The School Food and Beverage Policy:

Examining Schools’ Readiness to Implement the Policy

With Organizational Readiness for Change

By

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Food and nutrition are an integral part of daily life and can have an effect on social, cognitive, and physical development as well as the prevention of negative health outcomes. The development of the School Food and Beverage Policy was targeted to both elementary and secondary schools in Ontario as a proactive approach to health and wellbeing by eliminating the sale of foods that do not meet nutrition criteria.

School food policies can play an important role in students’ overall health and well-being, but little is known about schools’ readiness for implementing these policies. The purpose of this study was to examine schools’ readiness to implement the policy with an organizational readiness lens. This study consisted of a policy analysis and qualitative interviews with 8 administrators who were directly involved in the planning and preparation for the policy and 4 teachers who were recommended by their respective principals as key stakeholders in assisting in the process.

Policy analysis uncovered the inconsistencies within the policy, while interview data revealed emergent themes surrounding: pre-implementation planning, policy technicalities, and challenges of confronting implementation. The variability in perspectives of readiness illustrates the complexity of preparing for policy implementation across schools and even within schools.

Findings suggest that there is a need for more effective dissemination, in-service training, and education for school stakeholders in order to engage and stimulate interest and compliance of the nutrition standards. Having appealing and nutritious foods that students will enjoy is an area that requires more work. Developing supportive partnerships within and outside the school to reinforce consistent messages to students is also an area that needs attention. The results of this research serve as a framework for potential solutions to school nutrition policies, strategies,
and interventions and may also inform key stakeholders and policy makers in adapting and refining policies as a means of supporting the implementation process for successful outcomes.
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Chapter 1

Introduction

Food and nutrition are an integral part of daily life and can have an effect on cognition and learning (e.g., Bellisle, 2004; Benton et al., 2003; Taras, 2005), physical development (Harrod-Wild, 2007), as well as the prevention of negative health outcomes (Bidlack, 1996). Food contains vitamins, minerals, and essential nutrients that are necessary in growth and development. With the convenience of ‘junk food’ also known as ‘competitive foods’, poor eating habits and sedentary lifestyles have increased, the consumption of healthy, nutrient dense foods has declined. This shift has led to a higher prevalence of serious long-term health conditions such as obesity (Reedy & Krebs-Smith, 2010), cardiovascular disease (Fung et al., 2001), type 2 diabetes (Lindstrom et al., 2006), and some cancers (Schatzkin, 2000).

In response to research, the Ontario Ministry of Education implemented the Program/Policy Memorandum (P/PM) No. 150, also known as the School Food and Beverage Policy (SFBP), which restricts the sale of all food and beverages that do not meet the nutritional standards of the memorandum. In an attempt to help minimize the consumption of unhealthy foods and promote foods that nourish cognitive and physical development in children (Ontario Ministry of Education, 2010), this policy mandates that all publicly funded elementary and secondary schools comply with these standards beginning September 2011 as one part of the foundations for creating a healthy school.

School policies are an important aspect of improving physical and social environments as well as behavioural changes in the individual (MacLellan, Taylor, & Freeze, 2009). Policies also provide key stakeholders the opportunity to guide and create programs or interventions that foster change in a desirable direction. Research has shown that schools can positively influence
children’s eating behaviour by increasing the availability of healthy foods such as fruits, vegetables, and low-fat, high-fiber foods and decreasing the availability of competitive foods through federally mandated nutrition standards (Bevans, Sanchez, Teneralli, & Forrest, 2011). The SFBP was created to elicit change and to support a healthy school environment to “enhance student learning and success as well as enhance students’ social and emotional well-being” (Ontario Ministry of Education, 2010, p. 1) by setting nutrition standards for food and beverages sold in all venues (e.g., cafeteria, tuck shops), programs (e.g., breakfast or lunch), and events (e.g., bake sales, sporting events).

Providing a school environment that promotes healthy eating is important in preventing serious health conditions, maintaining good physical and mental development, and supporting students’ overall well-being. Examining the implementation of school food policies and how the individuals within a school fully prepare for a new policy is essential in determining a schools’ influence on students’ eating habits. One common challenge with implementing similar policies is resistance to changing the status quo from various levels of individuals that the policy impacts (Suarez-Balcazar et al., 2007). It has, however, been suggested that increasing readiness for policy implementation may decrease such resistance to the change (Cheng, Mok, & Tsui, 2002; Weiner, 2009).

Since readiness is considered an essential precursor to the successful implementation of change (Armenakis, Harris, & Mossholder, 1993; Weiner, Amick, & Lee, 2008), it only seems logical to try to increase readiness for policy implementation in order to help decrease resistance to the policy. Weiner (2009) states, “when organizational readiness is high, organizational members are more likely to initiate change, exert greater effort, exhibit greater persistence, and
display more cooperative behaviour” (p. 67), influencing the effectiveness and success of the policy being implemented.

**Rationale**

Policies are an important part of creating a framework for planning, organizing, and clarifying roles and responsibilities to ensure efficiency and commitment to the policy (Delaney, 2002); yet policy planning and preparation rarely involve individuals who put the policy into practice. In this study, organizational readiness for change is the proposed framework used to examine schools’ readiness for implementing the SFBP. This proactive approach suggests supporting specific factors that have been identified in the literature as challenges to implementing healthy eating policies.

Previous research on school food policies has indicated potential barriers and facilitating factors for implementation. On one hand, social support (e.g., parents, community, and principals’ leadership) was a common factor in research on positive influences on healthy eating in both Canadian provinces and U.S. states (e.g., Agron, Berends, Ellis, & Gonzalez, 2010; MacLellan et al., 2009; MacLellan, Holland, Taylor, McKenna, & Hernandez, 2010; McKenna, 2003; Vecchiarelli, Takayanagi, & Neumann, 2006). On the other hand, the challenges with implementing school food policies have been numerous. MacLellan and colleagues (2010) identified lack of communication, limited school resources, the role and responsibility of feeding children, and accommodating students’ food preferences as major barriers to effective implementation. Contextual factors, such as food options, pricing, and advertising, have also had a detrimental effect on children’s eating habits (Kubik, Lytle, Hannan, Perry, & Story, 2003; Nollen et al., 2007). These factors have shown negative effects on some schools’ revenue, which,
in turn, has been viewed as a predominant challenge to effectively develop, implement, and monitor school food policies (Agron et al., 2010; Nollen et al., 2007).

In considering studies on the enabling and barrier factors for implementing school food policies, I attempt to understand schools’ readiness to implement the policy with an organizational readiness framework. As a result of readiness assessment and anticipation of some of the challenges, schools may be better equipped to promote implementation designs and strategies that support enabling factors and reduce resistance to change. Processes and strategies that align with organizational readiness may help support schools’ preparedness for the implementation of the policy.

Purpose

The goal of this study is to investigate schools’ readiness for implementing the SFBP. This purpose was informed by three objectives designed to examine organizational readiness for implementing the policy:

1. To examine how the SFBP informs, influences, and supports schools’ readiness to implement the policy;
2. To examine the nature of school stakeholders’ engagement and actions in facilitating readiness for implementing the policy;
3. To examine the differences and similarities among elementary and secondary schools’ readiness for implementing the policy.

Definition of Terms

Merriam-Webster Dictionary (n.d.) defines readiness as being “prepared mentally or physically for some experience or action.” Numerous studies have investigated organizational readiness as a multi-dimensional construct that has been defined in many ways. Beer (cited from
Holt, Armenakis, Harris, & Feild, 2007) defined readiness for change in terms of the social, technological, and systematic ability of an organization to change. Armenakis, Harris, and Mossholder (1993) specifically identified readiness as one’s capacity for change and where individuals’ willingness, motives, and goals matched the organization’s expectations. The literature illustrates various aspects of readiness such as one’s beliefs about the appropriateness of, support for, and the value in the proposed change (Holt et al., 2007). The different factors that influence readiness are broad and multi-faceted. Readiness has been summarized as a comprehensive attitude that is influenced by environmental, structural, and organizational members’ receptivity to the intended goals. Holt et al. (2007) defined readiness for change as:

A comprehensive attitude that is influenced by (i) the content (i.e., what is being changed), (ii) the process (i.e., how the change is being implemented), (iii) the context (i.e., circumstances under which the change is occurring), and (iv) the individuals (i.e., characteristics of those being asked to change) involved, and collectively reflects the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo. (p. 326)

For the purposes of this study, based on the works in the fields of organizational readiness theory and school food policy implementation, readiness for policy implementation has been defined as (i) being cognitively aware of the current needs and characteristics of the individuals within the school, (ii) identifying challenges or barriers for the school and developing a plan accordingly to execute the change within a reasonable timeframe, (iii) informing, engaging, and involving all the key stakeholders in the change process, and (iv) establishing support networks to sustain and facilitate the change.
Research Study

This study was carried out in three stages. The first stage was a policy analysis of the SFBP through descriptive, process, and evaluative methods. The second stage was the qualitative interviews, which provided a deeper understanding of the participants’ experiences and views on preparation for the policy from October 2010 until September 2011. The third stage was a critical comparative analysis of elementary and secondary schools’ readiness to implement the School Food and Beverage Policy through the organizational readiness lens.

This study was conducted in publicly funded elementary and secondary schools in three school boards located in Southern Ontario. A total of 12 participants were interviewed to gain perspectives across different school boards. The criteria for participant recruitment included those who worked closely with the planning, preparation, and initial training for implementing the School Food and Beverage Policy in September 2011. These individuals mostly included administrators and occasionally teachers who led some of the schools’ healthy eating initiatives.

Limitations

One of the limitations of this study was the lack of research on organizational readiness for change on policy implementation within the education sector. For the purpose of this study, the organizational readiness for change framework was adapted from other academic fields to reflect the challenges found in literature on implementing school food policies. The notion of readiness for policy implementation requires more research in order to support the reliability of this theoretical framework.

This study was also limited by the small sample size. This sample size does not allow for the development of models and the design of implementation strategies based on these select findings, nor do these data allow for information to be generalizable. In addition, the results of
this study were based upon school stakeholders’ retrospective views of readiness for policy implementation two to three months after the policy was implemented in schools. Thus the reliability of participants’ actions in preparing for this policy might not have been as accurate as compared to interviews conducted at the time of planning and training for the policy.

**Thesis Overview**

This thesis is organized into five chapters. Chapter 1 introduced the reader to the rationale and purpose of this study. Chapter 2 provides a review of the relevant literature for the topic being researched. Chapter 3 describes the research design and methods used to conduct and analyze the data. Chapter 4 contains two parts: the first part is a policy analysis of the School Food and Beverage Policy; and the second part reports on the interview responses according to thematic analysis. Chapter 5 contains a summary of the research questions according to results found in Chapter 4, conclusions, and discussions, as well as implications for theory, practice, policy, and future research.
Chapter 2

Review of the Literature

Research has shown that food can affect cognition, learning, and student achievement (e.g., Benton & Owens, 1993; Rampersaud, 2009; Videbeck, 2010). Collectively, this research has resulted in various initiatives to change food that is served and sold in schools both nationally and internationally. For example, Chef Jamie Oliver initiated a campaign to replace all processed foods that were high in fat, salt, and sugar, with more nutritious meals prepared in schools across the United Kingdom (Gilbert, 2005). Belot and James (2009) found that there were substantial improvements in literacy and science tests in addition to a decrease in absenteeism as a result of this campaign. These findings illustrate the potential impact that food changes can have on students in school. This initiative has recently expanded to Jamie Oliver’s Food Revolution, which tackled all North American schools in an attempt to improve the diets of young American students through education, cooking skills, and the use of fresh, local, and better quality food, a similar goal to that the School Food and Beverage Policy (SFBP) aims to achieve in Ontario.

With studies that have examined the effect of food on both short-term and long-term health outcomes, such as oral health (Burt et al., 1988; Selwitz, Ismail, & Pitts, 2007), overweight and obesity problems (Neumark-Sztainer, Hannan, Story, & Perry, 2004), or nutrient deficiencies necessary for proper mental and physical development (McCann & Ames, 2007; Rampersaud, Pereira, Girard, Adams, & Metzl, 2005), it has become evident that policies must be in place to help address these rising concerns. The long-term health effects of being overweight or obese have increased the risk of serious chronic conditions, such as cardiovascular disease, type 2 diabetes, and certain cancers. Increasing the consumption of fruits and vegetables
and decreasing the consumption of foods high in fat, sugar, and salt have been shown to decrease the risk of developing these short-term and long-term effects in later life.

