutel 2005; Maclean et al. 2009; Puhl et al., 2007; Murray 2005b; Flanagan 1996; DeJong 1980; Anesbury and Tiggeman 2000) and unfair or unequal treatment as a result of body weight, or "weight discrimination" (see Flanagan 1996; Andreyeva et al. 2008; Puhl 2009; Roehling 1999, 2002; Puhl and Brownell 2001).

This Chapter has shown that obesity framing has been largely determined by AO research which communicates obesity as a serious public health challenge. This frame holds individuals "personally responsible" for body weight, implicating private health behaviours (such as overeating and physical inactivity) as major contributors to obesity. Increasingly, this frame has relied on the "obesity as epidemic" frame as a means to garner public awareness and elevate the need for public intervention, which has led some to question how this frame will translate into specific government policies and programs.

Chapter 4 will examine, in detail, how this obesity frame has impacted obesity program design in British Columbia. Analyzing specific government policies and programs in BC, this Chapter will argue that BC policies and programs targeting obesity have been shaped by the dominant "health individualism" obesity frame. It will be argued that obesity program design in BC reflects "individual responsibility" for body weight, and relies on individuals as the primary agents of change. Furthermore, it will be shown that Government has traditionally taken on a resource-role in managing obesity, and has structured Government programs around "nodality" or information-based tools.

CHAPTER 4: THE IMPACT OF OBESITY FRAMING ON PROGRAM DESIGN

Researchers, institutions, international organizations and countries are "tuning in" to contemporary obesity debate, suggesting that obesity framing can be linked to a larger body of literature that examines how ideas and frames translate into specific government policy and programs (see Goldstein and Keohane 1993; Hall 1989; Hay 2001; Schmidt 2001, 2008; Yee 1996; Campbell 1998; Aberbach and Christensen 2003; Daugberg and Pedersen 2004; Bhatia and Coleman 2003). This link implies that obesity framing has some bearing on program design; in other words, how obesity is being studied and talked about has some impact on how obesity is being dealt with as a public health issue. In fact, the WHO is a good example of how program design quite often mirrors how a particular agency tunes into obesity framing.

The WHO has been sounding alarms about obesity as a "global pandemic" since the 1990s, identifying obesity as a serious public health concern (WHO 2009). The WHO recognizes individual consumption patterns and physical inactivity as contributing to obesity, however it insists that "improving dietary habits is a societal, not just an individual problem" and "improving physical activity is a societal, not just an individual problem" (WHO 2009). According to the WHO, strategies aimed at improving nutrition and activity levels, therefore "…[demand] a population-based, multisectoral, multidisciplinary, and culturally relevant approach" (WHO 2009). This implies that programs

and strategies are developed in such a way that they are consistent with the institution's "understanding" of obesity: aware that "...obesity is predominantly a "social and environmental disease" [the] WHO is helping to develop strategies that will make healthy choices easier to make" (WHO 2009). One such strategy is the WHO's Global Strategy on Diet, Physical Activity and Health (DPAS), adopted by the World Health Assembly in 2004. It calls on all stakeholders to take action at global, regional and local levels to reduce the prevalence of chronic disease and the common risk factors such as unhealthy diet and physical inactivity (WHO 2009). WHO emphasis on modifying dietary nutrition and physical activity levels and creating opportunities for "healthy choices," however, somewhat confuses the message that obesity is primarily a social and environmental disease. In fact, targeting individual consumption patterns and activity levels in an effort to encourage individuals to make healthier choices seems to be rather consistent with dominant obesity orthodoxy.

Other jurisdictions, for instance the United States (US), are "tuning in" more specifically to the dominant "individualism" frame. The Centers for Disease Control and Prevention (CDC), the primary Federal public health agency operating through the US Department of Health and Human Services, reports that the "bottom line" of obesity is that "calories count!" (CDC 2009). Though the CDC outlines environmental, genetic and medical factors as contributing to obesity, the CDC emphasizes that overweight and obesity are caused by "...eating too many calories and not getting enough physical

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¹⁴ DPAS is complemented by the WHO chronic disease prevention and control framework of the Department of Chronic Diseases and Health Promotion as well as the Department of Nutrition for Health and Development. Although the specific strategic objectives of each department differ somewhat, both departments share a common goal/objective of health promotion, including diet/nutrition, physical activity, and chronic disease prevention, particularly amongst disadvantaged and/or vulnerable populations (WHO 2009).

activity," behaviours which are largely determined by personal lifestyle (CDC 2009). The idea that unhealthy eating and physical inactivity create risk for obesity is consistent with the dominant "individualism" frame, which outlines unhealthy individual lifestyles as "risky behaviours" contributing to obesity. CDC's strategy, the Nutrition, Physical Activity and Obesity Program (NPAO) mirrors this framing by targeting individual consumption and activity patterns and encouraging individuals to increase physical activity, increase consumption of fruits and vegetables, decrease consumption of high energy dense foods and sugar-sweetened beverages, and decrease the amount of time spent watching television (CDC 2008). CDC program design is seemingly built on research stemming from the "individualism" frame, which one could argue, is becoming more common across jurisdictions as AO research and the dominant "individualism" frame become "institutionalized" in organizations, medicine, popular media and, increasingly, government (see Chapter 3).

4.1 Obesity Framing in British Columbia

A survey of BC Government communications and news releases¹⁵ from 1994 to 2009 suggests that BC is also "tuning in" to the dominant "individualism" frame (**see Appendix B**). The BC Government recognizes obesity as a serious health concern that merits public action: "...we have to move now to turn back the tide of obesity in B.C." says ActNow BC Minister Gordon Hogg (Ministry of Education and Ministry of

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¹⁵ This survey was conducted by searching for communication and new releases containing "obesity" across all Departments and Ministries in the BC Government in the period 1994 to June 8, 2009. The search ran a total of 31 communications/news releases in this period. All 31 communications/news releases were surveyed in this thesis using an adapted version of the "framing memo." For each communication/news release, I identify the release date, source, core position of the news release and the key claims/arguments that appear in the communication/news release.

Tourism, Sport and the Arts 2007). Like AO research, public intervention in obesity is supported by evidence that overweight and obesity levels are associated with economic costs and chronic disease:

"Overweight/obesity costs \$730 million to \$830 million annually [and]...physical inactivity costs us more than \$570 million a year" (Ministry of Health, "\$30 Million to Promote Healthy Living in B.C.," Mar 23/06).

"Obesity is a major risk factor for many chronic illnesses, particularly cardiovascular diseases, type 2 diabetes and some types of cancer" (*Ministry of Healthy Living and Sport, "Obesity Rate Down for First Time in 10 Years in B.C.," Sept. 28/08*).

"Obesity is a serious condition that affects quality of life expectancy. Complications of obesity present significant burden and cost to the health care system such as cardiovascular disease, increased cancer risk, type 2 diabetes, sleep apnea, orthopedic problems, and decreased quality of life" (*Ministry of Tourism, Sport and the Arts*, "Shapedown BC Model at BC Children's Hospital," Oct. 5/06).

Government's understanding of the source of the problem indicates that it is drawing heavily on the "individualism" frame: "British Columbians continue to consume high-calorie, low-nutrient fast food in larger portions, forego the recommended food groups and lead more passive lives driving to and from work, despite years of public awareness campaigns" (Ministry of Health and Office of the Provincial Health Officer 2006). Similar to dominant obesity orthodoxy, poor nutrition and physical inactivity are posed as major risks: "...the greatest threat to the future well-being of our kids lies in their deteriorating diets and their lack of adequate exercise" (Ministry of Education and Ministry of Tourism, Sport and the Arts 2007). Understanding that obesity is largely the result of unhealthy choices such as unhealthy eating and physical inactivity, the Government has prioritized obesity as a "healthy living" concern; Health Minister George Abbott remarks, "Healthy living concerns such as obesity and eating healthy

foods top the list of health issues for B.C." (Ministry of Health et al. 2007). A survey of Government communications confirms this finding. Across all 31 communications, "physical activity" was cited in 23 news releases, "healthy eating" was cited in 18 news releases, "healthy choices" was cited in 19 news releases, and "healthy living" or "healthy lifestyles" were cited in 23 news releases. The reliance of Government on AO framing is further evidenced in a 2005 news release from the Ministry of Health in 2005: "research tells us that four risk factors are the major causes of our most common chronic diseases...individually and together, our lifestyle choices about nutrition, exercise, tobacco and healthy choices during pregnancy can make a real difference in our own health, and in the sustainability of the entire health care system. These choices can reduce the risk of developing chronic diseases such as type-2 diabetes, cardiovascular disease, hypertension, Fetal Alcohol Spectrum Disorder and some types of cancer" (Ministry of Health 2005). The framing of obesity as a "healthy living" concern resulting from unhealthy lifestyle choices implies that solutions be devised to promote individual choices, such as good nutrition and physical activity, that are healthy. It is not surprising then that Government communications, even after the launch of ActNow BC, target "individual" choices as a strategy to reduce levels of overweight and obesity and associated diseases and healthcare costs:

"When we make everyday choices that include healthy eating and physical activity, we're taking steps towards reducing obesity" (Ministry of Healthy Living and Sport, "Obesity Rate Down for First Time in 10 Years in B.C.," Sept. 28/08).

[&]quot;Improved diets could reduce death from cardiovascular disease and stroke by 20 percent and from cancer and diabetes by 30 percent" (Ministry of Health, "\$30 Million to Promote Healthy Living in B.C.," Mar. 23/06).

"We can reduce health-care costs and broaden the ability of all British Columbians to access safe and nutritious food if we pay more attention to what we eat, reduce our portions and remain physically active. These are all basic health tenants" (Ministry of Health and Office of the Provincial Health Officer, "A Better Diet Will Reduce Health-Care Costs," Oct. 04/06).

"One third of cancers and the accompanying burden to families and the health-care system could be avoided if we followed a few basic rules; ate more fruit, vegetables and grains and minimized the intake of some fats to maintain a normal weight and exercised regularly" (Ministry of Health and Office of the Provincial Health Officer, "A Better Diet Will Reduce Health-Care Costs," Oct. 04/06).

"Type 2 diabetes account for 90 percent of diagnosed diabetes cases in B.C. This type of diabetes is closely linked to obesity, making it largely preventable. By being physically active, eating healthier foods and quitting smoking, people can reduce their risk of developing this permanent chronic condition, or control it when it does occur" (Ministry of Health, "Report Shows Impact of Diabetes in B.C.," Dec. 08/05).

"We are supporting programs that promote healthy living and prevent illness in our society...if we can address the issue of obesity in children and teach them proper lifestyle choices, we can make a real difference in their health, and in the sustainability of the entire health-care system" (Ministry of Tourism, Sport and the Arts, "New B.C. Centre to Help Kids Tackle Obesity," Oct. 05/06).

A survey of BC Government communications indicates that obesity is increasingly becoming a public issue. Of the 31 news releases surveyed, 3 news releases were retrieved in the time period 1994 through June 5, 2001; 5 news releases were retrieved in the time period June 5, 2001 through June 16, 2005; and 23 news releases were retrieved in the time period June 16, 2005 through June 8, 2009. The significant increase in Government communications from 2005 onwards (25 out of 31 communications were released in the period 2005 to 2009) suggests that obesity has grown significantly as a public health issue in BC, receiving far more attention and support for public action. It is not surprising then that obesity has grown as a target of public policy since 2005.

In fact, 2007 marks a recognizable shift towards the adoption of "healthy living" models in British Columbia. This begs the question, "what occurred to bring these initiatives forward in 2007?" Beginning with ActNow BC in March 2005, it can be argued that the period 2005-2007 served as a precursor in the development of "healthy living" obesity models in BC for several reasons. First, it has been shown that BC is not only listening to contemporary obesity debate, but is "tuning in" to the "individualism" frame promoted by the AO literature. As such, the development of these models was likely influenced by the growing body of literature that recognizes obesity as a serious health "epidemic" and the growing interest of popular media in obesity since the 1990s. While it is impossible to say that one has led to the other, it can be hypothesized that growing interest in obesity, both in literature and popular media, has triggered an "issueresponse" cycle whereby policy-makers are encouraged to act on obesity. This hypothesis might be further supported by the fact that a growing body of literature has detailed the economic and social costs associated with obesity, and what those costs mean for Government. This literature has not only contributed to the "problem definition," but has also offered governments rationale upon which to act on the problem. Another, more tangible, explanation for the development of obesity programs from 2005 onwards might be that up until 2004, BMI results from the Canadian Community Health Survey (CCHS) were based on self-reported rather than measured data since the CCHS initiative began in 2000. This means that the CCH surveys conducted in 2000-2001 and 2003 may have "...under-represented the actual prevalence of overweight and obesity" (Starky 2005). Between the 2000-2001 and 2004 surveys, the prevalence of overweight (including obesity) among Canadian adults increased by more than 11 percentage points and the

prevalence of obesity increased by 8 percentage points, indicating the "...tendency of people to over-report their stature and under-report their body mass" (Starky 2005).

Therefore, data reporting the prevalence of obesity in Canada was largely under-reported prior to 2004, which has likely had important implications for problem detection and identification; in other words, prior to 2004, reported obesity rates in BC may not have appeared "alarming" or signalled an "epidemic."