The prevalence of obesity has become a serious public health concern. Schneider (2008) stated the high prevalence of obesity in adult and adolescent populations may be attributed to a combination of genetic factors, environmental influences, low energy expenditure, and high caloric intake. The economic burden of obesity has increased substantially over the past 30 years (Wang & Dietz, 2002; Withrow & Alter, 2010) with a conservative estimate of $4.3 billion (2005) in healthcare costs due to excess weight in Canada (Public Health Agency of Canada, 2009).

Being overweight puts individuals at risk for cardiovascular disease, elevated cholesterol and other lipid abnormalities, hypertension, diabetes, hormone dysregulation, respiratory problems, digestive issues, and even psychological problems (Schneider, 2008). The increase in child and adolescent obesity has led to research on the determinants of healthy eating. This research in turn has led to the subsequent development of school policies that support and foster healthier eating habits. The implementation of the School Food and Beverage Policy has rationalized nutrition standards based on studies that have shown how proper nutrition can prevent the risk of heart disease, type-2 diabetes, and some cancers.

**The Ontario Context**

In December 2006, the Ontario Ministry of Education released the *Foundations for a Healthy School* framework. This framework was developed based on current research and input from education and school-based health experts, including input from the Ministry of Health Promotion (Ontario Ministry of Education, 2006). The Ontario government is committed to supporting healthy school environments by promoting “optimal childhood health, growth, and
intellectual development” (Ontario Ministry of Education, 2010, p. 2) by developing programs and policies such as the SFBP to assist schools in becoming healthier places to learn. The *Foundations for a Healthy School* framework outlines the four components of a healthy school, including (i) High-Quality Instruction and Programs, (ii) Healthy Physical Environment, (iii) Supportive Social Environment, and (iv) Community Partnerships. This comprehensive framework suggests strategies for supporting healthy eating, physical activity, bullying prevention, substance use and abuse, personal safety and injury prevention, growth and development, and mental health under each of the four components.

The development of the SFBP was one of the important steps in creating healthier schools in Ontario. The purpose for this policy was to “contribute to improved education and health outcomes for all students” (Ontario Ministry of Education, 2010, p. 2) and to reduce the risk of students developing serious health conditions through “knowledge, skills, and attitudes regarding healthy eating” (p. 2). In order to achieve this goal, nutrition standards were established for food and beverages sold in publicly funded elementary and secondary schools beginning in the 2011/2012 academic year. Nutrition standards were developed according to Canada’s Food Guide to Healthy Eating. These standards outlined strict guidelines for each of the food groups (e.g., grains, fruits, and vegetables as well as ‘mixed dishes’) and miscellaneous items (e.g., condiments, dressings, gravies, etc.) to indicate the optimal amount of fat, sodium, and fibre that should be sold in schools (Ontario Ministry of Education, 2010). Nutrition criteria are also specified for the different forms of food such as fresh or canned items (Appendix A).

Food labels on each item were to be compared with the nutritional requirements outlined by the policy document to determine whether to “sell most (≥ 80%),” “sell less (≤ 20%),” or were “not permitted for sale” (Ontario Ministry of Education, 2010, p. 3). Food and beverages
that contained an optimal amount of nutrients were placed in the “sell most (≥ 80%)” category because these products were the healthiest option with the lowest amount of fat, salt, and/or sugar. Products that were slightly higher in fat, salt, or sugar content were to be limited to only 20% of the available foods for sale. Foods that exceeded these criteria were not to be sold in schools because of the empty calories, lack of essential vitamins or minerals, and high fat or sugar content (e.g., confectionary items and deep fried foods). These types of foods were often referred to as ‘competitive foods’. For example, grain products that contain less than 3 grams of fat and 240 milligrams of sodium or less qualify in the “sell most” category and may constitute 80 percent of the food choices available; while grains that contain more than 3 grams, but less than 5 grams, with 480 milligrams of sodium or less qualify in the “sell less” category and make up 20 percent of the food choices available. Values that exceed 5 grams of fat and 480 milligrams of sodium are considered non-nutritious and are not permissible for sale in schools.

In the SFBP, “the ministry recognizes that there may be differences in approaches and implementation at the local level” (Ontario Ministry of Education, 2010, p. 5) and makes recommendations to collaborate with students, parents, staff, community members, and health professionals to assist in the compliance of the intended objectives. The ministry also requires principals to comply with Ontario Regulation 200/08, *Trans Fat Standards*, Regulation 562, *Food Premises*, which regulates proper food handling and preparation under the Health Protection and Promotion Act, and *Sabrina’s Law*, to minimize the risk of exposure to anaphylactic agents (Ontario Ministry of Education, 2010). Within this policy, recommendations are made to accommodate the diversity of religious/cultural needs of students and staff while being environmentally aware, offering local produced goods when possible, and avoiding the use of food or beverages as a reward or incentive (Ontario Ministry of Education, 2010).
Previous experience and research from other school districts in other provinces and states illustrate some of the challenges to implementation. If Ontario schools can learn from others’ mistakes and anticipate some of the potential barriers, the efforts put forth in implementing programs and initiatives to achieve these goals may prove to be more effective.

**International School Food Policies**

In order to address the immediate concern of the worldwide obesity epidemic (Withrow & Alter, 2010), school food policies have been created to eliminate food and beverages that were high in fat, salt, and sugar from every school venue. Eliminating many of the popular foods such as candy, chips, and soda has raised a number of problems in schools in the United States (Vecchiarelli, Takayangagi, & Neumann, 2006). Enforcing nutrition standards alone has merely limited the types of food and beverages sold within schools; however, the unintended consequences of this policy have emerged in numerous studies and are discussed further in this review.

In a study by Vecchiarelli and colleagues (2006), 399 students in the Los Angeles school district were surveyed on their knowledge and perceptions of the impact the policies had on their dietary behaviours. The school food policies impacted some students’ behaviours, but not all. The policy had changed over half (52.6%) of the students’ eating habits inside school, while only 20.3% of the students felt that it affected their daily food consumption outside of school (Vecchiarelli et al., 2006). Enforcing new policies that did not consider students’ needs in order to comply with the policy resulted in resistance to the changes in the types of foods they consumed. In some cases, students reported that the policy had an adverse effect on their food consumption. One student said that he would “binge on junk food when [he got] home” (p. 530) due to the lack of ‘junk foods/soda’ at school. Of the students who wrote a comment, 10% of the
students felt that the policy had a negative impact on their diets. Rather than banning all the so-called ‘junk food’, studies suggest providing more appealing food alternatives for students to choose from (MacLellan, Holland, Taylor, McKenna, & Hernandez, 2010; McKenna, 2003; Vecchiarelli et al., 2006). Policy goals do not necessarily translate into practice easily; thus investigating strategies that support the implementation of the policy by assessing schools’ readiness may increase compliance and reduce resistance to the change may better result in the achievement of the intended goals.

In some studies, students and parents reported that schools failed to accommodate students’ food preferences and to make healthier alternatives more appealing for students, resulting in poor implementation of the policy (MacLellan et al., 2010). Understanding the circumstances that lead to healthy eating behaviours can help policymakers develop policies and institute a system of change that minimizes the incidence of negative health outcomes and positively influence healthy food choices.

**Major Themes**

Five predominant themes were present in the existing research on the implementation of policies and programs surrounding healthy eating in schools: (1) resource availability; (2) communication; (3) social structures; (4) contextual factors; and (5) individual factors. Each theme is described in further detail below, making specific reference to the Canadian context when possible; however, I draw on international studies for comparison to illustrate some of the challenges for implementing school food policies.

**Resource availability.** Financial resources are critical in the feasibility and sustainability of implementing any project, program, or initiative. Material and human resources, such as the proper facilities and staff, are also fundamental to the effectiveness of any change efforts.
Financial resources. Funding deficits have been found to be potential barriers to the implementation of school food policies. The food system in the United States contributes a sizable portion to the total workforce; producing $1 trillion annually (Belasco, 2008). The School Nutrition Association (as cited by Weaver-Hightower, 2011) found that food sales in elementary and secondary schools make up almost $15.9 billion or 2.5% of all restaurant and food service sales in the U.S. while approximately $2.5 billion comes from school and college vending machine revenue. In Canada, the estimated annual food revenue is $60 billion (Canadian Restaurant and Foodservices Association, n.d.), with approximately $7.1 billion coming from the combined food services of various facilities including hospitals, schools, prisons, factories, and entertainment operations (Canadian Restaurant and Foodservices Association, n.d.).

In the United States, the National School Lunch Program (NSLP) and the School Breakfast Program (SBP), both federally funded food assistance programs, provide subsidized or free meals to over 101,000 public and private schools (Ralston et al., 2008). Eligibility is dependent upon household income, living situation, or participation in other assistance programs such as the Food Stamp Program (Ralston et al., 2008). In 2008, the Ontario government invested $32 million over three years to the Student Nutrition Program (SNP), particularly focusing on communities with the highest needs (Ontario Ministry of Children and Youth Services, n.d.); however, since this program does not require eligibility and is open to all, insufficient funding is provided to support the needs of all participating students. Initiatives such as the SNP rely solely on parent volunteers, teachers, other school staff, and community members to run the program and with the Ontario government currently contributing only 15% of the total cost incurred by the program, the remaining funding is dependent upon local
charities, corporate sponsors, and contributions from parents and the local community (Ontario Student Nutrition Program, n.d.). These factors pose the question of feasibility and sustainability of such programs for the future.

Nutrition standards in school food policies in the United States and Canada have generally been exempt if meals were offered to students at no cost, thus presenting a problem for students without sufficient financial resources to eat a proper healthy meal. Students may be served non-nutritious foods because of this policy exemption. Drewnowski and Darmon (2005) found that there was a negative correlation between energy density and diet cost. This finding meant that high calorie, energy-rich foods (e.g., refined sugars and high fat) were typically more inexpensive compared to the healthier, nutrient rich alternatives. As a result, individuals or families with fewer financial resources opt for the energy-dense grains, fats, and sugars since they cost less than lean meats, and fresh fruits or vegetables (Drewnowski & Darmon, 2005).

Both obesity and hunger coexist in low-income families (Drewnowski & Darmon, 2005) and present a challenge for programs attempting to prevent hunger as well as obesity. In general, consumer food choice has been based upon taste, cost, convenience, and health and has presented major barriers to purchasing healthier foods options (Callaghan, Mandich, & He, 2010; Carillo, Varela, Salvador, & Fiszman, 2011; Holmberg, Coveney, Henderson, & Meyer, 2010; Neumark-Sztainer, Story, Perry, & Casey, 1999). Moreover, low-income households tend to consider taste and cost to be the predominant factors affecting food choice (Drewnowski & Darmon, 2005). In order to make healthier foods and beverages more accessible to low-income families, policies should investigate ways to make them more affordable. Drewnowski and Darmon (2005) discussed the issue of obesity and healthy eating as a socioeconomic issue. Research has suggested decreasing the prices of healthier foods in order to promote their
consumption (French, Jeffrey, Story, Hannan, & Snyder, 1997; French & Wechsler, 2004); however, more research is needed to understand the role financial profitability plays in schools’ food sales.

Callaghan, Mandich, and He (2010) conducted *The Healthy Vending Machine Pilot Project* making healthier snacks more readily available to students. Product sales were monitored and focus group interviews were conducted to obtain students’ opinions about healthy eating and the new vending machine choices (Callaghan et al., 2010). Results showed a 66% decline in vending machine revenue. According to students’ responses, prices were unreasonable for the value, and were one of the major barriers in purchasing healthier items. One student noted that “they’re really expensive, the healthier ones. They’re more expensive than the other ones, and you get less” (Callaghan et al., 2010, p. 189). Similarly, in a study by Carrillo, Varelo, Salvador, and Fiszman (2011), the second most important underlying factor of food choice was price; not being too expensive and being “good value for money” (p. 87).