While these explanations are speculative, there is reason to believe that these factors have contributed to the "problem definition" of obesity and have fuelled political actors to act on obesity as a public health concern. This implies that obesity program design in BC has been influenced by larger discursive frames, in particular, the dominant "individualism" frame. After outlining BC Government programs targeting obesity, this thesis will evaluate the relationship between obesity framing and obesity program design. It will be argued that obesity program design is influenced by the AO research and "individualism" frame promoted by Government.

4.2 Obesity Programs in British Columbia

Since the adoption of ActNow BC in March 2005, there has been a marked increase in Government strategies designed to help prevent and counter rising obesity rates. These strategies are summarized below:

4.2.1 ActNow BC

Established in 2005, ActNow BC is the Government's healthy living initiative, which aims to encourage BC residents to eat more healthfully, increase physically

activity, cut tobacco consumption and to make healthy choices during pregnancy (Ministry of Health 2008). ActNow BC is a "province wide effort to establish a real culture of fitness and health living embraced by British Columbians of all ages...ActNow BC is about (each of us) making small choices that can result in big improvements to our quality of life" (Ministry of Health 2005) The objectives of ActNow BC are:

- Increase by 20 percent the number of British Columbians who are physically active;
- Increase by 20 percent the number of adults in BC that eat at least five servings of fruits and vegetables daily;
- Reduce by 20 percent the number of BC adults who are overweight or obese;
- Reduce tobacco use by 10 percent; and
- Increase by 50 percent the number of women who receive counselling about the dangers of alcohol and tobacco use during pregnancy.

Promoting these goals, ActNow BC provides a number of healthy living resources (publications, reports, opportunities, information, tools and links) and healthy living tools, including the Heart Rate Calculator, Activity Challenge, Health Link BC Target Heart Rate Tool, Body Mass Index Calculator, EA Tracker, and the Health Link BC Calorie Burning Tool (Ministry of Health 2008).

ActNow BC is comprised of several initiatives, including Action Schools! BC, the BC School Fruit and Vegetable Nutritional Program, Active Communities Initiative, Dial-A-Dietician, Making it Happen: Healthy Eating at School, the 2010 Challenge and the Centre for Healthy Weights: Shapedown BC.

4.2.1.1 Action Schools! BC

Part of ActNow BC, Action Schools! BC is a "best practices" model designed to help schools in creating individualized action plans that promote healthy living (Ministry of Health 2008). The program integrates physical activity and healthy eating messages "...into the fabric of the school community, with the goal of providing children with a foundation for life-long healthy living" (Ministry of Health 2008). Action Schools! BC provides schools with a framework that builds on "best practices" and resources within the school community that targets six Action Zones: school environment, scheduled physical activity, classroom action, family and community, extra-curricular, and school spirit (Action Schools! BC 2008). This framework encourages schools to promote and create opportunities for physical activity and healthy eating. To assist schools, this program provides practical resources, including action ideas, program recommendations, success stories, downloadable resources and program information, and links to healthy living resources within BC and across Canada (Action Schools! BC 2008). Schools become an Action School by registering with Action Schools! BC. There is no cost for registration, and schools are eligible to receive free physical activity Classroom Action Bins and Healthy Eating Action Packs that contain equipment and resources that promote healthy living (Action Schools! BC 2008). Schools are also offered access to free Action Workshops as part of the Action Schools! BC strategy.

4.2.1.2 BC School Fruit and Vegetable Snack Program

The BC School Fruit and Vegetable Snack Program is a collaborative program of ActNow BC, the Ministry of Health, the Ministry of Education, the Ministry of Agriculture and Lands, the Ministry of Tourism, Sport and the Arts, and BC Agriculture

in the Classroom Foundation. The School Fruit and Vegetable Snack Program is an initiative that aims to improve the health of children across BC. During the school year, students and school staff receive a BC grown fresh fruit or vegetable snack twice a week every other week (BC Agriculture in the Classroom Foundation 2008). This model encourages children and families to consume the recommended serving of fruits and vegetables according to Canadian Health guidelines (BC Agriculture in the Classroom Foundation 2008). In order to take part in this initiative, schools must fill out an application for and sign-up for the program.

4.2.1.3 Active Communities Initiative

The Active Communities Initiative (ACI) is a cross-sectoral initiative that promotes healthy lifestyles and mobilizes British Columbians to be more physically active (Act Now BC 2008). This initiative assists in the development of community environments that foster physical activity, mostly through local governments, partner organizations, First Nations and communities (ACI 2008). ACI is delivered by BC Recreation and Parks Association, with funding provided by the Provincial Government through ActNow BC and in partnership with 2010 Legacies Now (ACI 2008). ACI supports communities that are committed to increasing physical activity by 20 percent through funding opportunities, program ideas and community promotion. ACI provides resources such as program information, marketing tools, strategies to target populations, opportunities for participation on recreation, sport and physical activity, online resources and information, and progress measure for communities to understand where they are in meeting their goal (ACI 2008). According to ACI, over 90 percent of BC residents live in or near a community which has endorsed an Active Communities program (ACI 2008).

4.2.1.4 Dial-A-Dietician

Operated by HealthLines Services BC, Dial-A-Dietician is "...part of an evolving tele-health care platform that provides multi-disciplined comprehensive self-care and health system navigation services to British Columbians and health care professionals" (Ministry of Healthy Living and Sport 2008). Funding for this information line is provided by the Ministry of Healthy Living and Sport to support the objectives of the Dial-A-Dietician free nutrition information line: to improve and maintain the nutrition of BC residents; to provide free nutritional information and verbal advice on food and nutrition, human nutrition, clinical nutrition, food safety and food science; to increase awareness of nutritional issues; and to provide current/up-to-date information on issues related to nutrition (Ministry of Healthy Living and Sport 2008). Based on current scientific sources, this free nutrition information line provides British Columbians with easy-to-use nutrition information for "self-care" (Ministry of Healthy Living and Sport 2008). As part of the service, British Columbians can access information on diet/nutrition and registered dieticians, who can provide nutrition consultation over the phone. Should more in-depth counselling be required, dieticians can refer patients to hospital outpatient dieticians, community nutritionists and other nutrition services. For most resources, translation services are available in 130 languages.

4.2.1.5 Making it Happen: Healthy Eating at School

Also part of ActNow BC, Making it Happen: Healthy Eating at School is a free resource-base that provides information and tools that help foster a school environment that encourages healthy eating and good nutritional habits. Often, these resources are used in conjunction with the Action Schools! BC strategy.

4.2.1.6 2010 Challenge

Supported by the Provincial Government, the 2010 Challenge is a four-pronged initiative, which aims to encourage healthy eating, increase physical activity, decrease tobacco use, and decrease overweight and obesity rates by 2010. The targets of the 2010 Challenge are:

- Increase by 20 percent the number of British Columbians who eat the recommended daily servings of fresh fruits and vegetables;
- Increase by 20 percent the number of British Columbians who are physically active:
- Reduce by 10 percent the number of British Columbians who smoke; and
- Reduce the number of British Columbians who are considered "overweight" or "obese."

4.2.1.7 The Centre for Healthy Weights: Shapedown BC

The Centre for Healthy Weights: Shapedown BC is a comprehensive family-based intervention strategy offered through BC Children's Hospital (BCCH) to assess and treat childhood and adolescent obesity (Ministry of Tourism, Sport and the Arts 2006; BCCH 2009). The Shapedown program is supported by the Ministry of Health through ActNow BC and receives annual provincial government funding in the amount of \$400,000. Through group and one-on-one counselling and standard medical, psychological and social assessment, the Centre helps families to target and modify the underlying factors that promote poor nutrition and physical inactivity (Ministry of Tourism, Sport and the Arts 2006). The Shapedown model is based on the successful practice of the Shapedown model in the United States, ¹⁶ and stresses the well-being of the

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¹⁶ The Shapedown program was developed at the School of Medicine at the University of California in 1977 and has been successfully implemented in the United States for more than 20 years (Ministry of Tourism, Sport and the Arts 2006).

child, treating obesity as a complex "bio-psycho-social" problem (BCCH 2009; Ministry of Tourism, Sport and the Arts 2006).

4.2.2 BC Healthy Living Alliance

Formed in 2003, the BC Healthy Living Alliance (BCHLA) is the largest health promotion team ever assembled in the history of BC (BCHLA 2007). The BCHLA is a group of organizations that work together to improve the health of British Columbians, with a specific mandate "...to lead collaborative actions to promote physical activity, healthy eating and living smoke-free in order to improve the overall health of British Columbians" (BCHLA 2007). The Alliance is committed to reducing the burden of chronic disease in British Columbia. Although the Alliance recognizes a wide range of chronic diseases, the Alliance focuses on common risk factors (physical inactivity, poor nutritional habits, tobacco use, obesity etc.) that contribute to cardiovascular disease, cancer, chronic respiratory disease and diabetes (BCHLA 2007). The Alliance has outlined three goals to help reduce the burden of chronic disease in BC: first, the Alliance supports health promoting policies, environments, programs and services. Second, the Alliance seeks to build collaborative partnerships among government, non-government and private sector organizations. Finally, the Alliance seeks to empower communities to create and sustain health promoting environments, policies, programs and services (BCHLA 2007).

The Alliance is working towards several targets to improve the health of British Columbians. The BCHLA targets for 2010 are:

- 9 out of 10 British Columbians do not smoke;
- 7 out of 10 British Columbians eat at least 5 servings of vegetables and fruits;
- 7 out of 10 British Columbians are physically active; and
- 7 out of 10 British Columbians are at a healthy weight.

BCHLA is comprised of two major initiatives that encourage healthy eating and physical activity: the BCHLA Healthy Eating Strategy and the BCHLA Physical Activity Strategy.

4.2.2.1 Healthy Eating Strategy

BCHLA is committed to helping British Columbians make healthy snack and meal choices, by providing them with the skills and knowledge necessary to make informed nutritional decisions. The Healthy Eating Strategy is comprised of several initiatives, including Healthy Food and Beverages at School, Work and Play (aims to provide healthier food choices in schools, recreation facilities and government buildings), Farm to School Salad Bar (delivers fresh BC-grown produce to children in BC), Food Skills for Families (helps vulnerable families in BC in the selection and prepare of healthy foods), and Sip Smart! which encourages children to reduce sugar-sweetened beverage consumption e.g., "pop" (BCHLA 2007).

4.2.2.2 Physical Activity Strategy

BCHLA is committed to getting British Columbians to be more physically active.

As such, the Alliance has developed four initiatives to encourage physical activity: Walk

BC (promotes walking as easy, cost-effective and quick exercise and encourages British

Columbians to get out and walk), Everybody Active (supports access to recreation and physical activities for everyone), Community Based Awareness Initiative (using communities to raise awareness about the importance of physical activity) and Built Environment and Active Transportation Initiative, which utilizes community building to "bridge the gaps" in physical activity (BCHLA 2007).

In March 2006, the Alliance received a \$25.2 million grant from the Provincial Government to promote the goals of ActNow BC. \$1 million of that amount has been invested in healthy eating (BCHLA 2007).

4.2.3 BC Healthy Schools

The concept of "healthy schools" has emerged out of a global move towards healthy living. This concept supports two general philosophies: healthy children are better equipped/able to learn and schools can directly influence children's health. In BC, the Directorate of Agencies for School Health (DASH) is the driving force behind the Comprehensive School Health (CSH) model. Also known as "a Healthy School" CSH is a "…practical framework for students, families, schools, and communities to network and create plans to enhance student health and learning" (Ministry of Health 2008). The BC Healthy Schools model supports two initiatives: Daily Physical Activity and the Guidelines for Food and Beverage Sales in BC Schools.

4.2.3.1 Daily Physical Activity

The Ministry of Education introduced the Daily Physical Activity program for all schools and students in BC. Effective September 2008, all students from Kindergarten to

Grade 12 will be required to participate in 30 minutes of physical activity per day, or the equivalent of 150 minutes of physical activity per week (Ministry of Education 2008). Physical activity can be either instructional or non-instructional, and can include activities based on endurance, strength or flexibility (Ministry of Education 2008). Requirements of compulsory physical activity as part of the education curricula differ between Kindergarten, Grades 1 through 9, and Grades 10 through 12. According to the Ministry of Education, students in Kindergarten are required to participate in 15 minutes of physical activity per day as part of their education program. Students in Grades 1 through 9 are required to participate in 30 minutes of physical activity per day as part of their education program (Ministry of Education 2008). For students in Grades 10-12, physical activity as part of students' education program is optional/non-compulsory, however students must self-report a minimum of 150 minutes of physical activity per week (Ministry of Tourism, Sports and the Arts 2008). The fact that physical activity remains non-compulsory for Grades 10 through 12 somewhat confuses the requirement of daily physical activity for all students K through 12 in BC.

4.2.3.2 Guidelines for Food and Beverage Sales in BC Schools

The Guidelines for Food and Beverage Sales in BC Schools, referred to as the "Junk Food Ban" in most media releases, took effect in September 2008. These Guidelines were designed by a team of BC Community Nutritionists to "...maximize students' access to healthier options and fully eliminate the sale of unhealthy foods and beverages in BC schools..." (Ministry of Health 2008). The Guidelines align with Canada's Food Guide (2007), distinguishing between healthy and unhealthy food and beverage items. The Guidelines suggest four categories: Choose Most, Choose

Sometimes, Choose Least and Not Recommended (Ministry of Health 2008). The Guidelines require all BC schools to eliminate the sale of food and beverages that are within the Choose Least and Not Recommended (Ministry of Health 2008).

To assist schools with the transition, the Knowledge Network and BC Dairy Foundation have created a web resource Healthy Option Vendors in British Columbia (Network Knowledge and BC Dairy Foundation 2008).

4.2.4 HealthLink BC

HealthLink BC is a comprehensive resource providing British Columbians with information and advice on healthy living and preventing illness (HealthLink BC 2008). HealthLink BC information and resources are offered in four easy formats:

- *HealthLink BC (Website)* The HealthLink BC website offers information and resources on over 3,000 health topics, tests and procedures.
- *BC HealthFiles* BC HealthFiles offers multilingual (English, French, Chinese, Punjabi, Farsi, Spanish and Vietnamese) fact sheets on public health issues in BC.
- 8-1-1 8-1-1 provides 24-hour (7 days a week) access to a registered nurse, 5pm-9am access to a pharmacist and weekday access to a dietician. Translation services are available for all categories of practitioner in more than 130 languages.
- BC HealthGuide Handbook The BC HealthGuide Handbook offers information on how to recognize and cope with various health problems, and offers advice on which care facilities might be appropriate and/or when to consult your physician about your condition.

4.2.5 Nutritional Guidelines for Vending Machines in BC Public Buildings

In November 2006, Premier Gordon Campbell launched an initiative to replace junk food with healthier food choices in vending machines in all provincially-funded

public buildings, including hospitals (Vancouver Coastal Health 2008). This initiative is "...part of the provincial strategy to reduce health care costs by improving individual health" (Ministry of Labour and Citizens' Services 2005). Compliance with these new Guidelines was immediate, though several institutions have been exempt from this strategy. To date, residential facilities, including correctional facilities and long-term care facilities; post-secondary residential facilities; and buildings owned by Provincial Public Bodies, but are leased to a third-party that provide non-government services are all exempt from these Nutritional Guidelines (Ministry of Labour and Citizens' Services 2005). The Guidelines, developed by the Ministry of Health, align with Canada's Food Guide (2007), distinguishing between healthy and unhealthy food and beverage items. The Guidelines suggest four categories: Choose Most, Choose Sometimes, Choose Least and Not Recommended (Ministry of Health 2008; Vancouver Coastal Health 2008). The Nutritional Guidelines stipulate that vending machines managed by Public Bodies will not contain food items from the "Not Recommended" or "Choose Least" categories and at least 50 percent of food and beverage items in a bank of vending machines in any given location in the building must come from the "Choose Most" category (Ministry of Labour and Citizens' Services 2005).

4.3 Obesity Program Design: A "Health Individualism" Construct

The recognition that obesity is a serious health concern that demands public action has led to the creation of BC Government programs that target the reduction of overweight and obesity levels and associated diseases and costs. ActNow BC, BC's first "comprehensive obesity program" was built on research that suggests that four *modifiable* factors (poor nutrition, physical inactivity, tobacco and unhealthy choices

during pregnancy) are major risk factors for common chronic diseases including type-2 diabetes, cardiovascular disease, hypertension and certain types of cancer (Ministry of Health 2005). This same research tells us that "...individually and together, our lifestyle choices about nutrition, exercise, tobacco and healthy choices during pregnancy can make a real difference in our own health, and in the sustainability of the entire health care system. These choices can reduce the risk of developing chronic diseases such as type-2 diabetes, cardiovascular disease, hypertension, Fetal Alcohol Spectrum Disorder and some types of cancer" (Ministry of Health 2005). As discussed, this research reflects AO research, and more specifically, the "individualism" frame, since it suggests that individual lifestyle choices constitute the major modifiable risk factors for obesity and chronic disease. Thus, it can be argued that ActNow BC was not only built on AO research, but it was built on the "individualism" frame. A review of the ActNow BC program shows this to be true: "ActNow! BC is about each of us making small choices that can result in big improvements to our quality of life. Starting with just 30 minutes of moderate exercise and five servings of fruits and vegetables each day, we can dramatically improve our health" (Ministry of Health Services 2005). Even "...a few small changes in your lifestyle can have you looking better, feeling better, and enjoying a better quality of life" (ActNow BC 2008). Emphasis on making better choices and changes to individual lifestyle habits suggests that the ActNow BC is a program that reflects individual responsibility for and control over lifestyle habits, such as unhealthy eating and physical inactivity, that result in being overweight and obesity. This is supported by a clear problem definition of obesity on the ActNow BC website:

What's happening is we're eating lots of food, but we're not always making the most nutritious choices [...] For example, most of us could benefit from eating more fruits and vegetables and cutting back on fats and sugars — did you know that the average adult in BC gets about 25% of their total calories from foods not in the Canadian Food Guide such as pop, chips and candy? Finding a healthier balance doesn't have to be hard. It could be easy as adding fruit to your cereal at breakfast, choosing regular instead of fancy coffee, and saying no to supersizing the next time you order fast food (ActNow BC 2008).

This exert identifies over-consumption of high-sugar and high-fat foods (e.g., pop, chips, candy and high-calorie caffeinated beverages), under-consumption of fruits and vegetables, and over-sized portions as major contributors to overweight and obesity. Notably, these all constitute poor individual lifestyle choices, implying that individuals are responsible for excess body weight (whether overweight or obese). Having identified poor lifestyle habits as the problem, it is implied that devising solutions would involve individuals modifying or correcting unhealthy lifestyle choices. A survey of ActNow BC strategies suggests exactly that; the tools and resources offered by ActNow BC encourage individuals to make healthy choices and modify unhealthy lifestyle habits. The healthy living resources and tools offered by ActNow BC actively campaign individuals to eat healthy and exercise regularly and encourage lifestyle modification or substitution. A number of healthy living tips appear on the website, including Everyone Can Eat More Fruits and Vegetables!; How Can I Lose Weight?; What's Stopping You?; Fitting Activity into Your Day at Home; 21 Easy Ways to Get More Action into Your Day; and How Healthy do You Want to Be? (ActNow BC 2008) The emphasis of "you" and "your" in ActNow BC tools and resources suggest two things: first, that the *individual* is the primary agent of change, and second, that these lifestyle habits (namely diet and physical activity) are easily *modifiable*.

4.3.1 Obesity as "Healthy Living"

It can be said that ActNow BC is constitutive of knowledge, resources, tools, information and strategies that encourage individuals to modify unhealthy lifestyle choices that are considered major risk factors for serious health problems like obesity and associated chronic diseases. It comes as no surprise then, that the Government programs and strategies that are associated with ActNow BC reflect similar knowledge and a parallel framework for action. This is supported by the fact that ActNow BC is the umbrella program for other Government programs such as Action Schools! BC, the BC School Fruit and Vegetable Snack Program, Active Communities Initiative, Dial-A-Dietician, Making It Happen: Healthy Eating at School, the 2010 Challenge and Shapedown BC. Equally important is that programs that do not fall under the umbrella of ActNow BC, such as the BC Healthy Living Alliance and BC Healthy Schools, are directly funded by the Province to promote the goals of ActNow BC. BC Healthy Schools is a health partnership of ActNow BC, British Columbia Dairy Foundation and the Knowledge Network (BC Dairy Foundation, ActNow BC and Knowledge Network 2008). In March 2006, the Alliance received a \$25.2 million grant from the Provincial Government to promote the goals of ActNow BC. \$1 million of that amount has been invested in healthy eating (BCHLA 2007). Programs that neither fall under the umbrella of ActNow BC or receive funding from ActNow BC, such as the Nutritional Guidelines for Vending Machines in BC Public Buildings complement or extend the ActNow BC objectives/goals indirectly:

"Healthy food choices in vending machines support the goals of ActNow BC, which promotes healthier lifestyle choices for all British Columbians" (Vancouver Coastal Health, "VCH Stocks Vending Machines with Healthier Choices," Jun. 24/08).

Whether a part of ActNow BC or a program that directly or indirectly supports the objectives of ActNow BC, obesity programs appear to share and support the core positions and overall goals of ActNow BC (see Table 3 below).

Table 3: Goals and Objectives of BC	tives of BC Government Obesity Programs												
	Act Now BC	Action Schools! BC	BC Snack Program	Active Communities	Dial-A-Dietician	Making It Happen	2010 Challenge	Shapedown BC	BCHLA	BC Healthy Schools	HealthLink BC	Nutritional Guidelines	
Goal/Objective													
Increase Health/Wellness	X	X	X	X	X	X	X	X	X	X	X	X	
Promote Healthy Living Choices/Lifestyle	X	X	X	X	X	X	X	X	X	X	X	X	
Encourage Healthy Eating	X	X	X		X	X	X	X	X	X	X	X	
Encourage Consumption of Daily Recommended Fruits and Vegetables	X	X	X		X	X	X	X	X	X	X	X	
Encourage Physical Activity	X	X		X	X	X	X	X	X	X	X		
Make Healthy Choices/Habits More Accessible	X	X	X	X	X			X	X	X		X	
Reduce Levels of Overweight and Obesity	X	X		X	X		X	X	X	X	X	X	
Reduce Levels and Risk of Chronic Disease	X	X			X			X	X	X	X	X	
Reduce Health Care Costs	X	X					X	X	X	X		X	

This implies that, like ActNow BC, obesity strategies in BC are also predicted on the view that obesity is largely the result of individual lifestyle habits or choices that are unhealthy and that individuals have responsibility for and control over modifying nutrition and physical activity habits:

Action Schools! BC

"...providing more opportunities for more children to make healthy choices more often" (Action Schools! BC 2008).

BC School Fruit and Vegetable Snack Program

"Fruits and vegetables have so many health benefits to offer. Try to reach the goal of eating 5-10 servings of fruits and vegetables a day. By doing this, you will reduce the risk of disease [heart disease and stroke] and maximize good health" (BC Agriculture CF 2008).

Making It Happen: Healthy Eating at School

"Kids need to eat well in order to grow and develop properly, but many are consuming too many calories and not getting the nutrition their bodies need" (Making It Happen: Healthy Eating at School 2008).

2010 Challenge

"Premier Gordon Campbell and MLAs all over the province are leading walks to encourage everyone to commit to a healthier lifestyle...our lifestyle choices about nutrition, exercise, tobacco and healthy choices during pregnancy can make a real difference in our own health, and in the sustainability of the entire health care system" (Ministry of Health Services, "Prince George Residents Act Now to Meet 2010 Challenge," Mar. 19/05).

Shapedown BC

"The Shapedown Program is family-focused and targets the underlying factors that often promote poor food choices and physical inactivity in families" (Ministry of Tourism, Sport and the Arts, "Shapedown BC Model at BC Children's Hospital," Oct. 5/06). "The best thing about the Shapedown program is that patients can work as a team with their family to adopt the healthier lifestyle they need to avoid the serious consequences linked to childhood obesity" (Ministry of Tourism, Sport and the Arts, "New B.C. Centre to Help Kids Tackle Obesity," Oct. 5/06).

BC Healthy Living Alliance

"61% of British Columbian children aged 12-18 do not eat the minimum recommendation of five daily servings of vegetables and fruit [and] 51% of British Columbians are not sufficiently physically active" (BCHLA 2007).

"Reduction of sugar-sweetened beverage consumption has been identified as possibly the best single opportunity to curb the obesity epidemic" (BCHLA 2007).

"The more you move, the better you feel. That's why physical activity is a key component of a healthy and happy lifestyle. BCHLA has four initiatives to take British Columbians from the TV to the trails..." (BCHLA 2007).

BC Healthy Schools

"One in every four children in B.C. between the ages of two and 17 is overweight or obese. Statistics document the fact that physical education and health courses alone are no longer enough to counteract the increasing temptations of an inactive lifestyle and unhealthy food choices" (BC Healthy Schools 2008).

HealthLink BC

"Every day, we make choices about the food we eat and our lifestyles: We can make healthier choices for ourselves and our families that make a real difference in our ability to remain healthy and active now, and enjoy life to its fullest in the future [...] the best health starts with eating healthy foods, exercising regularly and staying active [and] preventing and reducing illness or disease" (HealthLink BC 2008).

Nutritional Guidelines for Vending Machines in BC Public Buildings

"Promot[ing] an environment that encourages healthier eating in line with the goal of reducing health care costs by promoting individual health."

(Ministry of Labour and Citizens' Services 2005)

"This is part of the provincial strategy to reduce health care costs by improving individual health. When healthier products are available, you're able to make healthier choices in your diet" (Vancouver Coastal Health 2008).

Program emphasis on the role of "healthy choices," such as healthy eating and regular physical activity, in managing obesity indicate that obesity program design in BC is very much centered on obesity as a "healthy living" construct. Even those programs that do not directly reference the importance of "healthy choices" in obesity, encourage the role of choice indirectly. For instance, the Active Communities Initiative encourages individuals to be physically active: "Everyone. Active. Everyday" (ACI 2008) and the Dial-A-Dietician strategy emphasizes "self-care" in nutrition.