In addition to declining revenue, another funding issue in Canada has been the government cutbacks that have resulted in local school boards attempting to financially support themselves. Fundraising events that sell high profit items such as chocolate bars and candy—high energy and low in nutritional value—represent one of the few ways to relieve the fiscal constraint of funding shortfalls (French, Story, & Fulkerson, 2002; Story, Kaphingst, & French, 2006). With nutrition standards in place, a concern regarding the ability to support school programs from the profit of certain popular foods is potentially one of the greatest obstacles to implementing the new policies (McKenna, 2003).

*Material and human resources.* A study in a Prince Edward Island school district found that one of the barriers to successful implementation of food policies was limited resources
(MacLellan et al., 2010). The lack of school facilities for preparing healthy food, kitchen staff shortages, and the cost incurred to prepare and keep healthier foods available were major challenges that schools were facing (MacLellan et al., 2010; Winson, 2008). With funding shortfalls, vending machines play an important role in creating additional revenue for the schools (Winson, 2008). While healthier foods and beverages may have increased in purchase and consumption, actual sales revenue has been found to decline in some instances (Callaghan et al., 2010). Furthermore, challenges with funding did not allow for extra kitchen staff to prepare foods from scratch as the most optimal and healthy approach to food preparation. Baked goods prepared off-site were often high in trans-fat and saturated fat content (Winson, 2008).

Consequently, the School Food and Beverage Policy states that food should be trans-fat free (Ontario Ministry of Education, 2010) according to the Healthy Food for Healthy Schools Act and the Trans Fat Regulation. As a result, there seems to be a competing struggle between human resources and the mandates of the Ontario government.

**Communication.** Communication encompasses the dissemination, training, and education provided to key stakeholders (e.g., schools, parents, students, community members) about healthy school policies and nutrition topics. Communication through formal and informal channels and through consistent messages in multiple environments may prove to be an effective instrument for influencing life-long healthy eating behaviours.

One of the major barriers to implementing effective food policies is the lack of adequate communication between schools and teachers and schools with students and their parents (MacLellan et al., 2010). In the study by MacLellan and colleagues (2010), the majority of parents were unaware of the nutrition policy; however, many of those who were aware, attributed
healthy snack programs to school initiatives, not to a policy (MacLellan et al., 2010). This finding illustrates a distinct gap between the communication of the policy and practice.

No research has been found to discuss teaching students about school food policies. Although nutrition has been integrated into the curriculum, the number of hours devoted to teaching this topic may be insufficient to affect a behavioural change (Story, Kaphingst, & French, 2006). Kann, Telljohann, and Wooley (2007) and Agron et al. (2010) found that teachers ranked dietary behaviour and nutrition as a topic they wanted more in-service training and staff development on as an opportunity to support and promote the implementation of school wellness policies. Fahlman and colleagues (2011) found that in-service professional development on nutrition increased self-efficacy, outcome expectancies, and intentions to teach nutrition education as part of the curriculum post-intervention. The researchers asserted that more in-service training and professional development programs that promote self-efficacy have been strongly linked to increased teacher effectiveness (Fahlman et al., 2011). Moreover, teacher effectiveness may contribute to students’ knowledge and awareness to adopt healthy eating behaviours that promote health and overall well-being.

Effective nutrition education programs have improved eating behaviours of students (Crawford-Watson, Kwon, Nichols, & Rew, 2009; Powers, Struempler, Guarino, & Parmer, 2005). Programs that incorporate food preparation skills, age-appropriate nutrition counseling, energy-balance, and the potential health effects of food choices have all been shown to produce positive outcomes, encouraging favourable eating habits (e.g., Crawford-Watson et al., 2009; Perez-Rodrigo & Aranceta, 2001; 2003). Many effective nutrition education programs suggest an improvement in eating behaviours when incorporating nutrition knowledge with supportive families and community partnerships (e.g., Crawford-Watson et al., 2009; Perez-Rodrigo &
Successful approaches have recommended using an interactive or hands-on approach to make the learning more fun, integrating families with specific interventions, and integrating lessons across curricula (Lytle, 1994; Sharma, Gernand, & Day, 2008). Educating various levels of individuals of the school system including administrators, teachers, students, and food service staff as well as families and the community should be integrated into health education and taught and practiced as a way of life - at home, at school, and in all aspects of life. Programs incorporating nutrition and health education and other health services such as counseling and community and family outreach as a multimodal approach have also been suggested to contribute to better health (McKenna, 2010); however, evidence for using this approach in schools is limited.

**Social influences.** Modeling healthy eating behaviours that reinforce the message inside schools, at home, and in the community is a key part of developing lifelong healthy eating habits. MacLellan and colleagues (2010) asserted that peers are highly influential when encouraging the consumption of certain foods. Thus students’ support for food and beverage changes in schools may help increase acceptance of these healthier options (MacLellan et al., 2010). Christensen (2003) suggested that family members are key actors in engaging in practices that promote health. Utilizing the combined efforts of the various individuals involved supports a more effective system change.

The social dimensions of the social ecological model (SEM) (seen in Figure 1) enable policies and partnerships with various key stakeholders to be supported while taking a holistic approach to achieving health. Lewins’ work on the SEM (as cited in Suarez-Balcazar et al., 2007) explains the various levels or subsystems that may influence or promote healthy behavioural changes in an individual. From Figure 1, the critical antecedents for policy
development begin with dissatisfaction with the status quo and the emerging research and knowledge on the effects of food on health and academic performance.

*Figure 1. The Social Ecological Model to promote healthy eating*\(^1\)

Agencies and institutions that attempt to regulate food policies guide school districts and ultimately food vendors to provide healthier food choices at schools. These types of changes

often attempt to influence schools and the community to affect change in families, peers, and teachers to act as role models to influence students’ eating behaviours. Challenges to implementing food policies may include: resistance to changing the status quo, lack of communication among key stakeholders, unrealistic expectations, and lack of revenue or resources (Suarez-Balcazar et al., 2007) needed to sustain healthy food programs and policies. So, although food policies may have some influence on eating behaviours, interventions that target several of the levels are more likely to produce a synergistic effect that encourages and sustains these healthy eating behaviours inside and outside of school (Suarez-Balcazar et al., 2007).

MacLellan and colleagues (2010) found that having parents’ and students’ support for healthy eating was a strong facilitating factor in the success of the policy. This finding was consistent with previous research influencing the success of other school food policies (MacLellan et al., 2009; Suarez-Balcazar et al., 2007; Vereecken, van Houte, Martens, Wittebroodt, & Maes, 2009). The more social support, peer involvement, and community representation in such health promoting initiatives, the greater the impact they had on the outcome (Gillies, 1998).

Identifying leaders and empowering individuals and communities as agents to initiate change motivates people to take action and adopt a new practice (Whitman, 2009). Principals’ leadership was identified as a key policy enabler in the schools’ change efforts (MacLellan et al., 2009). Principals, who valued and prioritized the change and had more positive attitudes, acted as facilitators for stimulating interest in forming a strong policy working group to identify champions for the change process and contributed to the success of their goals (French, Story, & Fulkerson, 2002; MacLellan et al., 2009).
The World Health Organization (WHO) (2008) suggested creating partnerships with relevant stakeholders at the various administrative levels - locally, regionally, and nationally. Change agents such as parents, teachers, administrators, food activists, NGO’s, Ministry of Health and Education, and local and provincial government are needed in order to coordinate actions and influence change at all levels within the system. Ries and von Tigerstrom (2010) argued that many jurisdictions in Canada and other countries are in line with comprehensive measures to improve and promote health and have taken legal action to regulate taxes on ‘junk’ food and restricted food advertising to children. It has been found that Canadian government actions have been inconsistent and sparse across the provinces (Ries & von Tigerstrom, 2010) and require more attention and action in order to promote health and wellbeing.

Establishing a system that accommodates the social ecological model to target the various influences and stakeholders simultaneously may help coordinate strategic efforts to achieve the desired outcomes. Suggestions have been made to prepare a multilevel, cross-disciplinary approach to achieving health in order to influence and affect change in various arenas (e.g., Deschesnes, Martin, & Hill, 2003; Gillies, 1998; McKenna, 2010; Whitman, 2009). Collaborations with healthy food vendors and local farmers may help strengthen healthy food programs to ensure meals comply with nutrition standards and dietary guidelines, while minimizing spending costs.

**Contextual factors.** A healthy school environment has been described as the physical and aesthetic surroundings and the psychosocial climate and culture of the school (World Health Organization, 2008). Contextual factors refer to the physical setting or food environment including vending machines or a la carte item availability and food promotion and marketing.
within the school. Since students spend a portion of their day in schools, it is important to examine the role of the school environment on eating behaviour.

**Vending machine and a la carte options.** The U.S. Health Behavior in School-aged Children (HBSC) surveyed Grades 6 to 10, among 152 schools to examine dietary intake and food frequency compared to vending machine sales (Rovner, Nansel, Wang, & Iannotti, 2011). With healthier food choices available in school vending machines, the consumption of these foods did tend to increase (Rovner et al., 2011), especially in younger grades. In the older grades, however, the unanticipated result was that the food availability had no significant effect (Rovner et al., 2011). Researchers assumed that older adolescents had access to outside venues and more disposable income than younger grade students, which therefore contributed to a smaller proportion of their vending machine purchases (Rovner et al., 2011). Similar studies have shown that the contents of school vending machines and ‘a la carte’ availability tend to be positively or negatively correlated with dietary intake depending on the selection of items sold in them (Cullen & Zakeri, 2004; Kubik et al., 2003; Neumark-Sztainer et al., 2005; Rovner et al., 2011).

Limiting the access to foods high in fat and sugars has been associated with less frequent purchases of these items (Neumark-Sztainer et al., 2005; Rovner et al., 2011); while higher availability of fruits and vegetables in schools has tended to increase the consumption of these healthier foods (Kubik et al., 2003). Neumark-Sztainer and colleagues (2005) suggested that having closed campus policies (i.e., students must stay on school grounds for lunch) was associated with fewer purchases from nearby fast food establishments or convenience stores. As well, limiting the hours of operation of vending machines was linked to fewer soft drink purchases from those vending machines (Neumark-Sztainer et al., 2005). High schools and middle schools were more likely to sell foods that were high in fat and salt content than
elementary schools were (Rovner et al., 2011). This difference was possibly due to the availability of more vending machines. Thus limiting the number of vending machines and creating policies to decrease access outside of schools have been suggested as strategies to support healthier eating. Since banning ‘junk’ food has negatively affected some students (Vecchiarelli et al., 2006), confining students during lunch hour and limiting their access may too have their consequences. Further research is required to examine the long-term effects of these strategies.

Food promotion and marketing. Although multiple factors have been shown to influence food choice, food marketing has been a competing force that influences eating behaviours. Food and beverage marketing may include logos, brand name signage in vending machines, as well as free product samples or sponsored educational materials from exclusive beverage contracts. In-school marketing was designed to promote sales, increase loyalty, and capitalize on financially vulnerable schools during budget shortfalls when sufficient revenues were no longer coming from the school board (Story & French, 2004).

Foods and beverages that have been marketed to children have been predominantly energy dense with low nutritional value and that are inconsistent with recommended dietary guidelines of school food policies. Food marketing is highly influential in students’ purchasing behaviour and subsequent consumption (e.g., Neumark-Sztainer et al., 2005). Although few policies exist in the U.S. to control food marketing to children, in 2008, Ontario passed Bill 53, An Act to Amend the Consumer Protection Act, 2002 to prohibit “commercial advertising for food or drink that is directed at persons under 13 years of age” (Legislative Assembly of Ontario, n.d.). The Act states that an advertisement directed towards children should be determined by “the context of its presentation, and in particular (a) the nature and intended purpose of the goods
advertised; (b) the manner of presenting such advertisement; and (c) the time and place it is shown” (Legislative Assembly of Ontario, n.d.).