4.3.2 Obesity as Individualism

Whether changes are initiated in schools (Action Schools! BC, BC School Fruit and Vegetable Snack Program, Making It Happen: Healthy Eating at School, BC Healthy Schools), workplaces (Nutritional Guidelines for Vending Machines in BC Public Buildings), communities (Active Communities Initiative, 2010 Challenge), or homes (ActNow BC, BC Healthy Living Alliance, Dial-A-Dietician, HealthLink BC, Shapedown BC), individual lifestyle modifications, expressed as healthy choices, healthy

eating and physical activity, are the crux of obesity program design in BC. This implies that obesity programs in BC largely rely on the individual as the primary agent for change. In other words, individuals are responsible for adopting a "healthy lifestyle" and modifying unhealthy or "risky" behaviours that put the individual at risk for overweight and obesity. Program reliance on individual change is evidenced by the tools and resources offered by Government strategies, which rely almost exclusively on individuals to use knowledge and information resources to make healthy and informed decisions (see

Appendix C for a more thorough review):

Action Schools! BC

Provides resources including: Food Fit For Sports or Physical Activity, Physical Activity Weekly Log, Bounce-at-the-Bell Poster, Availability of BC Vegetables and Fruit, Veggies and Fruit the Colour Way Tracking Chart, Healthy Eating Booklist, Classroom Healthy Eating Action Resource, Healthy Eating Weekly Log, Colourful Choices Poster, Vegetable and Fruit Challenge Chart, Vegetable and Fruit Food Guide Serving Sizes for Canada Poster Form etc.

BC School Fruit and Vegetable Snack Program

Offers suggestions on "how to include more fruits and vegetables into your diet," including: having a glass of fruit juice with breakfast, adding fresh or dried fruits to breakfast cereal, adding fruit to yogurt topped with low-fat granola or bran, choosing salad with low-fat dressing, storing fresh cut up vegetables in the fridge for snacking, and including fresh vegetables on sandwiches.

Active Communities Initiative

Offers community plans, resources and program opportunities which help individuals get out and get active. Community plans include access to community developers and community initiative staff who provide tools and strategies to communities that encourage individuals to be more physically active. Program opportunities include walking programs; tips on active workplaces, active transportation and active aging.

Dial-A-Dietician

Provides information-based resources for "self-care" including: Lifestyle Steps for Healthy Weight Loss: Getting Started, Lifestyle Steps for Healthy Weight Loss: Taking Action Resources for Healthy Lifestyles, Eating for a Healthy Weight – Guidelines for Indo-Canadians, Eating for a Healthy Weight for Indo-Canadians – Extra Tips for

Healthy Meals, Health Canada – Physical Activity Guides, Recipe Substitutions to Lower Fat and Sugar, Health Canada – Eating Well with Canada's Food Guide.

Making It Happen: Healthy Eating at School

Resources include: Healthy Option Vendors in British Columbia; Quick Reference for Healthier Food Choices; Healthier Foods: How To Make Fun-Fast-Food Healthier for Students; Tool for Stocking Healthy Foods in School; Bake Better Bites; Simple Recipe Modifications and Brand Name Food List Key to Successful Changes; Recipe Substitutions and Salad Bar; Offering Students Tasty, Healthy Food that they Will Purchase; (School Assessment Tool) Healthy Eating at School: How is Your School Doing?

2010 Challenge

The 2010 Challenge offers links to related resources including: ActNow BC, the BC Government and 2010 Legacies Now.

BC Healthy Living Alliance

BCHLA offers two strategies (the Physical Activity Strategy and the Healthy Eating Strategy) that encourage individuals to adopt healthy eating and increase physical activity. The BCHLA also offers a number of reports and publications including: Bake Better Bites Recipes and Tips for Better Baked Goods; Risk Factor Effective Interventions An Overview of their Effectiveness; Risk Factors - Background Document; Resources for Health - A Cost Effective Risk Factor Plan for BC; Cost Of Eating in BC 2007 Report; BCHLA Community Capacity Building Strategy; BCHLA Healthy Eating Strategy; and BCHLA Physical Activity Strategy. Also, BCHLA offers a number of media sources including: Physical Activity Strategy Backgrounder; Healthy Eating Strategy Backgrounder; BCHLA Funding for Healthy Food in Schools etc.

Shapedown BC

The Centre features a 10-week program and a resource centre for families (information resources for parents include, Promoting Healthy Weights, Active Play, Healthy Eating and A Healthy Relationship with Food) which help parents to "...sharpen their nurturing and limit setting skills in order to curb the child's emotional overeating and /or excessive screen time" and encourage the child to accept "...more responsibility for his/her food intake and activity levels and feels safer and happier" (BCCH 2009).

BC Healthy Schools

BC Healthy Schools offers a number of resources including: Healthy Schools Network Newsletter; Healthy, Safe and Caring Schools Resource Guide 2009; Resources to Support Healthy Eating in Schools; Guidelines for Promoting Health in Schools; Healthy Choices Webpage; The NEW Canada Food Guide Website; Eat Well, Play Well, Stay Well Program Webpage. Also, BC Healthy Schools offers a number of related links on nutrition information, including: School Health; Ministry of Health Services; Ministry of Healthy Living and Sport; Achieving Health Promoting Schools etc.

HealthLink BC

HealthLink BC offers a number of interactive and health fitness tools including: Are You at Risk for a Heart Attack?; Is Your Weight Increasing Your Health Risks?; What Is Your Child's BMI?; How Many Calories Did You Burn? HealthLink BC also offers printed resources such as the BC HealthFiles and the BC HealthGuide, and information and tools to help individuals make informed decisions about health and manage a healthy lifestyle (action sets and decision points).

Nutritional Guidelines for Vending Machines in BC Public Building The Nutritional Guidelines strategy offers links to ActNow BC.

A review of the tools and resources offered by Government programs indicates that obesity program design is centered on an information-based or resource-based approach, wherein individuals are encouraged to make the necessary lifestyle modifications and are provided with the information, tools, tips and suggestions to do so. With some exceptions, obesity program design in BC is predominantly resource-based involving few regulatory measures. For instance, ActNow BC is an online resource base that provides information and tools to encourage individuals to eat more healthfully and increase physical activity. Action Schools! BC is an information- and resource-based framework that assists schools in developing "individualized action plans" that promote healthy living. Active Communities Initiative offers communities information, strategies, tools and resources that foster physical activity and encourage individuals to become more physically active, and the Dial-A-Dietician initiative is an information-based program – accessed online or by telephone – that provides individuals with food and nutrition information and consultation on a variety of nutrition-related health topics. Making It Happen: Healthy Eating at School is a free resource-base that provides information and tools that help foster a school environment that promotes healthy eating and good nutritional habits. The 2010 Challenge is a resource-based initiative that

encourages individuals to eat healthy and exercise regularly with the aim of reducing overweight and obesity. Finally, HealthLink BC is a comprehensive online resource that provides British Columbians with information and advice on healthy living and disease prevention.

The information- or resource-based nature of the programs suggests that individuals are ultimately responsible for changing or modifying lifestyle habits with the aim of weight reduction and improving health. Although many Government programs are restricted to a resource- or information-base, some programs entail tangible action plans that seek to manipulate or alter private behaviours such as food consumption and physical activity. For instance, the BC School Fruit and Vegetable Snack Program delivers fresh fruits and vegetables to schoolchildren on a bi-weekly basis. Shapedown BC offers a combination of group and one-on-one counselling targeting nutrition and physical inactivity patterns in children and families. The BCHLA offers the Healthy Eating Strategy, which entail initiatives that offer fresh fruits and vegetables to schoolchildren (Farm to School Salad Bar) and aim to replace "unhealthy" options with healthy food choices in schools and other facilities through "Work and Play" (BCHLA 2007). BC Healthy Schools includes two regulatory measures – Daily Physical Activity and the Guidelines for Food and Beverage Sales in BC Schools – which have made physical activity a mandatory component of the education curricula for students in Grades K through 9 and a recommended guidelines for students in Grade 10 through 12 and have replaced unhealthy food choices and "junk food" in school vending machines with healthier options (Ministry of Education 2007). Similarly, the Nutritional Guidelines for

Vending Machines in BC Public Buildings have replaced unhealthy foods or junk food with healthier food choices in all provincially-funded public buildings.

Indeed, some Government programs express more structural changes, for example, changing private consumption or activity patterns through regulatory measures, however, these programs can only control for modifications within certain institutional settings and therefore require individuals to initiate lifestyle changes in environments that are not controlled for in order to affect real change in weight reduction. For instance, the initiatives of the BC School Fruit and Vegetable Snack Program and the BCHLA Healthy Eating Strategy provide children with healthy foods with the overall aim of teaching healthy eating and proper nutrition. This implies that the programs largely rely on the extension of these "learned" habits to the home or private sphere. This is also true of the Guidelines for Food and Beverage Sale in BC Schools and the Nutritional Guidelines for Vending Machines in BC Public Building; while these strategies are able to effectively constrain food "choices" in certain institutional settings (schools, public buildings etc.), they are not controlled for in other environments (e.g., a grocery store), and therefore they rely almost entirely on individuals to "learn" healthy habits and apply them in other environments. Through group and one-on-one counselling, Shapedown BC teaches proper nutrition "in house," but relies heavily on families to adopt proper nutrition and physical activity habits as part of permanent lifestyle modification. Finally, while the Daily Physical Activity strategy is able to uphold physical activity requirements for students in Grades K through 9, the strategy is only able to control for this habit while the student is in school. In other words, when youth cease to be students, the strategy relies

on the extension of "learned" habits about the importance and benefits of physical activity to adulthood.

4.3.3 Implications for Government

To a large extent, the AOC has played a major role in "framing obesity" as an urgent public health problem that necessitates government action. Moreover, the AOC has been instrumental in "framing obesity" as a health individualism construct that holds individuals responsible for and in control of lifestyle habits such as healthy eating and physical activity. An analysis of obesity program design has shown that BC is not only "tuning in" to the dominant "individualism" frame, it is using claims of the AOC as building blocks for program design in BC. This has important implications in defining the role of Government in obesity program design; when it comes to obesity, the BC Government has primarily assumed the role of distributing information to the general public. In other words, Government redistributes scientific information about the causes, consequences and solutions of obesity through information monitoring and release, advice and exhortation, advertising and Commissions and inquiries (Howlett and Ramesh 2003, 92). Although Government has conducted some independent studies through Ministries and Commissions (for example, the Select Standing Committee on Health, and the Parliamentary Information and Research Service), Government communication is almost always drawn from a larger scientific body of literature on obesity. In fact, a survey of Government communication indicates that Government is filtering through the larger debate, and reproducing knowledge and information about obesity that either stems directly from AO research or is consistent with AO research. Whether filtering can be directly linked to the "power of ideas" (Jacobsen 1995, 256) alone is unclear i.e., it is

difficult to isolate where "ideas" end and "interests" begin, however, it can be said with certainty that larger framing processes of obesity have been decisive in shaping how the BC Government talks about obesity and produces knowledge about obesity. These filtering processes suggest that Government is a "detector" of information that uses a number of tools to obtain information (Hood 1986, 91). These tools range from "nodal receivers" (Government inserts itself as a "node" in information networks), "ear trumpet" (Government actively seeks out information) and "scrutiny of free media and direct inquiries," where Government scrutinizes news and media sources or uses surveys or questionnaires to obtain information from the general public (Hood 1986, 92-95). In terms of obesity, Government tends to rely on the use of "nodal receivers" i.e., it situates itself within and draws information from larger obesity debate and framing, and positions itself as an "ear trumpet," i.e., it actively prompts independent or non-governmental organizations and institutions to "come to it" with obesity information and knowledge.

Government's role in obesity programs can also be construed as that of a "middleman," between scientific researchers and the general public. Considering that the obesity debate is largely framed by "scientific" or "medical" discourse/language (see Saguy and Riley 2005; Evans 2006; Gard and Wright 2001), it might be difficult for the general public to fully comprehend the issue; therefore, it is Government's role to communicate obesity research/discourse in ways that the general public can understand it. In this way, it can be said that the role of Government in obesity is to distribute knowledge and information about obesity to civil society; in other words, the role of Government is obesity programs is largely information-based (Howlett and Ramesh 2003, 92). The fact that Government draws from a larger debate and reproduces scientific

knowledge and information about obesity offers one explanation of why Government typically fills a resource- or information-based role, but another might refer more directly to the "type" of discourse or information that is being reproduced. As discussed, the BC Government draws heavily from AO research, which understands obesity as construct of health individualism and emphasizes the role of the individual in modifying unhealthy lifestyle habits. Within AO research, the prescribed policy direction is such that individuals have "personal control" over and responsibility for unhealthy lifestyle habits that lead to overweight or obesity. To a large extent, the role of Government in AO research and the dominant obesity frame is already defined: Government should campaign public awareness and attention and devise solutions target individuals and encourage them to modify behaviours (Saguy and Riley 2005). The emphasis on solutions that require individuals to make lifestyle modifications almost automatically diminishes Government's role in obesity and relegates Government to a role that campaigns public awareness and disseminates information and knowledge to the public; or as Brownell puts it, because obesity is framed as a construct of health individualism "...[for Government], it stands to reason that little should be done beyond minor efforts to persuade people to be responsible" (Brownell 2005, 961).