Ofcom (2007), an independent regulator of commercial advertising services in the UK, conducted research to examine the role of television advertising on children’s food consumption of high fat, salt, and sugar foods. Advertising had a modest effect on children’s food choice and an indirect effect on food preference, consumption, and behaviour (Ofcom, 2007), providing some evidence to restrict advertising of less healthy foods. Ofcom (2007) argues that multiple factors may contribute to eating behaviour and childhood obesity and thus advertising food and beverages targeted towards a younger demographic may still be allowed as long as the product meets the standards of the nutrient profiling scheme (Ofcom, 2007). Similar to the nutrition standards in the School Food and Beverage Policy, advertising healthy foods that meet nutritional requirements may establish a means for promoting healthy eating habits and better food choices; however, more research is needed in this area.

In preparation for the nutrition standards, schools have to potentially overcome the decrease in revenue from exclusive beverage contracts with corporations that help fund their schools. Moreover, providing appealing healthy food choices that are both affordable and palatable may assist in students’ food consumption. Schools are in a highly influential position to affect changes in children’s dietary habits and, therefore, attention to the environment is one of the critical components in improving their diets.

**Individual factors.** Attitudes toward food choice can be a major contributor in one’s ability to commit or sustain healthy eating habits (Carrillo, Varela, Salvador, & Fiszman, 2011). Focus group discussions, in-depth interviews, and factor analyses have shown that taste, cost, convenience, and health were among a few of the consistent factors influencing food choice
(e.g., Brug, Lechner, & De Vries, 1995; Carillo et al., 2011; Holmberg et al., 2010; Neumark-Sztainer et al., 1999). The implications for accommodating these factors could potentially contribute to changing one’s eating behaviours. Identifying factors that influence food choice are important aspects in preparing for policy implementation because of the effect these factors may have on the compliance of the School Food and Beverage Policy.

Armenakis, Harris, and Mossholder (1993) describe readiness as a “cognitive precursor to the behaviours of either resistance to, or support for, a change effort” (p. 681). Coch and French (cited from Armenakis, Harris, & Mossholder, 1993) explained that enabling members of an organization to participate and be a part of the change reduced resistance and increased acceptance of that change. Therefore, school leaders must prepare and include members such as teachers and students in the change process.

In order to adopt healthy eating behaviours in school and out of school, consistency is key in fostering change in a desirable direction. Proactive models that address the various levels of influence should be targeted in order to increase compliance and decrease resistance to the policy. The lack of communication among the stakeholders about new policy changes, insufficient funding or resources, individuals’ beliefs and attitudes towards change, and environmental barriers to implement food policies and programs are all challenges that schools may face. Incorporating the different elements of eating behaviour into a comprehensive model for change may prove useful in future studies. Examining the planning and preparation for policy implementation based on a theory of change may provide a framework for future evaluative analysis.
Theoretical Framework

Since the School Food and Beverage Policy has yet to be implemented fully in Ontario, there has not been any published research investigating schools’ perceptions of readiness for implementing this policy. The lens through which this study was conducted is a readiness framework.

Weiner (2009) described organizational readiness as the commitment to implement the change; the collective capability to enforce the change; and the value, resource availability, and task demands of the change. The organizational readiness framework has been used as a conceptual model to assess employee readiness for change within an organization (Armenakis, Harris, & Mossholder, 1993). Simpson (2002) suggested that readiness was influenced by the motivation to change, staff/leader attributes, resources, and the organizational climate. Schools may be considered a hierarchical organization consisting of various individuals (e.g., board members, administrators, teachers, support staff, and students) that may collectively contribute to change. Consequently, without preparing or collaborating with the members of the organization, unintended consequences may ensue. Since readiness is considered an essential precursor to the successful implementation of change (Armenakis et al., 1993; Weiner, Amick, & Lee, 2008), it becomes beneficial to examine schools’ readiness to implement their school food policies.

The importance of readiness in policy implementation. Understanding perceptions of readiness can establish a foundation for engagement in the change process (Newhouse, 2010). Cheng, Mok, and Tsui (2002) suggested that identifying and understanding the key factors that bridge the gap between policy planning and implementation are found in the preparation stages prior to implementing the policy. These factors include: (i) stakeholders’ cognitive, psychological, and technical readiness, (ii) resource readiness (e.g., material, human, and
financial resources), (iii) timeframe for implementing the policy, and (iv) legal preparation (e.g., legal rights of those involved). Cheng et al. (2002) asserted that readiness must also be established at the various levels of the organization (e.g., individual, classroom, school, community) to reduce resistance to the policy and facilitate effective practices.

According to Weiner (2009), failure to establish readiness may account for one-half of all unsuccessful organizational change efforts. A study by Flaspohler and colleagues (2008) described organizational readiness as a tool to promote the effective dissemination and adoption of a school improvement model. Results from their readiness assessment were used to inform training and technical assistance in support of their project as a means of connecting program development into the implementation process (Flaspohler, Anderson-Butcher, Bean, Burke, & Paternite, 2008). Failing to acknowledge the forces and factors that affect the adoption of new policies may jeopardize the results of different health programs or initiatives. Thus by anticipating some of the challenges to healthy eating, schools may be better equipped to promote implementation designs and strategies that support enabling factors and reduce resistance to change.

Therefore, readiness to implement the School Food and Beverage Policy may be supported by attending to the following five factors: (1) resource availability (e.g., staff, facilities, and financial resources); (2) contextual/environmental factors (e.g., altering a physical aspect that is conducive to the proposed change); (3) social influences (e.g., utilizing leaders or peer supports to motivate change); (4) communication (e.g., disseminating and discussing the changes or providing education and training to support the change); and (5) individual factors (e.g., considering one’s beliefs and attitudes and the value of the change).
The extent or level to which these readiness factors have been met and the amount of support provided may influence the effectiveness and success of a policy being implemented. Weiner (2009) states, “when organizational readiness is high, organizational members are more likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behaviour” (p. 67). Thus the effectiveness of the policy being implemented may exhibit greater success upon supporting these specific strategies. Some examples may include, but are not limited to, the following:

Table 1

Examples of Readiness Criteria Associated with Promoting Change:

<table>
<thead>
<tr>
<th>Resource Availability</th>
<th>Contextual Factors</th>
<th>Social Influences</th>
<th>Communication</th>
<th>Individual Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• financial (e.g., funding, budget)</td>
<td>• physical setting/ environment where the change is taking place</td>
<td>• organizational structure</td>
<td>• dissemination of policy</td>
<td>• intentions, beliefs, attitudes about the proposed change</td>
</tr>
<tr>
<td>• material (e.g., facility)</td>
<td>• situational factors</td>
<td>• leaders</td>
<td>• training programs to assist/facilitate change</td>
<td>• ability to implement change (self-efficacy)</td>
</tr>
<tr>
<td>• human resources (e.g., staff)</td>
<td>• climate/culture of the environment is conducive to change</td>
<td>• social ecological model - levels of influence</td>
<td>• active participation</td>
<td>• commitment to change/change effort</td>
</tr>
<tr>
<td></td>
<td>• marketing and advertising</td>
<td>• motivation e.g., reward system</td>
<td>• education</td>
<td>• task demands and resource availability to proceed/sustain such a change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• understanding the urgency and value of the change</td>
<td>• value e.g., rewards/pay off</td>
</tr>
</tbody>
</table>
Readiness is a crucial planning activity that may help prepare schools for change in adopting a new policy. Processes and strategies that align with the organizational readiness framework may help support schools in preparing for the implementation of the policy at the various levels of the organization. Further research may inform policy makers as to how to reevaluate the policy in order to address any concerns or issues that schools may face in order to support a more effective implementation process.

The proposed framework suggests strategies that may support an implementation design. Future research may examine the applicability and practicality of organizational readiness for change with policy implementation in schools and its effectiveness in achieving the desired policy goals in fostering healthy eating.

**Chapter Summary**

Research suggests proper nutrition may affect cognitive development, learning, and students’ health. Thus the SFBP was created as a means to promote better eating habits and to provide a supportive and healthy school environment for Ontario’s students. Since organizational readiness has been suggested as a means for engaging change such as the adoption of the SFBP, a readiness framework has been proposed from the review of the literature that has been modified from an organizational readiness framework. Five areas have been proposed for gauging the extent of school readiness to implement a policy: (1) resource availability, (2) communication, (3) social influences, (4) environmental influences, and (5) individual factors. Examining school’s readiness with respect to organizational readiness may help identify key issues in preparing for policy implementation. This study is designed to identify how schools align with the readiness framework in order to indicate its usefulness and applicability to implementing the SFBP.
Chapter 3

Research Methodology

This study was a qualitative descriptive research design, aimed at understanding school stakeholders’ perspectives on schools’ readiness to implement the SFBP. More specifically, the purpose of this study was to examine the organizational readiness for implementing the SFBP in selected elementary and secondary Ontario schools. In this chapter, the research design, data collection process, and data analysis procedures are presented.

Research Design

A qualitative research approach was most appropriate for this study because of the interpretive, experiential, contextual, and personalistic nature that it provided (Stake, 2010). According to Patton (2002), qualitative research has “no single, ideal standard” (p. 12), but facilitates a deeper understanding of a comprehensive and multifaceted approach that is often case-specific. I chose qualitative research to illustrate the holistic nature of how policies are interpreted, implemented, and perceived through individuals’ experiences, the social environment, and the school contexts in which they are situated. Patton (2002) viewed this approach as synergistic — “a complex system that is greater than the sum of its parts” (p. 59).

Two sources of data were used in this study: (i) policy analysis and (ii) interviews. The first stage of this study consisted of multiple document analyses to help inform the analysis of the policy. The second stage consisted of semi-structured interviews with school administrators and other school stakeholders working closely with the planning of the policy. The third stage of this study included a comparative analysis of the differences and similarities among elementary and secondary schools’ readiness to implement the policy.
This study was guided by three research questions:

1. How does the SFBP inform, influence, and support schools’ readiness to implement the policy?
2. What is the nature of school stakeholders’ perceptions on the actions of readiness for implementing the SFBP?
3. What are the differences and similarities among elementary and secondary schools’ readiness to implement the policy?

Both the policy analysis and the interviews answered question 1 while participant interviews alone informed questions 2 and 3.

**Policy Analysis**

A heuristic approach was used to analyze the policy; focusing on policy as stated, rather than policy as used. In this study, the focus was on (a) the SFBP and (b) the Ministry of Education online resource. Using this method of data collection, I was better able to understand the ideas, actors, and institutions involved in the development of the SFBP. This method was also used as a low cost, easily accessible method of obtaining information (Hodder, 2000).

At the time of data analysis, the website URL was http://healthy.apandrose.com. The current URL is http://hs.curriculum.org/sb. This site contains five modules. The first module provides an overview of the policy. The second provides further explanation for understanding the nutrition standards, in particular, the 80/20 rule. The third module reiterates the 80/20 rule for categorizing food and beverages sold in all venues, programs, or events. The fourth module offers resources and guidelines for supporting implementation, and the fifth module discusses the comprehensive or whole-school approach incorporating the Foundations for a Healthy School.
These modules were created to provide schools with additional resources and support to help prepare for the implementation of this policy.

As the SFBP has just recently been implemented, no evaluations to date have been conducted within Ontario public schools. This stage of the study focused on Pal’s (1987) framework, which includes three styles in approaching analysis: (i) descriptive, (ii) process, and (iii) evaluative analyses. A descriptive analysis includes content analysis and historical analysis. The process analysis focuses on the political decisions and interactions that shaped the policy and the evaluation analysis included: logical, empirical, and ethical evaluations. Although a new policy analysis framework has been proposed by Pal (2006), the previous version provided a more exploratory guide that was more feasible and practical for approaching policy analysis. Pal’s (1987) framework also provided a specific lens for dissecting the policy document in a systematic manner that targeted various aspects of the stated policy.

In the descriptive analysis, the historical section, examined the immediate antecedents, providing a more expansive view or pattern in the development and subsequent state of the policy (Delaney, 2002). The content analysis focused on describing and understanding the purpose, problem definitions, goals, and instruments of the current policy as it exists (Pal, 1987). This critical stage of policy analysis is often used as a foundation for evaluation analyses later on.