The reliance of Government on external AO literature has been instrumental in relegating Government's role in obesity to an information-based role, which begs the question, "what does this articulate for policy instrument choice?" Policy instruments are broadly defined as the "tools" and "techniques" of governance; thus, policy instrument choice refers to the instruments that governments use (or choose to use) in order to implement policies (Howlett 2000, 414; Howlett and Ramesh 2003). Policy instruments

can be understood as either "substantive," policy instruments that have the goal of altering the *substance* of activities or behaviours of private citizens, or "procedural," policy instruments that seek to alter political or policy behaviours of actors involved in the *process* of policy articulation and policy-making (Howlett 2009, 6-7). Whether "substantive" or "procedural," policy instruments can be located within a particular stage of policy production or the "policy cycle" (Howlett 2009, 15). "Front-end" policy instruments tend to affect agenda-setting or policy formulation, whereas "back-end" policy instruments can be said to affect policy implementation or policy evaluation (Howlett 2009, 15). Policy instruments, according to Christopher Hood, can be further categorized as relying on "nodality" (information, communication, knowledge and attitudes), treasure (exchange and bank balance), authority (rights, status and duties) or organization, which necessitate acting directly in the physical environment or person, and whether the instruments have the goal of effecting change (effectors) or detecting change (detectors) in an environment (Hood 1986, 6-7, 124-125; Howlett 2009, 415).

As shown, despite a handful of tangible strategies, obesity programs in BC largely rely on individuals to use Government information and resources to make healthy and informed decisions. This has had the effect of defining Government as a resource-base, through which Government uses information and exhortation to encourage individuals to modify lifestyle habits in such a way that is consistent with Government goals. It can thus be said that policy instrument choice has been largely "substantive," in that, Government seeks to manipulate or alter the *substance* of activities and behaviours of private citizens (Howlett 2009, 6-7). It follows then that policy instruments chosen on the basis that they "effect" change in the environment i.e., they are "effector" instruments (Hood 1986, 124-

125; Howlett 2000, 415). In this way, Government policy instruments can be understood as 'sermons' (Evert Vedung 1998): "efforts to use the knowledge and data available...to influence consumer and producer behaviour is a direction consistent with government aims and wishes" (Vedung and van der Doelen 1998, extracted from Howlett 2009, 5). Having surveyed the tools and resources of each Government strategy, it can be said that Government relies on both "front-end" (notification instruments and moral suasion) and "back-end" (exhortation and information campaigns) substantive policy instruments (Howlett 2009, 15). In obesity program design, examples of "front-end" policy instruments typically take the form of Government "e-health" portals or resources, as found in ActNow BC, Action Schools! BC, BC Fruit and Vegetable Snack Program, Dial-A-Dietician, Making It Happen: Healthy Eating at School, BC Healthy Living Alliance and HealthLink BC). Many of these resources are "self-serve" (information and resources that are "...standard, packaged, pre-selected and available to anyone who chooses to take the trouble to pick it up"), "voluntary" and require minimal state involvement (Hood 1986, 7, 28; see Spectrum of Substantive Policy Instruments – Howlett 2000, 416). In contrast, a variety of "back-end" policy instruments are used, ranging from "government information campaigns" to more regulatory measures involving the distribution and consumption of goods. While most government programs¹⁷ rely on a "government information campaign" in some form or another, only few government programs involve regulatory measures that attempt to alter citizen behaviour through the delivery and consumption of goods. For example, the Guidelines for Food and Beverage Sale in BC Schools and the Nutritional Guidelines for Vending Machines

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¹⁷ As found in ActNow BC, Action Schools! BC, BC School Fruit and Vegetable Snack Program, Active Communities Initiative, Making It Happen: Healthy Eating at School, 2010 Challenge, Shapedown BC, BC Healthy Living Alliance, BC Healthy Schools, and HealthLink BC.

in BC Public Buildings restrict the delivery and consumption of unhealthy foods in BC schools and most public buildings in BC. Also, through the Daily Physical Activity strategy, Government has been able to impose physical activity standards on students Grades K through 9 and, to a lesser extent, students in Grades 10 through 12. These are all examples of what Hood calls "authority-based" instruments – where Government employs standard setting and control regulation (Hood 1986; Howlett 2009). Treasure-based instruments, although less common, are also used in obesity management. For instance, Government, through ActNow BC, provides funding for some programs – such as Shapedown BC and the BC Healthy Living Alliance – in order to promote the goals of ActNow BC.

While it is clear that Government uses a large mix of policy instruments, including nodality-, authority- and treasure based instruments, in obesity management, the use of nodality-based instruments seems to be favoured. The predominance of nodality-based instruments might simply be explained by the preference of liberal democratic societies to use less coercive instruments (Doern and Phidd 1992). Yet a more probable explanation might be that it is Government's will to match results comparable to, or better than, results attained in the past with "fewer bureaucratic building materials" (Hood, 1983, 10). In other words, Government "using bureaucracy sparingly" may translate into "government on the cheap" (Hood, 1983, 10). This explanation seems consistent with the fact that government "e-health" portals and government information campaigns on obesity are largely "self-serve," which, for Government, translates into minimal state involvement, fewer costs (since "nodality" is not "immanently" depletable), and lower bureaucratic constraint (Hood, 1983, 145).

How obesity continues as a public policy issue will, to a large extent, determine policy instrument selection in obesity management. As the issue area develops over time, perhaps nodality-based instruments will be supplemented or replaced by more directive authority-based instruments, or as Doern and Phidd argue, Government will "move up the scale of coercion" if less coercive instruments fail to produce expected results (Doern and Phidd 1992). It will be the task of future research to examine how policy instrument selection in obesity management continues from here.

CHAPTER 5: CONCLUSIONS AND FUTURE RESEARCH

Obesity represents a growing public health challenge for many countries. In the past twenty years, obesity has emerged as an epidemic in developed countries and obesity rates are increasing rapidly in developing countries. Research on obesity has increased exponentially in the past decade, shedding new light on the causes, consequences and costs associated with obesity and qualifying obesity as an urgent public health issue on which policy-makers need to act.

This thesis has traced the introduction of obesity as a health risk behaviour into public policy in British Columbia. It has examined the link between obesity framing and program design in British Columbia, highlighting the importance of ideas and discursive processes in the advancement of policy goals.

Through the work of Vivian Schmidt, this research has demonstrated the importance of studying not only ideas, but the context within which ideas are expressed. Schmidt's framework (detailed in Chapter 2), which departs from traditional models of discourse analysis, has been of particular importance to this research since it underscores that not only ideas matter, but also the institutional context within which ideas are expressed, where, to whom and by whom. Her framework has further highlighted the rhetorical and argumentative framing of discourse to influence or guide political action and has offered a framework through which to understand the success or advancement of

some ideas and discourses over others. Schmidt's work represents an important theoretical and methodological framework in frame analysis and marks an important development in the study of how ideas interact with public policy.

Chapter 3 outlined the measures, causes and consequences of obesity and discussed contemporary obesity debate as a struggle between two communities (the antiobesity community and the fat acceptance community) for control over obesity framing. Peter Haas' framework on epistemic communities was used to highlight the cognitive and normative ideas, core beliefs and the policy directions expressed by each community, providing a coherent framework through which to analyze the interactions, discourse and differences within each community. In many ways, Haas' work was used to identify the different components of framing presented by each epistemic community (the antiobesity community and the fat acceptance community) as well as the similarities and divisions that exist within and between communities, so that Schmidt's framework could be used to assess how those elements are either helping or hindering the advancement of ideas and discourses. It was shown through Schmidt's framework that obesity framing has been largely determined by antiobesity research, and, in particular, the health individualism frame. And, despite evidence that numerous factors contribute to obesity, it was shown that the antiobesity community selectively filters the existing scientific evidence and reproduces knowledge that fits with its framing. Schmidt's work was also used to explain the advancement of this frame, in particular, why some discourses succeed over others. It was argued that the health individualism frame has advanced as a result of its relevance to and resonance with core North American values of health individualism, institutional appropriateness, and its adequacy to address costs

and consequences associated with obesity. Furthermore, it was shown that the core belief structure of the antiobesity community (in particular the health individualism frame) has been endorsed by a larger "discourse coalition," comprised of organizations, popular media and government, which has had the effect of naturalizing the discourse.

Chapter 4 connected the discursive framing of obesity to program design in British Columbia, arguing that Government not only reproduces knowledge that is consistent with the health individualism frame, but has used that research to justify and design obesity programs. Through Government communication and program review, it was shown that obesity program design in British Columbia is centered on providing information and resources that encourage individuals to adopt healthy living habits such as healthful eating and regular physical activity in order to reduce body weight, reduce risk of chronic disease and improve overall health. This Chapter discussed obesity as a health individualism construct, and what implications this has had for Government's role in managing obesity. It was argued that Government has, for the most part, assumed a resource-based role in obesity management, employing predominantly nodality-based instruments which rely on the individual as the primary agent of change.

5.1 Research Limitations and Areas of Future Research

This thesis has looked at how discursive framing influences program design and, to a lesser extent, policy instrument choice. Ideas and discursive processes were examined in this thesis, however, the role of material interests in shaping ideas and Government programs has been largely overlooked; in other words, the extent to which the advancement of ideas and policy instrument choice are a reflection of actors' interests

(see Goldstein and Keohane 1993). Future research is needed to assess the role of interests in determining policy options, program design and instrument choice in order to develop a deeper understanding of, and perhaps a more conclusive link between, obesity framing and program design in British Columbia. Second, the survey of programs conducted in this thesis was not exhaustive. Efforts were made to include all programs directly endorsed by the Government of British Columbia, however, due to limitations of scope, not all Government programs were included in this review. Also, having only studied how obesity framing influences obesity program design in British Columbia, this thesis is limited in what conclusions it can draw about how obesity framing impacts program design in other jurisdictions. This thesis lays the theoretical groundwork for research in other jurisdictions and a comparative analysis, so that more generalized conclusions can be drawn about the relationship between obesity framing and program design.

Across jurisdictions, obesity is becoming a matter of public policy, which merits discussions of not only how framing is impacting program design, but also consideration for how obesity will continue as a public policy issue. It has been documented, for instance, in framing literature the role of policy frames (particularly dominant policy frames) in determining what program options and policy instrument choices are acceptable within the given set of beliefs, values and ideas (see Bhatia & Coleman 2003; Schmidt 2008; Gard and Wright 2001; Hajer and Versteeg 2005; Lang and Rayner 2007). As such, there needs to be consideration for how policy framing might lock in program design and policy directions; in other words, how obesity framing can constrain political actors to think about obesity in certain ways (and not others), can narrow program

options, and can determine policy preferences. Future research might examine "rhetorical entrapment" (Schmidt 2008), "policy continuation," or "policy succession," how ideas act as "blinders," how ideas become "embedded" in institutions (Goldstein and Keohane 1993; Hogwood and Peters 1982) or trapped in "disciplinary boxes" (Lang and Rayner 2007) and how "hegemonic" discourses shape how we conceive of an issue, but also "delimit" or "silence" other ways of thinking or doing (Gard and Wright 2001; Hajer and Versteeg 2005; Yanow 1992; Siegel and Lotenberg 2007). Further consideration might be given to how "policy cores" and institutions persist or change over time (Sabatier and Jenkins-Smith 1993; Thelen 2003).

Another area that merits future research is the evaluation of obesity as a health individualism construct, including the assumption that the relationship between "health knowledge" and "health practices" is a positive one (Khachkalyan et al. 2006). The assumption that knowledge about good health will lead to healthy practices needs to be closely examined in connection with nodality-based tools and whether they are effective tools to address obesity. This discussion might be linked to Christopher Hood's view that government can be examined as a "tool-kit" in order to better understand what government *is* doing, what it is *not* doing and what it *could* be doing to address obesity (Hood 1986). One might assess, for instance, whether Government is using the appropriate combination of tools and instruments to "match the job" (Hood 1986, 2007).

As more policy-makers respond to the growing challenge of obesity, there will be a need for more information about which policy initiatives will be acceptable and effective. It will be the task of future research to critically evaluate how obesity continues

as a public health challenge and succeeds as a public policy issue: "although only a few may originate a policy, we are all able to judge it" (Pericles, extracted from Popper 1966).