In the process analysis, examining the key ideas, actors, and institutions involved in the political debate and decision-making can often provide insight into the development of the content of the policy. Process analyses mainly focused on the “immediate political process, decisions, debates, conflicts, and compromises” (Pal, 1987, p. 30) that evolve into the profile of the policy.
In the evaluation analysis, logical evaluation assessed the “policy’s internal rigor and consistency” (Delaney, 2002, p. 38). This section was also based upon the following dimensions: “internal consistency of policy’s multiple goals, consistency between goals and instruments, or ends and means, and the difference between intended and contingent consequences (Pal, 1987, p. 32). Empirical evaluation involved the review of the efficiency and efficacy of the policy or the ‘real’ effects of the policy (Delaney, 2002). Ethical evaluation assessed the policy “in terms of [the] pre-existing value systems of right and wrong” (Pal, 1987, p. 36). Ultimately, ethical evaluation was used to ensure the policy did not violate any moral principles of the governing body.

As the researcher, it was my goal to systematically investigate the key issues in this policy in order to identify gaps in the policy that may lead to problems that schools may encounter during the implementation of the policy. The purpose of analyzing this policy document (P/PM No. 150) through Pal’s (1987) framework was to understand the foundational aspects on which the policy was developed, as well as to direct the development of the interview guide questions to allow rich and meaningful data to emerge. Developing an awareness of the content and the issues found in the logical, empirical, and ethical evaluations helped to focus in on the potential issues that school administrators may face when having to plan and coordinate actions for implementing the SFBP.

Delaney (2002) stated that comparisons between policies of other times and places “shows what is unique or routine about a given policy or policy proposal” (p. 39) to help assess or evaluate the policy’s intended objectives and may allow for policy learning to take place. The reason for analyzing the policy in this manner is to understand the development of the policy and examine how the Ontario government has supported the implementation process.
**Instruments and procedures.** Using a heuristic approach, SFBP resource guides, primary and secondary research studies, and relevant literature reviews were used to evaluate the content and development of the SFBP and the Ministry’s resource module provided through the Ontario Ministry of Education website.

Descriptive, process, and evaluative analyses of the SFBP were conducted in order to identify some of the key concepts and/or barriers that emerged in this study. The three dimensions of Pal’s (1987) analysis included:

1. Descriptive
   a. Historical analysis: This section contained the events, policies, and programs that led to the development of the policy.
   b. Content analysis: This section included the definition of the problem, the intentions, goals, and instruments used in the policy.

2. Process: This section involved identifying the political interactions that influenced the content of the policy.

3. Evaluation
   a. Logical evaluation: This section involved the examination of the internal consistencies of the goals, consistency between goals and instruments, as well as the differences between intended and contingent consequences.
   b. Empirical evaluation: This section consisted of evidence of the efficiency and efficacy of the policy in practice. Research was obtained from schools from the United States and some Canadian provinces that implemented similar food policies.
   c. Ethical evaluation: This section assessed the policy in terms of pre-existing values or rights systems.
This analytical model provided a better understanding of the policy by focusing on various aspects of obtaining discrete and manageable pieces of information that shaped the current state of the policy. Results were obtained by reading the SFBP and its complementary resource guides to critically analyze the three specific aspects of Pal’s (1987) framework.

First, the historical analysis was approached by examining when nutrition standards were issued in schools and the specific health initiatives that preceded the development of the SFBP. Second, the content information was retrieved directly from the policy itself in terms of its problem definition, purpose, goals, and instruments. The problem and purpose of the policy were both clearly defined within the introduction of the document. The goals were found in the rationale section of the policy and the instruments, or means for achieving those goals, were found in the nutrition standards. Third, the process evaluation was conducted by examining the actors and institutions that were referenced in the policy, the accompanying resources, the Ontario Ministry of Education, and an internet search for the “School Food and Beverage Policy.” Lastly, the empirical evaluations were based upon research that examined the implementation of similar school food policies, while both logical and ethical evaluations were based upon reflective, intuitive, and interpretational reasoning.

**Qualitative Interviews**

This method was used to gain participants’ perceptions, understanding, and interpretations of the policy. It provided invaluable, in-depth information that might normally be beyond the scope of other methods of data collection. A preliminary information sheet was distributed to participants via email to obtain some background information and context for their experiences and perspectives of the SFBP. Semi-structured interviews provided a means for obtaining participants’ “attitudes, interests, feelings, concerns, and values” (Gay, Mills, &
Airasian, 2009, p. 370) regarding their views and experience of readiness to implement the SFBP.

**Participants.** This study involved a total of 12 participants from three school boards in Southern Ontario. One elementary school and one secondary school was selected from each of the boards. One administrator (e.g., principal or vice-principal) was selected from the elementary school level and one administrator was selected at the secondary school level. Each administrator was asked to recommend another key stakeholder within his or her school with whom he or she worked closely on preparing and planning for the SFBP. The same procedure was used in the second and third school board. Those school administrators who did not recommend any other staff were interviewed alone or in a group (Table 2).

Purposeful heterogeneity sampling was used to obtain participants from geographically diverse areas, ranging socioeconomic factors, and area level accessibility to food purchases outside of school. The purpose of this sampling was to capture “the core experiences and central, shared dimension of a setting or phenomenon” (Patton, 2002, p. 235) to allow thematic patterns to emerge. Administrators were selected due to their direct involvement with the implementation of the SFBP. Administrators were then asked to recommend other school staff who had also been involved in the implementation process. These individuals were chosen in order to gain a better understanding of the process and procedures prior to the implementation of the policy. Participants were selected in both elementary and secondary schools in order to identify the differences or similarities in the preparation process of policy implementation across settings.
Table 2

Recruitment Selection

<table>
<thead>
<tr>
<th>Participants from</th>
<th>School Board A</th>
<th>School Board B</th>
<th>School Board C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School 1</td>
<td>1 administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School 2</td>
<td></td>
<td>1 administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 school staff</td>
<td></td>
</tr>
<tr>
<td>Elementary School 3</td>
<td></td>
<td>1 administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 school staff</td>
<td></td>
</tr>
<tr>
<td>Secondary School 1*</td>
<td>1 administrator (+2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School 2</td>
<td></td>
<td>1 administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 school staff</td>
<td></td>
</tr>
<tr>
<td>Secondary School 3</td>
<td></td>
<td></td>
<td>1 administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 school staff</td>
</tr>
<tr>
<td>Number of Participants</td>
<td>2 (+2*)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total of 12 participant interviews</td>
</tr>
</tbody>
</table>

Note. In School Board A, secondary school 1*, the principal consented to being interviewed alone and on the day of the interview, he had invited the two vice-principals to attend the interview. Thus one unanticipated focus group interview was conducted among the 3 administrators.

Instruments. Semi-structured interviews were chosen as an optimal method of data collection to obtain participants’ perspectives, knowledge, and experiences within their specific context (Patton, 2002). The benefit of using semi-structured interviews was preparing a set of questions in advance, yet allowing the interviewer to modify, add, or explain particular questions during the course of the conversation (Robson, 1993). An interview guide was used to ensure that a consistent set of topics would be covered throughout each discussion, while still permitting the flexibility in wording and allowing a more natural flow of conversation (MacMillan & Schumacher, 2009). Interview guides improve the comprehensiveness of the data in a relatively systematic approach for each respondent (Patton, 2002). This guide enabled the interviewer to
“explore, probe, and ask questions that [would] elucidate and illuminate that particular subject” (Patton, 2002, p. 343), while adapting to the situation and interviewee responses in order to clarify and address respondents’ perspectives and understanding of the topic.

Questions were developed based upon three specific areas: (1) knowledge and understanding, (2) preparedness, and (3) future considerations. Since the scope of this research was focused on readiness for policy implementation, some probing questions were also included in the guide to help direct the participants’ attention to some key areas found in existing literature in order to analyze the data with a specific readiness lens. Probing questions were used to request “more explanation, clarification, description, and evaluation” (Glesne, 2011, p. 123). These questions were designed to engage the interviewee in thinking about readiness if the topic had not already been discussed.

The consistency of the questions also provided opportunities for comparisons to be drawn and patterns to emerge during the analyses. The interview questions enabled participants to reflect on current practices and investigated some of the key issues in perceived areas of readiness that were examined in the course of this research study. All interviews were conducted at the participants’ respective schools during regular school hours and during teachers’ preparation or free periods. Clarifying questions were asked throughout the interview to ensure opinions were those of the interviewees and could not be misinterpreted.

**Procedures.** After receiving school board approval and purposefully sampling the potential schools, I approached principals via phone of each school to seek interest and consent for conducting research at their school. Once approval was granted, a letter of information and consent (Appendix B and Appendix C) form were either hand-delivered or emailed to the participants. Interviews were arranged at a mutually agreeable time and date at each of the
schools. Prior to the arranged interview time, a preliminary information sheet (Appendix D and Appendix E) was emailed to the participants in order to provide a context for their perspective and experiences with this policy and policy implementation in general. A 60-minute, face-to-face, in-depth, semi-structured interview was scheduled for each participant. Appendix F was used as a guide for the interviews. These interview questions were guided by the five aspects of organizational readiness in order to investigate and compare with the participants’ perspectives of readiness to implement the policy.

The timing of the interviews for each participant was important to conduct as soon as school boards had approved the study in order to obtain information at the preliminary stages of implementing the SFBP (e.g., October 2011 and mid-November 2011). The reason for this timing was to gain participants’ perspectives and insights while they were actively engaged in the development and implementation of the SFBP and better able to reflect on the actions of their planning, but also to monitor the initial stages of approaching implementation (e.g., menu changes) in order to reflect on those changes made. All interviews were recorded and transcribed verbatim. The total interview time for each participant ranged from 30 to 60 minutes in length.

The combination of the interviews, document analysis, and the thematic analysis chosen through the various perspectives were selected for crystallizing the data. Ellingson (2009) describes crystallization as a combination of multiple forms of analyses through different genres to offer deep and complex interpretations of meaning about a group or phenomenon. Analyzing the documents alongside the interviews, allowed me to acknowledge and compare some of the biases that each method provided in order to understand some of the core issues between policies and practice (Denzin & Lincoln, 2000). In both the document analysis and key stakeholders’ interviews, I was able to discover the gaps between policy and practice.
Ethics

This proposal received ethical clearance by the General Research Ethics Board at Queen’s University, Kingston, Ontario on September 7, 2011 (Appendix G). Each school board was provided with the necessary documentation in order to obtain approval before I contacted individual schools. Once school boards approved the study, school principals were each given a Letter of Information and Consent Form that outlined the purpose of the study and consented to the participation of school personnel, if applicable. If school personnel were recommended by the principal as a key stakeholder in the preparation process of the SFBP, a similar Letter of Information and Consent Form was given to the individual participants to consent to the use of their interview responses.

Data Analysis

Interviews were digitally audio-recorded and then transcribed verbatim following each interview. Data analysis involved a complex process of reading the transcripts, then open coding, and axial coding, and finally, selective coding in order to determine the emerging themes. A thematic analysis of interview data allowed for the most rich and meaningful representation of the information. Data were analyzed inductively, with the assistance of Atlas.Ti, a qualitative data analysis software.

First, all transcripts were read and reread in order to familiarize myself with the data. Each interview was coded individually through an open coding process, in which codes were derived directly from the text. Notes were kept within Atlas.Ti to track decisions made about category names and definitions for the codes. This procedure offered an authentic tracking of the data analysis process. After the initial coding was complete for each individual interview, I recoded the initial codes into more specific topic codes, which I refer to as my categories. In
order to confirm my coding strategy, a fellow graduate student was recruited to examine and
code a sample of my transcripts to determine the extent of agreement between my definition of
the codes and her understanding of the codes. Agreement was found in 83 percent of the codes.

After confirming the categories, I prepared a summary of each participant’s discussion
and highlighted the predominant topics that were discussed in the interview. By doing this, I was
able to see some of the common themes from each person and identify some of the differences
among administrator and teacher perspectives. In the next stage of data analysis, I reviewed the
categories and determined the frequency of the topic being discussed. I printed out the list of
topics with the frequency of quotes attached to that topic. This process allowed me to focus on
those categories first and to identify a predominant pattern that emerged. Those topic codes that
contained more than 20 quotes were highlighted in green. Topic codes that contained 12 to 19
quotes were highlighted in yellow. Topic codes that contained 5 to 11 quotes were highlighted in
pink. Codes with 4 or less quotes were re-examined to determine whether they would fit into
other codes or were significant in explaining or understanding schools’ readiness for
implementing the policy.