APPENDICES

Appendix A: Dominant Obesity Frames in Contemporary Debate

	Antiobesity	Community	Fat Acceptance	e Community
Frame	Obesity as Risky Behaviour	Obesity as Epidemic	Fatness as Body Diversity	Obesity as Disease
Core position	Overweight and obesity are risky behaviours associated with serious health problems	Overweight and obesity are risky behaviours associated with serious health problems; obesity rates are epidemic	Fatness is a natural form of diversity; obesity is a medical term that discriminates against fat people; fat people can be healthy (health at any size)	Obesity is a serious disease
Metaphor	Unhealthy habits, like smoking and drinking alcohol	Unhealthy habits, like smoking and drinking alcohol	Difference is diversity, like gender, race, culture or sexual orientation; social justice	Genetic diseases such as cancer, etc.
Catch phrases	Unhealthy lifestyle; serious health risk; individual responsibility	Unhealthy lifestyle; epidemic; serious health risk; individual responsibility	Diversity, tolerance, justice, discrimination	Disease, genetics, biology
Attribution of responsibility for problem	Individuals who have unhealthy lifestyles e.g., do not eat healthy or exercise	Individuals who have unhealthy lifestyles e.g., do not eat healthy or exercise	Frame does not view fatness/obesity as a problem	Genetics/biology (outside of individual control)
Implied solution	Weight- loss/weight- reduction; individuals should reduce weight through proper diet/nutrition and exercise	Weight- loss/weight- reduction; individuals should reduce weight through proper diet/nutrition and exercise	Individuals should improve overall health and psychological well- being	Government intervention/the responsibility of government to help: funding, tax breaks, and/or medical coverage for weight- loss treatments and surgery
Core values	Health, preventing illness	Health, preventing illness	Health, Acceptance, Diversity, Equality, Social Justice, Tolerance	Health

Source: adapted from Siegel and Lotenberg 2007, 256; Winnett 1995; and Wallack et al. 1993

Appendix B: BC Government News Releases (1994 – June 8, 2009)

BC Gove	rnment News Re	leases (June 16, 2	005 – June 8, 2009)	
Release Date	News Release	Source	Core Position	Key Quotes
06 Mar 2009	International Women's Day – Minister Statement	Ministry of Healthy Living and Sport (Mary Polak)	Obesity rates (self-reported) in BC declining as a result of healthy choices made by individuals	"Women are taking better care of themselves - In B.C. we've achieved the lowest smoking rates and the lowest self reported adult obesity rates in Canada. With our ActNow BC initiatives supporting women and families to make healthier lifestyle choices we are seeing women embrace the changes that will make a real difference in their health and the health of their families" (Mary Polak, Healthy Living and Sport Minister).
17 Nov 2008	Minister Congratulate s Top Researchers, Institutes	Ministry of Technology, Trade and Economic Development	Research shows that gene mutations have causal role in diabetes (a disease linked to obesity)	"Michael Hayden's discoveries relating to how gene mutations cause diabetes, Huntington's disease, Lou Gehrig's disease and many more disorders have moved medicine a giant step forward towards understanding, and some day curing, these afflictions" (Ida Chong, Minister of Technology, Trade and Economic Development).
28 Sept 2008	Obesity Rate Down for First Time in 10 Years in B.C.	Ministry of Healthy Living and Sport	Obesity rates (self-reported) in BC declining; Government commitment to offering tools for healthy living	"A new national health survey shows British Columbia has the lowest self- reported obesity rates in 10 years, along with the lowest rates among provinces in Canada" (Mary Polak, Minister of Healthy Living and Sport). "We're committed to helping British
				Columbians live healthier, offering the tools that help people make the changes in their lives that can have a tremendous impact on their health" (Mary Polak, Minister of Healthy Living and Sport).
				"Obesity is a major risk factor for many chronic illnesses, particularly cardiovascular diseases, type 2 diabetes and some types of cancer. When we make everyday choices that include healthy eating and physical activity, we're taking steps towards reducing obesity" (Dr. Art Hister, Family Physician in Vancouver, BC).

Release Date	News Release	Source	Core Position	Key Quotes
02 Sept 2008	Hockey Players Welcome Students With Reading, Activity	Ministry of Education; Ministry of Healthy Living and Sport	Learning healthy habits through education; government taking action on obesity	"The Read to Succeed challenge is a great way for students to develop reading and exercise routines that will help them at school and in their daily lives [] We encourage students to participate in these types of programs and to continue to develop healthy habits outside of the classroom" (Mary Polak, Healthy Living and Sport Minister).
				"Today marks the Province's implementation of two key ActNow BC strategies to help address the issue of childhood obesity and improve the health of B.C. students" (Mary Polak, Healthy Living and Sport Minister).
				"ActNow BC is the provincial government's health and wellness initiative that works together with government ministries, the health sector and partners to deliver programs and services that encourage healthy choices for all British Columbians."
28 Sept 2007	Child Health Survey Wraps Up Conversation Point	Ministry of Health; Provincial Health Services Authority; BC	Obesity is a healthy living concern; healthy eating and physical activity key in health	"Healthy living concerns such as obesity and eating healthy foods top the list of health issues for B.C. children aged 10 to 16 years old" (George Abbott, Health Minister).
		Children's Hospital	and sustainable public health system	"It's great to see that the next generation of British Columbians believe healthy eating and physical activity as a key priority and critical to the sustainability of our public health system" (George Abbott, Health Minister).
				"Children identified exercise, diet and sleep as the top three contributors to good health. Eighty per cent of children surveyed said being overweight, not exercising regularly, drinking alcohol and eating unhealthy foods as contributing to bad health. Nine out of 10 children identified smoking and taking drugs as contributors to poor health while 43 per cent of children and youth felt that the primary responsibility for good health was their own" (Wynne Powell, Board Chair of Provincial Health Services Authority).

Release Date	News Release	Source	Core Position	Key Quotes
04 Sept 2007	Future Public Servants Receive Graduate Fellowships	Ministry of Advanced Education; Office of the Premier	BC Government introduces daily 30-minute physical activity requirements for schools	"The Province will require 30 minutes of daily physical activity for students and is also fast-tracking the removal of junk food in schools with Canada's most aggressive initiative yet to fight obesity in children and youth" (Shirley Bond, Education Minister) "One in four of our children is now overweight or obese. For their future, and for the future of our province, this must changeby removing junk food sales in schools, and by requiring that B.C.'s students have daily physical activity, we are helping to create a culture of health in our schools and for our children" (Shirley Bond, Education Minister). "Every move is a good move, and we have to move now to turn back the tide of obesity in B.C. [] Our schools are a vital link in demonstrating to families that healthy choices in physical activity and nutrition can really improve their children's quality of life" "If we can help students build good health habits while they are young, their chances of living healthier and longer lives are much higher" (Perry Kendall, BC Provincial Health Officer).
28 Jun 2007	School Survey Shows Students Hearing Health Issues	Ministry of Education	School survey indicates that students are learning about how to stay healthy	"More B.C. Students are learning about how to stay healthy" (Shirley Bond, Education Minister). "This year's satisfaction survey shows that students are hearing our message about being healthy and physically activehelping students understand their health choices is a key focus of our Healthy Schools program and a step forward in combating childhood obesity in B.C." (Shirley Bond, Education Minister).

Release Date	News Release	Source	Core Position	Key Quotes
11 Jun 2007	Canada's New Government Signs First Nations Health	Office of the Premier; Health Canada; First Nations Leadership Council	Obesity calls for government plan	"This builds on British Columbia's First Nations Health Plan released last year that will help us to close the health gap between First Nations people and other British Columbians in areas like life expectancy, mortality, youth suicide, infant mortality, diabetes rates and childhood obesity" (Gordon Campbell, Premier).
24 May 2007	\$4M for Playground Equipment to Help Kids Get Moving	Ministry of Education; Ministry of Public Safety and Solicitor General; Ministry of Tourism, Sport and the Arts	The BC Government, through ActNow BC, has contributed \$4M to provide better playground equipment for children	"Twenty five per cent of B.C. children aged 2-17 are overweight or obese. The number of overweight teens has doubled in the past 25 years and obesity cases have tripled. Having better access to safe, modern playground equipment will help kids form healthy lifestyle habits while they're young" "The playground funding supports government's ActNow BC goal of encouraging B.C. kids to increase physical activity levels and the ActNow BC campaign goal to 'make ever move a good move.""
10 Apr 2007	Premier Announces \$9.5M for First Nations Health	Office of the Premier; Ministry of Health; First Nations Leadership Council	Obesity considered a health challenge	"Today, our government is taking a serious step in bringing the health of First Nations people to a first-rate level, but there are still some serious challenges that lie ahead of us" (George Abbott, Health Minister). "We intend to meet those challenges head-on and by 2015, we expect to see progress made in key areas such as life expectancy, mortality, youth suicide, infant mortality, prevalence of diabetes, childhood obesity, and practicing, certified First Nations Health Care Professionals"

Release Date	News Release	Source	Core Position	Key Quotes
03 Apr 2007	Resources for Parents/Teac hers to Support Youth Fitness	Ministry of Education; Ministry of Tourism, Sport and the Arts	Obesity-related health problems and ill-health linked to poor diet and physical inactivity; encouraging healthy lifestyles through physical activity	"Daily physical activity is an important component to developing a healthy lifestyle" (Gordon Hogg, Minister of State for ActNowBC). "ActNow BC is about encouraging all British Columbians to form healthy lifestyle habits from our youth to our seniors" (Gordon Hogg, Minister of State for ActNowBC). "I'm convinced that the greatest threat to the future well-being of our kids lies in their deteriorating diets and their lack of adequate exercise, so I'm thrilled to be associated with Act Now, which is teaching our kids – and their parents – about the vital importance of eating a healthy diet and becoming more active."
21 Nov 2006	New Program Promotes Health, Reading for Preschoolers	Ministry of Education; Ministry of Children and Family Development; Ministry of Health	Promoting healthy lifestyles such as healthy eating and physical activity through schools and education	"ActNow BC helps to promote healthy lifestyle choices and environments for all British Columbians" (Gordon Hogg, Minister of State for ActNowBC). "LEAP [Literacy Education Activity and Play] BC will help youngsters increase their physical activity while they learn new things, and that will promote good health habits from a young age and continue that trend throughout their lives" (Gordon Hogg, Minister of State for ActNowBC). "ActNow BC is a cross-government undertaking consisting of programs and services that motivate British Columbians to eat a healthy diet, be more physically active, maintain a healthy weight, reduce, quit and avoid tobacco use and make healthy choices during pregnancy" (Gordon Hogg, Minister of State for ActNowBC).

Release Date	News Release	Source	Core Position	Key Quotes
05 Oct 2006	New B.C. Centre to Help Kids Tackle Obesity	Ministry of Tourism, Sport and the Arts	New Centre for Healthy Weights: Shapedown BC to help reduce obesity in children and adolescents	"We face an increase in the number of overweight children and adolescents. The new Centre for Healthy Weights: Shapedown BC will help hundreds of children and adolescents learn new habits early and enjoy the best quality of life for many years to come" (Gordon Hogg, Minister of State for ActNow BC). "We are supporting programs that promote healthy living and prevent illness in our societyif we can address the issue of obesity in children and teach them proper lifestyle choices, we can make a real difference in their health, and in the sustainability of the entire health-care system" (George Abbott, Health Minister). "Shapedown BChas taught our entire family about healthier [lifestyle] choices for a better life" (Ceri Bowles).
				for a better life" (Ceri Bowles, Shapedown family participant).
04 Oct 2006	A Better Diet Will Reduce Health-Care Costs	Ministry of Health; Office of the Provincial Health Officer	A healthier diet key in reducing health-care costs.	"B.C.'s commitment to a healthier, fitter population is the best way to reduce future health-care costs and provide British Columbians with the benefits a safe, nutritious diet can bring to their lives."
				"We can reduce health-care costsif we pay more attention to what we eat, reduce our portions and remain physically active. These are all basic health tenants."
				"British Columbians continue to consume high-calorie, low-nutrient fast food in larger portions, forego the recommended food groups and lead more passive lives driving to and from work, despite years of public awareness campaigns"
				"One third of cancers and the accompanying burden to families and the health-care system could be avoided if weate more fruit, vegetables and grains and minimized the intake of some fats to maintain a normal weight and exercised regularly"

Release Date	News Release	Source	Core Position	Key Quotes
24 May 2006	International Conference Helps Make Schools Healthier	Ministry of Health; Ministry of Education	Health experts from across Canada are meeting to discuss options to make schools healthier	"Research tells us that the four risk factors, tobacco, inactivity, poor nutrition and obesity, are contributing causes to our most common chronic diseases. Supporting school-age children to make healthy decisions will give them the information and tools they need to stay healthy for life" (George Abbott, Health Minister). "ActNow BCencourages healthy lifestyle decisions to improve quality of life, reduce the incidence of preventable chronic disease and reduce demand on the health-care system[it] focuses on healthy eating, physical activity, maintaining a healthy weight, tobacco reduction and making healthy choices during pregnancy."
08 May 2006	Two Minutes That Can Save Your Life	Ministry of Health	Using awareness (Hypertension Awareness Week) to combat high blood pressure in BC	"Knowing what your blood pressure is, healthy eating and moderate exercise are important and simple steps we can all take to help reduce our health risks" (George Abbott, Health Minister). "Through our ActNow BC initiatives, government is promoting healthy choices, and proving support for each of us to improve our quality of life" (George Abbott, Health Minister).