Each quote within the three themes was then re-analyzed to confirm the meaning and
interpretation of the quote and the code to which it was assigned. The most predominant and
apparent theme that emerged encompassed challenges with the implementation of the policy,
which I have titled confronting implementation. Due to the nature of my study and the types of
interview questions that I had asked, the second most frequently discussed theme formed around
readiness, which I have titled pre-implementation planning. The third and final theme emerged
as the ‘loop holes’ surrounding the interpretation and compliance of the policy, which I have
titled policy technicalities.
Establishing Trustworthiness

There were several strategies used to ensure the accuracy and validity of the results. Interviews were digitally audio-recorded with the consent of the interviewees. Responses were clarified if I did not understand what the interviewee was saying. Asking clarifying questions helped to ensure interpretation of the discussion was based upon interviewees’ thoughts and perspectives. Interview sessions were transcribed verbatim. Participants’ quotations were used verbatim when reporting data to ensure their language was accurate. Quotations were only changed for tense.

Other considerations such as transparency, explicitness, dependability, confirmability, and transferability were also established to ensure greater trustworthiness (Guba & Lincoln, 1989). This study provided clear explanations throughout the study to rationalize the progression and development of the emergent themes to illustrate transparency. Themes were defined and were not pre-imposed on the data, but rather emerged from the data. Themes were applied consistently while reporting the results, making it very explicit. The consistency of the research findings were thoroughly explained within the study to ensure dependability of the results. Measures were also taken to evaluate the extent of agreement between the chosen codes during data analysis to improve confirmability.

A detailed background of the participating schools was provided to the readers to relate to these findings in their own lived experiences. Thus the transferability or the degree to which research findings would have applicability in other contexts could be obtained given the information presented. Quotations were primarily used and reported verbatim to eliminate researcher bias and to present findings that did not represent views, assumptions, interests, or motivations of the researcher.
Chapter Summary

This qualitative study consisted of a policy analysis and interviews with school stakeholders involved in the planning and preparation of the SFBP. Pal’s (1987) approach was used to guide the policy analysis and the development of interview questions. Interviewees were asked a series of questions designed to examine schools’ readiness to implement the SFBP and to answer three broader research questions. Policy analyses are described in the first half of Chapter 4, while the interviewee responses are reported in the latter half in a systematic manner to highlight the various perspectives among three commonly discussed themes.
Chapter 4

Data Analysis and Findings

Data analysis and the research findings are presented in this chapter within two parts: policy analysis and stakeholders’ perspectives.

Policy Analysis

This research is particularly concerned with understanding the Ontario SFBP through an applied policy analysis approach (Pal, 1987). Described as “reflective, creative, imaginative, and at its best, self-critical and exploratory” process (p. 20), Pal’s approach included descriptive, process, and evaluation analyses. Using a deductive approach, I completed an analysis utilizing four major documents: (i) School Food and Beverage Policy (P/PM No. 150), (ii) Ontario School Food and Beverage Policy Resource Guide 2010, (iii) online modules provided by the Ministry of Education website, and (iv) Ontario School Food and Beverage Policy Elementary Teacher Resource Guide 2011, along with current literature regarding school food policies to inform the analysis. Although the resource guides and the online modules reiterate the same concepts and ideas to complement and support the policy, I have used them to direct and inform the policy analysis.

For the purposes of this research, I have focused on areas that “reflect orientations or intellectual postures towards policy questions” (Pal, 1987, p. 28) and to focus only on the relationship between the policy content and the impact that the policy might have on its stakeholders. This analysis informed and directed some of the interview questions surrounding schools’ readiness to implement the policy, described in part two of this chapter.

Descriptive analysis. This type of analysis provided contextual understanding of the SFBP through the historical overview of the immediate antecedents and contributions to the
development of the policy to inform the current state of the policy (Pal, 1987). As well, it outlined the policy content, in terms of its purpose, problem definitions, goals, and instruments.

**Historical analysis.** It is important to examine the history and progression of the policy in order to understand its current state and contributions to and departures from practice and research. The historical evolution “tends to view policy more expansively, as a stable pattern of state behaviour stretching over decades” (Pal, 1987, p. 29).

In order to address rising concerns of the obesity and the high prevalence of chronic diseases, schools were considered to be in a highly influential position to change children’s eating patterns; the *Healthy Foods and Beverages in Elementary School Vending Machines Policy* was developed in October of 2004 in response to such considerations. This policy recommended that schools restrict the sale of all food and beverage items in elementary school vending machines to those that are healthy and nutritious, according to the recommended standards set in this memorandum. Following this health initiative, the Ministry of Education released the *Foundations for a Healthy School* framework in December of 2006. This framework was developed based on current research and input from education and school-based health experts, such as the Ontario Healthy Schools Coalition (OHSC) and the Ministry of Health Promotion, to outline four areas to engage in facilitating a healthier school. These four components of a healthy school included: (1) quality instruction and programs, (2) a healthy physical environment, (3) a supportive social environment, and (4) building community partnerships. In that same year, the Healthy Schools Recognition Program emerged as a means to encourage, celebrate, and reinforce healthy behaviours and practices in Ontario schools.

In September of 2008, The *Healthy Food for Healthy Schools Act and Trans Fat Regulation* came into effect in order to reinforce healthy messages and to achieve four goals. The
first goal was to provide the Minister with the authority to issue policies and guidelines concerning nutrition standards for food and beverages offered for sale on school premises or in connection with a school-related activity. The second goal was to add provisions regulating the trans-fat content of all food and beverages offered for sale in a school with special event days being exempt (pizza days, fundraisers, etc.). The third goal was to require school boards to ensure that food or beverages offered for sale in vending machines met nutrition standards, while the last goal was to grant the Minister the authority to make regulations to define criteria for which these contractual obligations applied. For example, the amounts and percentages of trans-fat permitted in food and beverages sold in school cafeterias, or the criteria for establishing a special event day were identified. This policy required that all schools abide by the nutritional guidelines for food and beverages sold on school property in an attempt to create a healthier learning environment and improve academic achievement through a more healthful diet.

On October 4th, 2010, the Ontario Ministry of Education released the School Food and Beverage Policy broadening the scope of the 2004 Healthy Foods and Beverages in Elementary School Vending Machines Policy to encompass both elementary and secondary schools’ food and beverage sales from all school venues including cafeterias, tuck shops, and vending machines. Restrictions, however, did not cover food purchased outside of schools, various events, or food brought from home. In order to provide clarity in understanding how to implement this policy, a resource guide and online modules were created to complement and provide additional tools to effectively implement the policy.

**Content analysis.** The definition of the problem is “key to deciphering its meaning and logic” (Pal, 1987, p. 10). Since policies often develop in response to single or multi-faceted problems, unclear definitions can often “create tensions and inconsistencies in the policy” (Pal,
First, I describe the content in terms of the rationale behind establishing the SFBP. Next I examine the policy using Pal’s framework for analysis.

The SFBP cited research found in the Centers for Disease Control and Prevention (CDC) (1996) for recommendations for supporting school health programs and promoting healthy eating. The CDC report provided a basis and rationale for the direction and goals the policy aimed to achieve. The purpose of this report was to support schools, districts, states, and national stakeholders as well as policymakers in meeting national health and educational objectives by implementing nutrition education programs (e.g., classroom instruction, health services and education, psychological and social services, etc.) and school food policies. This report also reviewed the literature on the role of school-based programs on promoting healthy eating and preventing non-communicable diseases.

General recommendations were suggested to support a comprehensive school health framework based upon the synthesis of research, theory, and practices. Further research has shown that food can have an effect on cognition, student achievement, and overall health (Centers for Disease Control and Prevention, 1996). Studies cited by this report included research investigating the “effects of diet on health, growth, and intellectual development” (CDC, 1996, p. 2) and the “effects of childhood eating patterns on chronic disease risks of adults” (CDC, 1996, p. 5), which has contributed to the overall purpose for implementing the SFBP.

More current research cited in the policy by Story, Nanney, and Schwartz (2009) reported how schools can play a larger role in obesity prevention through various means such as school food environments and physical activity environments and policies, body mass index measurements, and overall school wellness policies. This article offered supporting research that
these factors can affect physical, emotional, social, and academic aspects of students’ lives when in school (Story, Nanney, & Schwartz, 2009).

To provide a broader picture for the content analysis, I have included a figure that represents the antecedents for the SFBP within the framework of the *Foundations for a Healthy School* (see Figure 2 below). First, I analyzed the content of the overarching framework to provide context within which the SFBP lies. Within that framework, I highlighted the problems, purpose, goals, and instruments for the SFBP in order to give visual representation for the full description below.
Figure 2. Content Analysis
The problem arose from the mounting evidence of research between health status and educational success. In 2006, the *Foundations for a Healthy School* framework acted as a guide to assist schools in becoming healthier places to learn. Thus the purpose of this framework was four-fold: (i) to provide quality instruction and programs; (ii) to create a healthy physical environment; (iii) to provide a supportive social environment, and (iv) to build community partnerships in order to improve students’ eating habits, level of physical activity, safety, growth and development, along with mental health and wellbeing. The instruments or means through which these goals were achieved included policies, programs, and mandates such as the School Food and Beverage Policy, Swim to Survive Program, and Sabrina’s Law to name a few. Policy goals are bound to problem definitions and are what guides the direction of the policy (Pal, 1987). Within the healthy school frameworks goals, I have focused on the School Food and Beverage Policy document to identify the problem definition, the purpose, the goals, and the instruments through which to achieve the stated goals.

Nutritionally inadequate food and beverages at school make it difficult to have a healthy diet. Thus the purpose of the School Food and Beverage Policy was “to set out nutrition standards for food and beverages sold in publicly funded elementary and secondary schools in Ontario” (p. 1) as a way to (a) improve eating patterns and (b) improve skills, knowledge, and attitudes regarding healthy eating. The means for improved eating patterns were to be achieved through nutrition standards, specifically the “sell most,” “sell less,” and “not permitted for sale” categories. The intended instruments used to improve skills, knowledge, and attitudes towards healthy eating were through health education and curriculum lessons.

There are many factors and challenges to consider prior to implementing a policy and the Ontario Ministry of Education anticipated that schools would have difficulty navigating around
some of the key aspects of the nutrition standards. Therefore, the Healthy Schools Working Table created a *School Food and Beverage Policy Resource Guide 2010* as well as online modules on the Ministry website intended to provide more information on the nutrition standards and how to successfully implement the policy with links to information and resources to work towards creating a healthier school. Separate links are provided for parents, students, and teachers/principals for quick and easy access to information, documents, and other resources. This information was provided to help administrators and food service providers understand the nutrition standards, read the food labels, and help define each of the food groups to determine the categories of “sell most” (80%), “sell less” (20%), or not permitted for sale food items.

Roles and responsibilities were described for schools and school boards. Practices to support implementation aligned with the *Foundations for a Healthy School*. The goal of these resources was to understand and identify how food and beverages could fit into one of the three categories (sell most, sell less, or not permitted for sale) in order to meet the 80/20 rule, and to support the implementation of the policy. The modules provided tools such as: nutrition standards charts and tools to assess the nutrition facts, healthy menu tools, checklists, and surveys to assist schools in implementing the policy. In 2011, an additional resource guide was created for elementary teachers to identify their roles and responsibilities in the school and help them make connections between the policy and the specific curriculum expectations, and integrate life skills to support and promote health literacy.