Release Date	News Release	Source	Core Position	Key Quotes
23 Mar 2006	\$30 Million to Promote Healthy Living in B.C.	Ministry of Health	Poor lifestyle choices such as poor nutrition and physical inactivity are risk factors in chronic disease;	"We are supporting programs that promote healthy living and prevent illness in our society" (George Abbott, Health Minister). "Research tells us that four risk factors are the major causes of our most common chronic diseases. Lifestyle choices about nutrition, exercise, tobacco use and healthy choices during pregnancy can make a real difference in our own health, and in the sustainability of the entire health-care system" (George Abbott, Health Minister). "About 1.2 million people in British Columbia suffer from one of more chronic conditions – a large proportion of which are preventable." "By creating environments where healthy choices are the easy choices – like eating healthy, being physically active, maintaining a healthy weight and living tobacco free – we will be on the right track" (George Abbott, Health Minister). "Improved diets could reduce death from cardiovascular disease and stroke by 20 percent and from cancer and diabetes by 30 percent" (George Abbott, Health Minister). "Overweight/obesity costs \$730 million to \$830 million annually [and]physical inactivity costs us more than \$570 million a year" (George Abbott, Health Minister).

Release Date	News Release	Source	Core Position	Key Quotes
21 Mar 2006	Province Launches Measures to Improve Student Health	Ministry of Education; Ministry of Health	Obesity is a serious problem; encouraging healthy living (healthy eating, physical activity etc.) through schools	"Childhood obesity is a serious problem [] One in four B.C. children between the ages of two and 17 is overweight or obese. The measures we are launching today will help make our students more physically active and improve their eating habits" (Shirley Bond, Education Minister).
				"These measures are an investment in our children's good health, now and for the future [] They build on the work being done through ActNow BC, which aims to reduce the burden of chronic disease and disability on individuals and communities, and ensures the sustainability of our health-care system" (George Abbott, Health Minister).
				"Schools play an important role in shaping the attitudes and beliefs of B.C.'s students [] That's why it is important that we help students develop healthy living habits now, so that they can be healthy and successful adults who pass those habits on to their children" (Shirley Bond, Education Minister).
19 Jan 2006	National Non- Smoking Week	Ministry of Health	Improved health through lowered obesity rates, physical fitness, healthy choices etc.	"ActNow BC was launched early in 2005 as the Province's comprehensive health promotion platform to improve British Columbians' health bylowering obesity rates, increasing physical fitness and encouraging healthier choices during pregnancy. The ActNow BC target is to reduce tobacco use to 14.4 per cent of individuals 15 or older by 2010"
08 Dec 2005	Report Shows Impact of Diabetes in B.C.	Ministry of Health	Obesity and associated diseases/illnesse s are costly and largely preventable; individuals can reduce risk of disease through healthy eating, physical activity etc.	"Type 2 diabetes account for 90 percent of diagnosed diabetes cases in B.C. This type of diabetes is closely linked to obesity, making it largely preventable. By being physically active, eating healthier foods and quitting smoking, people can reduce their risk of developing this permanent chronic condition, or control it when it does occur." "Diabetes prevention [can]ease cost pressures on the entire health system" (Dr. Perry Kendall, Provincial Health Officer).

Release Date	News Release	Source	Core Position	Key Quotes
22 Nov 2005	Food Guidelines to Help Schools Improve Student Health	Ministry of Health; Ministry of Education	Obesity is a serious health problem; learning healthy lifestyle habits (healthy eating and physical activity) are key in sustaining a healthy lifestyle through adulthood	"Childhood obesity is a serious problemin B.C., one in four children between the ages of two and 17 is overweight or obese" (Shirley Bond, Education Minister). "Children with healthy eating habits have the positive foundation they need to develop a healthy body and mind [] through ActNow BC, our goal is to lead the way in North America in healthy living and physical fitness. These new guidelines support that goal by helping children develop healthy habits at school they can carry throughout their lives" (George Abbott, Health Minister).
26 Sept 2005	B.C. Invests Over \$4.2 Million in Health Promotion	Ministry of Health; ActNow BC	Poor nutrition, overweight/obes ity and physical inactivity are major risk factors in disease; promoting healthy lifestyles and healthy choices	"ActNow BC funding [is] aimed at providing [communities] with information, resources and support for healthy lifestyles" (George Abbott, Health Minister). "Promoting healthy and active lifestyles to all British Columbianswe will work to make the healthy choices the easy choices" "Risk factors such as tobacco use, poor nutrition, physical inactivity, overweight and obesity, and unhealthy choices during pregnancy are the major causes of common chronic diseases such as type-2 diabetes, cardiovascular disease, hypertensionand many types of cancer" (Ministry of Health).
30 Jun 2005	Survey Shows Student Satisfaction Increasing	Ministry of Education	Obesity is a serious problem; encouraging healthy eating and physical activity through BC schools	"We know that childhood obesity is a problem and schools are working to improve the health of our young peopleThat's why the Province is introducing a comprehensive health and physical activity program for schools, including expanding the Action Schools! B.C. program to every school in B.C. by 2010" (Shirley Bond, Education Minister).

BC Gover	nment News Re	leases (June 2, 20	01 – June 16, 2005)	
Release Date	News Release	Source	Core Position	Key Quotes
14 Apr 2005	Key Role for UNBC in Northern Cancer Strategy	Office of the Premier; Ministry of Health Services	Improving health and reducing risk of disease through healthy lifestyle	"Eating healthy, increasing physical activity, and reducing obesity have been reported by the scientific community to reduce cancer risks. These health considerations are the focus of the program ActNow BC. The programaims to improve the overall health and wellness of British Columbians, making B.C. the healthiest jurisdiction everto host the Olympic Games" (Ministry of Health Services, 2005).
03 Mar 2005	Pilot Program to Promote Healthy Eating in BC Schools	Office of the Premier; Ministry of Health Services	Learning healthy eating and physical fitness key in improving health.	"A big part of [prevention] is a lifelong commitment to healthy eating and fitness starting with an active, healthy childhood" (Gordon Campbell, Premier).
18 Nov 2004	Kids Hit the Slopes to Stay Fit and Healthy	Ministry of Sustainable Resource Management	Learning healthy lifestyle choices through physical activity	"We are committed to encourage kids to be more physically active and to make healthy choices" (Sandy Santori, Minister of State for Resort Development). "There's no better place than the slopes of some of British Columbia's finest resorts to provide an opportunity for our youth to get out there and be active" (Sandy Santori, Minister of State for Resort Development). "This program will help children make a positive lifestyle choice while taking advantage of our world-class resorts right here in the Kootenays."

Release Date	News Release	Source	Core Position	Key Quotes
10 May 2004	BC Celebrates Active Lifestyle as Key to Good Health	Ministry of Health Services; Ministry of Small Business and Economic Development; Ministry of Education	Physical activity is key in maintaining good health from infancy through adulthood	"Physical activity is key to keeping people healthy from infancy right through adulthood" (Colin Hansen, Health Minister) "Estimates are that 'physical inactivity' is costing British Columbians over \$422 million annually in direct and indirect health care expenditures" (Ministry of Health Services) "Research indicates that a sedentary lifestyle is a major risk factor for a number of chronic diseases such as coronary artery disease, stroke, hypertension, type 2 diabetes, colon cancer, breast cancer and osteoporosis" "It doesn't have to be a huge commitment and [it's] something everyone can do—just a small increase in activity can make a big impact" (Jon Les, Minister of Small Business and Economic Development).
30 Oct 2003	Provincial Health Officer Urges School Health Focus	Ministry of Health Services; Ministry of Education	Promoting good health and learning healthy lifestyles in schools is key to reducing preventable illnesses and sustaining a healthy lifestyle in adulthood	"British Columbia's top health public official is encouraging a greater emphasis on promoting student health in the province's schools" "Because the risk behaviours that lead to preventable illness and injury begin at a young age and develop throughout the school years, school is a key setting to improve the existing and future health of young people and thereby reduce future economic and social costs" "The new Grade 10, 11 and 12 program requires demonstrated knowledge and skills in personal health, such as physical activity, healthy eating, emotional wellbeing and health-enhancing decisions" "I am encouraged the ministry has recognized that importance of physical activity, particularly as we grapple with an epidemic of childhood obesity and related health problems such as diabetes" (Dr. Perry Kendall, Provincial Health Officer).

BC Gover	BC Government News Releases (1994 – June 5, 2001)				
Release Date	News Release	Source	Core Position	Key Quotes	
28 Mar 2000	Tribunal ruling recognizes obesity as a physical disability	Attorney General	Obesity is a physical disability; discrimination based on weight/obesity is recognized.	"A decision that Dion Rogal was discriminated against because of his size and weight is a step in the right direction" (BC Human Rights Commission). "We are disappointed that the tribunal chose not to consider our submissions to ensure all members of marginalized groups – like overweight people – have effective human rights protection."	
03 Mar 1999	BC Students Shape Up	Ministry of Education	Encouraging children to adopt healthy lifestyles such as physical activity to improve health.	"Physical activity is the key to a healthy lifestyleFit Kids in the Classroom will show kids that fitness can be fun, while helping them develop healthy habits that will stay with them their entire lives" (Paul Ramsey, Education Minister). "Elementary school students are on the move toward a healthier lifestyle, thanks to Fit Kids in the Classroom." "Right now in this province, one-third of children and youth are inactive. If we don't do something now, these kids will be in a higher risks groups for heart attacks, strokes, colon cancer, diabetes and other illnesses" (Paul Ramsey, Education Minister). "Fit Kids in the Classroom has the potential to have a tremendous impact on the long-term health and well-being of the students in B.C." (Paul Ramsey, Education Minister).	
04 May 1999	Premier Announces \$10.76 Million to Reduce Wait Time and Improve Care for Cardiac Patients	Ministry of Health	Obesity is a risk-factor for heart disease	"The risk factors for heart disease (smoking, high blood pressure, obesity, etc.)" (BC Ministry of Health, 1999).	

Source: adapted from Siegel and Lotenberg 2007, 256; Winnett 1995; and Wallack et al. 1993

Appendix C: Obesity Programs in BC – Core Positions and Resources

Program Con	ore Positions	Resources, Information and Tools
Act Now BC "W you can hab "W but che from back ave calc Gu hea be che say fast "Ac che qua 200" " have enjubele and (Ac was ave equal to the che and the che	Vant to feel better? Have more energy? Make ur mind and body stronger? Chances are you n – with just a few small changes in your eating bits" (Act Now BC Web). What's happening is we're eating lots of food, t we're not always making the most nutritious oices [] For example, most of us could benefit om eating more fruits and vegetables and cutting ck on fats and sugars – did you know that the erage adult in BC gets about 25% of their total lories from foods not in the Canadian Food and use such as pop, chips and candy? Finding a althier balance doesn't have to be hard. It could easy as adding fruit to your cereal at breakfast, oosing regular instead of fancy coffee, and ying no to supersizing the next time you order st food" (Act Now Web). Let Now! BC is about each of us making small oices that can result in big improvements to our ality of life" (Ministry of Health Services, 105) Leven a few small changes in your lifestyle can ve you looking better, feeling better and joying a better quality of life. Click the links low for all kinds of good advice on getting to, d maintaining, a weight that's healthy for you" ct Now Web). Adults can increase their health and wellness by ding just 30 minutes of physical activity – the uivalent of two coffee breaks – to each day" act Now BC Web). Would you invest 10 minutes of your time in mething that would make you look better, feel tter, get sick less often, and possibly live niger?" (Act Now BC Web).	Healthy Living Tips: What's Stopping You? How Healthy do You Want to Be? Everyone Can Eat More Fruits and Vegetables! Making Room for Fruits and Vegetables, Fruits and Vegetables to Fit any Budget, How Can I Lose Weight?, Maintaining a Healthy Weight with Fruits and Vegetables, Taking the First Steps, 21 Easy Ways to get More Action into Your Day, Walk Your Way to Health, Whole Grains and Your Health, What is Healthy Eating?, Healthy Eating on the Run, Over 4000 Reasons to Eat Your Fruits and Vegetables, Fitting Activity into Your Day at Home, Fitting in Physical Activity at Work

Program	Core Positions	Resources, Information and Tools
Action Schools! BC	"providing more opportunities for more children to make healthy choices more often"	Resources: Food Fit For Sports or Physical
	"Action Schools! BC is a best practices model designed to assist schools in creating individualized action plans to promote healthy living."	Activity Days; Play First Lunch Tool Kit; Physical Activity Weekly Log (Grades K to 3); Physical Activity Weekly Log (Grades 4 to 7); Bounce-at-the-Bell Poster; Sporting Spirit Poster; Skipping;
	"Diverse and creative classroom activities and discussions expose children to vegetables and fruit and provide the necessary knowledge, skills and experiences to build the foundation for lifelong healthy eating."	Availability of BC Vegetables and Fruit; Veggies and Fruit the Colour Way Tracking Chart; Veggies and Fruit by Colour Category; Healthy Eating Booklist; Classroom Healthy Eating Action Resource (Grades K to 7); Healthy Eating Weekly Log
	"Promotes the creation of inclusive and diverse physical activity and healthy eating opportunities throughout the school day, and supports school initiatives to make healthy choices the easy choices for children."	(Grades K to 3); Healthy Eating Weekly Log (Grades 4 to 7); Colourful Choices Poster; Vegetable and Fruit Challenge Chart; Vegetable and Fruit Food Guide Serving Sizes for Canada Poster Form
BC School Fruit and Vegetable Snack Program	"Canada's Food Guide to Healthy Eating recommends that people over the age of four eat 5 - 10 servings of fruits and vegetables a day. The Food Guide suggests vegetables that are dark- green and leafy or yellow-orange and fruits that are either citrus or yellow-orange are best. Why is it important to include a variety of colourful fruits and vegetables into your daily diet? Here's whyEating fruits and vegetables may help to prevent cancer, Eating fruits and vegetables may help reduce risk of heart disease and stroke, Eating fruits and vegetables may help reduce the risk of other diseases"	A few ideas how to include more fruits and vegetables into your diet: Have a glass of fruit juice with breakfast; Sprinkle your cereal with fresh berries, bananas or dried fruit; Add fruit to your yogurt and top with low-fat granola or bran; Enjoy a salad with low-fat dressing; Have fresh cut up vegetables ready to go in the fridge for an easy snack idea. Enjoy with low-fat dip; Load vegetables on your sandwiches
	"Fruits and vegetables have so many health benefits to offer. Try to reach the goal of eating 5 - 10 servings of fruits and vegetables a day. By doing this, you will reduce the risk of disease and maximize good health."	
	"the key messages of the program are: pick local fruits and vegetables, pick a variety of colourful fruits and vegetables, enjoy the taste of local fruits and vegetables, enjoy eating 5 to 10 servings of fruits and vegetables every day"	
	BC Agriculture CF	

Program	Core Positions	Resources, Information and Tools
Active Communities Initiative	"Everyone. Active. Everyday." "Active Communities: Promoting healthy living and increasing physical activity in BC." "The Active Communities Initiative is a cross-sectoral initiative focused on supporting communities to increase physical activity levels of British Columbians by 20%. The initiative mobilizes and collaborates with communities, local governments, Aboriginal and partner organizations to promote healthy lifestyle choices, increase accessibility to physical activities and build supportive community environments."	Community Plans: BC Recreation and Parks Association Active Communities Community Developer, BC Recreation and Parks Association Active Communities Initiative Staff Program Opportunities: Walking Programs, Passport Programs, Active Workplace, Active Transportation; Active Aging, High Five, Everybody Gets to Play, Related Research Media Room: Success Stories, Marketing Toolkit,
Dial-A- Dietician	"Offering quality food and nutrition information and resources for B.C. residents." "Dial-A-Dietitian is operated by HealthLines Services BC as part of an evolving tele-health care platform that provides multi-disciplined comprehensive self-care and health system navigation services to British Columbians and health care professionals." "Dial-A-Dietitian specializes in easy-to-use nutrition information for self-care, based on current scientific sources."	Media/News Page, Community Created Resources, Events Resources: Lifestyle Steps for Healthy Weight Loss: Getting Started; Lifestyle Steps for Healthy Weight Loss: Taking Action; Resources for Healthy Lifestyles ("Provides practical information on how to achieve a healthy weight through healthy eating and physical activity"); Eating for a Healthy Weight - Guidelines for Indo- Canadians; Eating for a Healthy Weight for Indo-Canadians - Extra Tips for Healthy Meals; Health Canada - It's Your Health- The Safe Use of Health Products for Weight Loss; Health Canada - Physical Activity Guides ("A guide to help you make wise choices about physical activity. Choices that will improve your health, help prevent disease, and allow you to get the most out of life"); Recipe Substitutions to Lower Fat and Sugar; Health Canada - Eating Well with Canada's Food Guide

Program	Core Positions	Resources, Information and Tools
Making It Happen: Healthy Eating at School	"Kids need to eat well in order to grow and develop properly, but many are consuming too many calories and not getting the nutrition their bodies need. Schools can play an important role in fostering healthy eating habits, especially when parents, school boards, teachers, and health professionals all work together." "When we looked at the statistics on child obesity, diabetes, and poor eating habits we realized people in B.C. needed someplace to go for more information," says Sarah MacDonald, Director of Programming and New Media for Knowledge Network. "We are proud to present on-line resources that will help to create a virtual network of free learning tools for educators, parents, and community organizations to improve the health and well-being of British Columbians." "Healthy Eating at School is Everybody's Business!" "Schools play an important role in the development of good eating habits." "Nutrition education programs help students gain the information and build the skills they need to make healthy food choices." "Schools that offer meal, milk or snack programs can have a positive impact on students' long-term nutrition habits." "Some BC schools and districts have implemented nutrition policies and guidelines to ensure an environment where good nutrition skills are taught and supported." "Schools can support good eating habits by setting the right example, providing an appropriate time and place for lunch, and building commitment from everyone involved." Making It Happen: Healthy Eating at School (British Columbia Dairy Foundation, ActNow BC, Knowledge Network); Knowledge Network	Resources: Guidelines for Food and Beverage Sales in BC Schools; Healthy Option Vendors in British Columbia; Healthy Fundraising for Schools; School Food Sales and Policies Provincial Report; Food Fit for Sports Day; Frequently Asked Questions for Schools on the Guidelines for Food and Beverage Sales in BC Schools; Quick Reference for Healthier Food Choices; Healthier Foods: How To Make Fun-Fast-Food Healthier For Students; Dental Health: School Food and Beverage Sales; Tool for Stocking Healthy Foods in School; Play First Lunch Toolkit; Bake Better Bites; Take Action on FOOD AT SCHOOL; Simple Recipe Modifications and Brand Name Food List Key to Successful Changes; Recipe Substitutions and Salad Bar; Offering Students Tasty, Healthy Food that they Will Purchase; (School Assessment Tool) Healthy Eating at School: How is Your School Doing?

Program	Core Positions	Resources, Information and Tools
2010 Challenge	"Premier Gordon Campbell and MLAs all over the province are leading walks to encourage everyone to commit to a healthier lifestyle," said Bond. "Individually and together, our lifestyle choices about nutrition, exercise, tobacco and healthy choices during pregnancy can make a real difference in our own health, and in the sustainability of the entire health care system." (BC Government News Release: <i>Prince George Residents Act Now to Meet 2010 Challenge</i>). "In the February throne speech, government made healthy living one of B.C.'s five Great Goals for a Golden Decade" (BC Government News Release: <i>B.C. Communities Act Now to Meet 2010 Challenge</i>).	Resources: ActNow BC (www.actnowbc.ca) BC Government (www.gov.bc.ca) 2010 Legacies Now (www.2010legaciesnow.com)
Shapedown BC	"The Shapedown Pogram is family-focused and targets the underlying factors that often promote poor food choices and physical inactivity in families." "According to new Statistics Canada data (July 2005), one in every three children is overweight or obese. As many as 50 percent of obese five-year olds and 85 percent of obese 15-year-olds will become obese adults." "Obesity is a serious condition that affects quality of life expectancy. Complications of obesity present significant burden and cost to the health care system such as cardiovascular disease, increased cancer risk, type 2 diabetes, sleep apnea, orthopaedic problems, and decreased quality of life." Ministry of Tourism, Sport and the Arts 2006	Parent Resources: Promoting Healthy Weights; Active Play; Healthy Eating; A Healthy Relationship with Food

Program	Core Positions	Resources, Information and Tools
BC Healthy Living	"Working together to promote wellness and prevent chronic disease"	BCHLA Reports & Publications:
Alliance	Healthy Eating Strategy:	Bake Better Bites Recipes and Tips for Better Baked Goods; Risk Factor Effective Interventions An Overview of their Effectiveness;
	"When it comes to healthy eating, education and access to nutritious foods are key. The goal of the Healthy Eating Strategy is to make healthy food more readily available and provide BC families with the skills and knowledge necessary for making sound snack and meal choices."	Risk Factors - Background Document; Resources for Health - A Cost Effective Risk Factor Plan for BC; Policy Consensus Statement on Marketing and Childhood Obesity; WHO Commission on Social Determinants of Health Report August 28 2008; Cost Of
	"61% of British Columbian children aged 12-18 do not eat the minimum recommendation of five daily servings of vegetables and fruit."	Eating in BC 2007 Report; BCHLA Community Capacity Building Strategy; BCHLA Healthy Eating Strategy; BCHLA Physical Activity Strategy
	"Reduction of sugar-sweetened beverage consumption has been identified as possibly "the best single opportunity to curb the obesity epidemic."	Media Room: Physical Activity Strategy Backgrounder; Healthy Eating
	Physical Activity Strategy:	Strategy Backgrounder; BCHLA Funding for Healthy Food in Schools; BCHLA Congratulates the
	"The more you move, the better you feel. That's why physical activity is a key component of a healthy and happy lifestyle. BCHLA has four initiatives to take British Columbians from the TV to the trails"	Province on the Speech to the Throne; Evidence in BC Affirms Findings from WHO Report - Address Social Inequities to Curb Rising Levels of Chronic Disease
	"To achieve these targets, BCHLA has three objectives to support British Columbians: To build skills and knowledge that lead to greater consumption of vegetables and fruit; To improve access to vegetables and fruit for all British Columbians; To decrease access to, and consumption of, unhealthy foods and beverages"	
	"51% of British Columbians are not sufficiently physically active." "Brisk walking has the greatest potential for increasing the overall activity levels of a sedentary population."	

Program	Core Positions	Resources, Information and Tools
BC Healthy Schools	"One of the core mandates of the Healthy Schools branch is to promote a comprehensive school health approach [] Comprehensive school health includes children's physical, social and emotional wellbeing. It is based on the recognition that health and learning are interdependent – and it goes well beyond what happens in the classroom [] "Comprehensive", in this context, means addressing health in every aspect of the school environment, including: teaching and learning the school's social and physical environment healthy school policy, and services and community partnerships." "British Columbia is promoting policy development and practice that reflect a comprehensive school health approach." We know that active, healthy students are happier and learn better. They also develop good habits that bring better chances of longer, healthier lives. Daily Physical Activity works alongside other Government initiatives, such as the Healthy Schools Network, Action Schools! BC, the School Fruit and Vegetable Snack program and revisions to guidelines for the sale of food and beverages within schools, all of which are tackling B.C's obesity and healthy living challenges. One in every four children in B.C. between the ages of two and 17 is overweight or obese. Statistics document the fact that physical education and health courses alone are no longer enough to counteract the increasing temptations of an inactive lifestyle and unhealthy foods choices. The Guidelines for Food and Beverage Sales in BC Schools (Revised 2007) are designed to maximize students' access to healthier options and fully eliminate the sale of unhealthy foods and beverages in BC schools by September 2008.	Healthy Schools Resources: Healthy Schools Network Newsletter; Healthy, Safe and Caring Schools Resource Guide 2009; Resources to Support Healthy Eating in Schools; Guidelines for Promoting Health in Schools; Healthy Choices Webpage; BC Medical Association - Family Health and Wellness Webpage; The Virtual Grocery Store Website; The NEW Canada Food Guide Website; Eat Well, Play Well, Stay Well Program Webpage Related Links: School Health; Ministry of Health Services; Ministry of Healthy Living and Sport; 2010 Olympics and Paralympic Winter Games; 2010 LegaciesNow; Canadian Society of Allergy and Clinical Immunology; Directorate of Agencies for School Health; Public Health Agency of Canada; Green Schools; Achieving Health Promoting Schools

Program	Core Positions	Resources, Information and Tools
Health Link BC	"Every day, we make choices about the food we eat and our lifestyles: We can make healthier choices for ourselves and our families that make a real difference to our ability to remain healthy and active now, and enjoy life to its fullest in the future."	Interactive Tools/Health and Fitness Tools: Are You at Risk for a Heart Attack?; Is Your Weight Increasing Your Health Risks?; What Is Your Child's BMI?; How Many Calories Did You Burn?
	"While healthy living may mean different things to different people, B.C. is committed to helping people of all ages achieve the best in health. The best in health starts with: Eating healthy foods, exercising regularly and staying active [and] preventing and reducing illness or disease"	Printed Resources: BC HealthFiles; BC HealthGuide Action Sets: Tools to help you learn and practice better ways to manage your health Decision Points:
	"Healthy living and physical activity are beneficial at any age. The time to start living healthier is right now!"	Information that helps you make informed decisions when you are facing medical conditions or other conditions that affect your health
Nutritional Guidelines	"In November 2006, Premier Gordon Campbell announced an initiative to replace junk food	Resources:
for Vending Machines in BC Public	with healthier food and beverage choices in vending machines in B.C. public buildings,	ActNowBc (www.actnowbc.ca)
Buildings	including hospitals, as part of the provincial strategy to reduce health care costs by	
	improving individual health" (Ministry of Labour and Citizens' Services, 2005).	
	"The government is inducing improvements through ActNow BC by providing	
	information and support for healthy lifestyle decisions" (Ministry of Labour and Citizens' Services, 2005).	
	"Promot[ing] an environment that encourages healthier eating in line with the goal of	
	reducing health care costs by promoting individual health" (Ministry of Labour and Citizens' Services, 2005).	
	"This is part of the provincial strategy to reduce health care costs by improving individual health. When healthier products are available, you're able to make healthier	
	choices in your diet' (Vancouver Coastal Health).	

Source: adapted from Siegel and Lotenberg 2007, 256; Winnett 1995; and Wallack et al. 1993

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