**Process analysis.** This style of analysis focuses on the “immediate political process, decisions, debates, conflicts, and compromises” (Pal, 1987, p. 30) that produced the policy. In this section, I identify some of the key ideas, actors, and institutions involved that have contributed to the development of this policy. The search was delimited to the ideas, actors, and
According to the “FAQ” section on the Ontario Ministry of Education website, the School Food and Beverage Policy was developed in collaboration with various committees including the Nutrition Standards for Schools Committee, a sub-committee of the Healthy Schools Working Table, the Ministry of Health Promotion, Children and Youth Services and Agriculture, Food and Rural Affairs, and health and food industry sectors to advise on the development of the policy and the nutrition standards (Ontario Ministry of Education, 2010); however, a key supporter with resources at the governmental level that has been cited by the policy and the Ministry has been the Dietitians of Canada (DC). This organization provided evidence-based education in food and nutrition to a variety of individuals and groups at the local, provincial, and national levels including various sectors such as the community, healthcare institutions, non-governmental organizations, and food service industries. In 2004, the DC worked collaboratively with the Ministry of Education in developing recommendations for school food and nutrition providing specific guidance for food choices that could be available in elementary school vending machines in order to ensure a supportive healthy eating environment. This collaboration provided the foundation and background for the SFBP.

In 2008, the Healthy Food for Healthy Schools Act was developed as part of the Ontario government's overall strategy for healthy students. In January of 2010, the McGuinty government mandated that the Minister of Education create nutrition standards in schools as one of the ways of supporting a healthy learning environment. The Ontario government and the Ministry of Health Promotion provided links to resources, information about nutrition and
healthy food choices, and even recipe ideas that reflected nutritional guidelines found in the policy through EatRight Ontario. This information was made available by the Dietitians of Canada who respond to requests from the public, educators, and industry representatives regarding information and resources to support the implementation of the SFBP.

Limited information was found to discuss this policy with key stakeholders such as the Ontario Secondary School Teachers’ Federation (OSSTF) and Elementary Teachers Federation of Ontario (ETFO). However, in June 2006, the Healthy Schools Working Table (HSWT), run by the Ontario Public School Boards’ Association (OPSBA), met with the Ontario Secondary School Teachers’ Federation (OSSTF) to briefly address the need for policies to support a healthy school environment including daily physical activity, anaphylaxis policies, and nutrition standards for food and beverages (OSSTF, 2010). OPSBA’s working teams and committees helped develop policy positions in response to government legislation and regulations and strove to support the values and needs of stakeholders’ interests, and most importantly, were developed in the best interest of Ontario students (OPSBA, 2012). The Healthy Schools Working Table contributed to two major resources. First, it assisted with the development of the five online modules, which contained (1) an overview of the policy document, (2) understanding the nutrition standards, (3) healthy venues, programs, and events, (4) implementation, and (5) practices to support implementation. These modules were designed to support schools in preparing and implementing the policy within their school environment. Second, the HSWT initiated and created the elementary teacher resource guide to help train and assist in a smooth transition with educational connections to support the policy’s direction.

**Evaluation analysis.** This part of the analysis included logical, empirical, and ethical evaluation of the policy. A logical type evaluation involves “assessing a policy’s internal rigor
and consistency” (Pal, 1987, p. 32). The empirical evaluation involves a review of the efficiency and efficacy of the policy and the real impact of the policy in practice. The ethical evaluation assesses the policy in terms of “pre-existing value systems, of right and wrong” (Pal, 1987, p. 36) based on the moral principles governing society. This approach to analysis is often rational and is aimed at identifying the potential gaps within the policy in order to make improvements to policy outcomes.

**Logical evaluation.** The following approaches constituted logical evaluation of the policy: (a) consistency between the goals and instruments, (b) the assessment of the internal consistencies of the policy, and (c) the difference between intended and unintended consequences (Pal, 1987).

**Consistency between goals and instruments.** The two goals of this policy as mentioned previously (seen in Figure 3), were to (i) improve eating patterns and (ii) to improve skills, knowledge, and attitudes towards healthy eating. The first goal of improving eating habits was to establish nutrition standards and to abide by the three food categories (sell most, sell less, not permitted for sale). These nutrition standards limit the types of food and beverages allowed for sale at school but cannot enforce these standards outside of school or at home.

The guiding assumption for this type of analysis is that “inconsistency is detrimental to intended policy outcomes” (Pal, 1987, p. 32) and that the policy improvements will occur with more consistency (Pal, 1987). This assumption would mean that targeting students’ eating habits in the school alone may not be able to affect their overall eating habits unless the message is consistent throughout the children’s life. While research has shown that higher availability of fruits and vegetables in schools tended to increase the consumption of healthier foods (Kubik et al., 2003), various external factors may also affect these outcomes.
At first glance, understanding the differences between the three food categories seems rather pedestrian since the nutritional guidelines are clearly indicated with specific values for the amount of fat, salt, or sugar that the food or beverage may contain. However, the challenge is how to determine all food and beverage categories if food is prepared from raw ingredients and does not contain the nutrition information that processed and packaged food may have. Another challenge is generating nutritional values in “mixed dishes” with multiple food choices to consider. The policy and the complementary resource guide do not mention the ways to determine appropriate serving size when considering the food categories. Another challenge is the time it will take staff to assess the nutritional information and the major and minor ingredients of the food in order to place food according to the food categories and subsequently, abide by the 80/20 rule.

Studies have shown that nutrition education can play a critical role in influencing attitudes, skills, and knowledge surrounding healthy eating (e.g., Crawford-Watson et al., 2009; Perez-Rodrigo & Aranceta, 2001; 2003; Powers et al., 2005), bringing about the second goal of this policy. Through formal health education and curriculum lessons, students may be better able to understand the benefits of healthful eating and gain the necessary skills and attitudes to choose to eat more healthfully. The creation of the Ontario School Food and Beverage Policy Elementary Teacher Resource Guide 2011 was undertaken to identify the role of the teacher and the curriculum connections that teachers must address to support the policy’s direction. This guide addresses the four aspects of the Foundations for a Healthy School offering ideas for lesson plans, how to promote health each month, how to work with the community, and many other suggestions and resources to encourage healthier eating. The challenge with learning expectations of the curriculum are that they are already so vast that new topics such as nutrition
and healthy eating may be incorporated at the expense of another topic. Competing political forces may be at work in deciding which curriculum topics take precedence over others. If the decision remains to the discretion of the individual teachers, there may be inconsistencies in the curriculum being taught. In the years prior to implementation, this resource guide was developed after the implementation of the policy, in 2011, and thus was not available in preparing teachers on the educational aspects of implementing this policy for September.

School food policies have traditionally been employed through direct provisions. In this manner, programs and policies such as these have often been characterized as a more rigid instrument for directing action (Howlett, Ramesh, & Perl, 2009). Howlett et al. (2009) discussed the advantage to this approach was the avoidance of “discussions, negotiations, and regulatory concerns with non-compliance” (p. 126); however, it may be seen as a disadvantage as it results in resistance to change due to the non-negotiable issue that these directives hope to achieve. No research was found to discuss the impact of teaching students about the nutrition standards or policies and thus no clear conclusions can be drawn; however, studies showed that teachers needed more in-service training on nutrition in order to help support and promote the implementation of school food policies (Agron et al., 2010; Kann, Telljohann, & Wooley, 2007).

*Internal consistencies of the policy.* While the goal of the SFBP was to help improve eating patterns and improve skills, knowledge, and attitudes regarding healthy eating, the nutrition standards within the policy do not apply to food or beverages that are: (i) provided to students at no cost; (ii) brought from home or purchased off school premises; (iii) sold during field trips or fundraising activities on or off the school premise; (iv) sold in staff rooms; or (v) sold in schools for non-school purposes. The policy also permits up to 10 exemption days that allow schools to deviate from the nutritional guideline, which sends inconsistent messages to
students. These exemptions could potentially convey mixed messages that interfere with the ultimate goals of the policy. To have effective policy implementation, consistency is key. In addition, when school policies and public policies are not aligned, mixed messages are received by students resulting in resistance to following school food policies or nutrition standards.

Although society has become more aware of the effects of diet on one’s health and is in support of offering healthier menu choices, restrictions are not placed on the sale of food to minors. Public policies have not yet addressed this issue to that extent. If there are attempts to bring about change, there must be consistency and modeling that reinforces the message from multiple sources and levels of influence in order to promote healthy eating behaviours both inside and outside of school. The Elementary Teachers Resource Guide identified teachers as role models who may influence students’ food choices through the knowledge and skills that they learn in class (Ontario Ministry of Education, 2011).

The Centre for Science in the Public Interest (CSPI) is an organization that strongly advocates for consumer health and nutrition, and food safety, among other public health and environmental issues. In 2007, a report was created to provide information on the existing structure of school food policies within Canada in order to establish clearer guidelines in school food policies and to support the implementation of a comprehensive approach to encourage healthy eating habits and ensure a healthy school environment to reduce the risk of developing preventable diseases (Leo, 2007). All provinces in Canada had established nutrition policies that were measured against benchmarks set by the Institute of Medicine’s (IOM) core nutrient standards and Canada’s Food Guide. The provinces had developed “weak policies that permit the frequent sale of nutrient-poor foods” (Leo, 2007, p. 16). They also contained high variability and inconsistencies among each of the province’s food policies, which lacked more specific nutrition
criteria to support food service providers with sufficient guidance in determining food offerings (Leo, 2007).

In Ontario’s SFBP, nutrition guidelines are clearly outlined; however, the policy states that the nutrition criteria were based upon “scientific research, on the Canadian Food Inspection Agency’s Guide to Labelling and Advertising” (p. 3). Upon closer inspection, this guide provides information regarding foods’ and beverages’ content labelling and advertising claims, and provides a breakdown of the nomenclature for the core nutrition information; however, it is unclear how nutrition criteria from the policy were actually derived from this source. Canada’s Food Guide states information in terms of number of servings a particular age group should aim to have each day and provides the approximate sizes for each serving, but does not indicate specific nutrition criteria as outlined in the policy. Serving sizes are not addressed in this policy except for miscellaneous items such as gravies, spreads, dressings, and dips.

The criteria for all food groups provide a specified amount for fat, saturated fat, sodium, fibre, and protein content to fit one of the three categories. For example, in the sell less category for Vegetables and Fruit, nutrition criteria indicate that food will fit this category if there is ≤ 5g of fat, ≤ 2g of saturated fat, and ≤ 480mg of sodium; however, it is unclear whether amount of fat is the total fat content and whether the amount of saturated fat is considered additional to this amount or considered separately.

This policy does not state other types of ‘good fats’ that are found naturally in foods such as monounsaturated fats found in olive oil, canola oil, sunflower oil, avocados, olives, almonds, pecans, cashews, etc., or polyunsaturated fats, found in soy, flaxseed, fish, and tofu, which may minimize food choice options if these healthy fat foods were avoided based on this criterion of fat content.
Differences between intended and contingent consequences. In one of the five online modules, module 2 addresses, ‘Understanding the Nutrition Standards’. This module provides explanations to implementers on how to determine the nutritional requirements of all food and beverages as to how they fit into one of the three categories to follow the 80/20 rule. In practice, 80% of the food choices offered must meet the nutrition criteria of the ‘sell most’ category, while 20% of the food choices offered must not exceed the nutrition criteria of the ‘sell less’ category. The example provided in the module explained it as such: one food choice would be represented by a bran muffin and another food choice might be a carrot muffin; however, five of the same variety (e.g., 5 bran muffins) are still considered one food choice. For beverages, an example included apple juice as one beverage choice and orange juice as another beverage choice. Multiple units of the same type of juice are still considered one beverage choice for the purposes of calculating the 80/20 rule. The consequence of calculating food and beverage choices to fit the 80/20 rule enables schools to potentially sell more units of the ‘sell less’ food or beverage option over the ‘sell most’ (healthiest) food and beverage option.

Another contingent consequence is the cost-benefit of assessing all the nutritional information for food and beverages that are sold in schools. For schools that contract outside food service providers to cater within their school board, this assessment would be at the vendor’s expense, which may pose challenges with the viability of doing business with schools if profits are reduced with the added expenditure of paying staff more for added responsibilities. The amount of time and energy it would take staff to discern every major and minor ingredient and determine the total nutritional content of prepared food may not outweigh the potential benefit reaped.
**Empirical evaluation.** Due to the recency of this policy in Ontario, program and policy evaluations have not yet been completed in the Ontario context; however, evidence from other provinces and states that have implemented school food policies can help to explore the real impacts, efficiencies, and efficacies of similar school food policies in various school contexts in relation to the goals of this policy.

Pertinent literature that I briefly discuss in this section is delimited to the publications within the last five years in order to obtain a current picture of the impacts of school food policies in Canadian or state schools. Further discussion is detailed in Chapter 5.

Studies that investigated the impact of school food policies within Canada and the United States have generally resulted in some positive outcomes, such as improved eating habits (e.g., Bevans, Sanchez, Teneralli, & Forrest, 2011; Cullen, Watson, & Zakeri, 2008; Mullally et al., 2010) and increased knowledge, attitudes, and willingness to try new foods (Day, Naylor, & McKay, 2009); however, research showed that insufficient communication, lack of facilities and staff, lack of appealing food choices, cost (e.g., ‘good for value’), and portion sizes of these healthier choices were barriers to implementing these policies (Callaghan, Mandich, & He, 2010; MacLellan et al., 2010; Rushowy, 2012). In addition, exceptions to the policies such as allowing staff, public, and other programs to still purchase food with minimal nutritional value or bring in food from home, similar to the exceptions found in the SFBP, were likely to reduce the overall effect of the policy in achieving its goals (Whatley-Blum et al., 2011).

There are no current, publicly available data within Canada that identify the actual food that is served in schools since the implementation of such food policies, nor is there evidence of how much children are actually eating (Leo, 2007). Limited studies examine the pre- and post-effects of implementing school food policies alone, but rather, evaluates more comprehensive
programs. These programs often use a holistic approach to improving eating habits that include changes in school food policies, nutrition-based curriculum, self-monitoring, non-food based rewards, and information for parents to encourage and support healthier eating habits at home (e.g., Day, Naylor, & McKay, 2009; Naylor & Bridgewater, 2007; Spitters, Schwartz, & Veugelers, 2009; Storey, Spitters, Cunningham, Schwartz, & Veugelers, 2011).

In a study by Jensen and colleagues (2009), improvements in breakfast frequency, dietary intake, increased frequency of reading food labels, and knowledge of food labels improved in the intervention group as compared to no significant changes in the control group. Similar results were found on increasing nutrition knowledge, efficacy expectations, and eating behaviour when implementing a nutrition curriculum for middle school children (Fahlman, Dake, McCaughtry, & Martin, 2008).

Research cited from the SFBP recommended using the Guidelines for School Health Programs to Promote Lifelong Healthy Eating from the Centers for Disease Control and Prevention from 1996. Although the research findings may be dated, most of the recommendations remain true to the development of school health programs such as implementing policies and nutrition education into curriculum, providing on-going in-service training for school staff, increasing parent and community involvement to reinforce the message, and evaluating the impact of programs to improve the effectiveness of such efforts (CDC, 1996; 2011). More recently, the CDC has developed a new guideline to promote healthy eating and physical activity and added a supportive school environment with a comprehensive approach to supporting health that includes quality and appealing school meals options and providing other health services to students as well as school staff in establishing healthier outcomes (CDC, 2011). These recommendations are aligned with the Foundations for a Healthy School.
Ethical evaluation. This type of evaluation examines whether the “effects of policy violate moral principles” (Pal, 1987, p. 37). In one case, this policy provides a fairly detailed and comprehensive look at the nutrition criteria for different food groups; however, it does not take into consideration the potential alternative options for vegans or those with food sensitivities, or intolerances to certain proteins found in dairy or wheat products or food allergies other than peanuts. Current research findings illustrate the increased prevalence of food allergies and adverse reactions to food so that policies need to be sensitive to individuals with these allergies and their needs and be able to reflect the changing environments (Gowland, 2009; Roehr et al., 2004; Rona et al., 2007).

With the various exemptions to the policy, an inconsistent message is sent to students that may limit the impact the policy has on achieving its goals to improve eating patterns and increase skills, knowledge, and attitudes towards healthy eating. Teachers and administrators are at risk for developing the same preventable diseases and illnesses as students, so why should school staff be exempt from the policy?

Other ethical issues surround the idea of generating revenue at the expense of students’ health and wellbeing. Healthier choice vending snacks tend to decrease revenue for schools (Callaghan, Mandich, & Meizi, 2010) and, due to funding constraints, schools that rely on this revenue tend to suffer. Although some research indicates that school food policies do not cause a loss in total revenue (Wharton, Long, & Schwartz, 2008), it is well known that ‘competitive food’ (e.g., chocolate bars, chips, and candy) sales are more profitable than the nutrient-rich alternatives due to the low cost of producing energy-dense grains, fats, and sugars compared to the production of lean meats, and growing fresh fruits and vegetables (Drewnowski & Darmon, 2005). The Elementary Teacher Resource Guide brings awareness of the variety of different
cultural and ethnic foods as well as the availability and access students may have to healthy food. For example, students of families from lower sociodemographic areas may not be able to afford to eat as healthy as they would like and school food policies may potentiate these insecurities. With “food offered to students at no cost” (Ontario Ministry of Education, 2010, p. 1), these non-nutritious meals may still be served to students who cannot afford healthier meals, which adds to the coexisting problem of obesity and hunger in low-income families (Drewnowskis & Darmon, 2005). Thus financial profitability plays a competing role against supporting healthier eating habits and long-term health outcomes.

Another controversial issue is one of freedom of choice. Schools have had the ethical obligation to address the increasing rates of obesity; however, by creating policies that restrict food and beverages that are sold in schools, the issue conflicts with allowing students free will to choose. The argument lies within two ideologies being either “broad choice” or “healthy choice.” Broad choice allows students to choose among a wide nutritional range of foods. Healthy choice limits the choices to only those meeting the recommended “healthy” nutritional standards. Those individuals in favour of the “broad choice” perspective may argue that schools are creating an artificial environment which is inconsistent with the world we live in and that even Canada’s Food Guide to Healthy Eating “stresses choice and variety” (McKenna, 2003, p. 210). Those persons in support of “healthy choice” perspectives think that “they can choose between all these foods, which are acceptable within the policy” (McKenna, 2003, p. 210). The “healthy choice” is the prevailing approach that the SFBP follows; however, this approach does not allow students to make those choices of their own free will.
Stakeholders’ perspectives

This chapter presents the findings from 10 interviews conducted in three different school boards. Nine individual interviews and one focus group interview, for a total of 8 administrators and 4 teachers, were conducted. The structure and organization of the data begin with an introduction to the school boards and the participants within the context of each school. Then the three overarching themes that emerged from the data are discussed according to a systematic and logical manner, not necessarily in order of importance or frequency of discussion.

Participant background. This section briefly describes each board and some of the pertinent details of the participants and their schools to provide a better understanding for their perceptions. Information regarding household income and parents’ level of education are also included since research has shown that socioeconomic status tended to moderate fruit intake (Sandvik, Gjestad, Samdal, Brug, & Klepp, 2010). In Ontario, the average number of students who live in lower income households is approximately 17% and almost 37% of Ontario students have parents with some university education (Ontario Ministry of Education, 2012).

Participants. This research involved three different school boards and 9 individual interviews and 1 group interview from both elementary and secondary schools within Ontario. Interviewees have been given pseudonyms to protect their identity as well as their respective school boards identity. Years in the profession ranged from 4 to 35 years. The interviewees are referred to throughout the analysis as: Aaron, Brian, Candice, Denise, Elenor, Fiona, Gloria, Hailey, Isabelle, Jessica, Ken, and Lucas.

The following table represents the matrix of the participants in this study.
Table 3

**Pseudonym Matrix**

<table>
<thead>
<tr>
<th>Board</th>
<th>School Level</th>
<th>Administrator</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1. Elementary</td>
<td>Aaron</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2. Secondary</td>
<td>Brian (Ken &amp; Lucas)</td>
<td>N/A</td>
</tr>
<tr>
<td>B</td>
<td>3. Elementary</td>
<td>Candice</td>
<td>Denise</td>
</tr>
<tr>
<td></td>
<td>4. Secondary</td>
<td>Elenor</td>
<td>Fiona</td>
</tr>
<tr>
<td>C</td>
<td>5. Elementary</td>
<td>Gloria</td>
<td>Hailey</td>
</tr>
<tr>
<td></td>
<td>6. Secondary</td>
<td>Isabelle</td>
<td>Jessica</td>
</tr>
</tbody>
</table>

*Notes. Numbers listed 1 through 6 were given to each school to provide reference for the school description below.*

The three boards are referred to as Board A, Board B, and Board C.

**Board A** is one of the larger districts in Ontario serving over 60,000 students.

**School 1:** This school has approximately 15% of the student population living in lower income households with 35% of parents having some university education. Aaron is an elementary principal who has been in the teaching profession for 25 years and in administration for 10 years. He has had prior experience in initiating a healthy snack program and is a strong supporter of their school breakfast club. He was first informed about the policy back in March of 2009 and believed that the most important component of the policy was to encourage and model healthy choices to students through the 80/20 rule. Based on my observations, this school is located in a residential area with very limited (less than 2) commercial food retailers within walking distance from the school.

**School 2:** Brian is a secondary school principal who has been in the profession for almost 30 years, with over 15 years of work in administration. Prior to the implementation of the School
Food and Beverage Policy, Brian was involved in educating staff and ensuring health and family studies curriculum emphasized healthy choices to students. He was also responsible for enforcing the policy with the board-contracted food service provider. He was first informed about the policy in February of 2010 and has a general, non-specific understanding of the policy content. The food service provider was mainly responsible for ensuring that the nutritional guidelines were followed.

Individual interviews were originally planned for; however, Brian had invited Ken and Lucas who are both vice principals of the same school to provide insight and discussion for the interview. Ken and Lucas have been in administration for 4 and 8 years respectively. Ken was the key contact at the school that worked with the food service provider and attended the information session with the board office. He believed that the transition into this policy was quite smooth due to the board’s central control and communications with the food service provider. Lucas’ role was to help disseminate the policy to staff and students and to organize the 10 exemption days.

This school has less than 10% of the student population living in lower income households with more than 50% of parents having some university education. This school is located nearby a large (15 or more) number of commercial food retailers within close walking distance from the school.

**Board B** is a medium-sized district in Ontario serving approximately 20,000 students.

**School 3**: Candice is an elementary principal who has been in the teaching profession for 23 years and in administration for just over 2 years. Her experiences prior to the implementation of the School Food and Beverage Policy were in the training she had received from the board and sharing this policy with her staff and student council. She was first informed about the policy
one year prior to its implementation. She believed that the most important component of the policy was to promote healthy eating.

Denise is an elementary school teacher who often engages in administrative duties when Candice is absent. She has been in the profession for almost 20 years and in her current position as a student support teacher for 5 years. Her experiences revolved around promoting healthy treats on special holidays and contributing to the purchase of healthy foods and snacks for the school’s lunch program and canteen. The successes of these initiatives were largely due to students having no choice, but also knowing the population of students she had to cater for. She was first introduced to the policy at a staff meeting in June 2010 and worked collaboratively with the principal and staff to find compliant foods to sell.

This school has approximately 5% of the student population living in lower income households with almost 70% of parents having some university education. Compared to the province-wide statistics for students in lower income households, this district contains a relatively high socioeconomic demographic population. This school is located in a residential area with very limited (less than 2) commercial food retailers within walking distance from the school.

School 4: Elenor is a secondary school principal who has been in the teaching profession for over 30 years and in administration for over 20 years. She was not involved in any healthy eating initiatives prior to the implementation of the SFBP. She was previously a family studies teacher and was well aware of the policy and the nutrition guidelines and the 10 special days that she is allowed to go off the policy. She was first introduced to the policy approximately three years ago when she met with an individual from the local health unit who came to speak to their cafeteria managers about long-term plans for implementation.
Fiona is a secondary school teacher who has been teaching for 35 years. She attended an in-service training session one afternoon approximately a year before the policy’s enforcement by a public health official hired by the board to present and train staff about the policy. She was well aware that the policy referred only to food sold on school grounds; however, she is a family studies teacher who actively sought to incorporate and abide by the nutritional guidelines of the policy when possible, while teaching about food preparation and culinary skills.

This school has approximately 5% of the student population living in lower income households with almost 40% of parents having some university education. This school is located in a residential area with a moderate number (between 8 to 14) of commercial food retailers within walking distance from the school.

**Board C** is a smaller-sized district serving just over 15,000 students.

_School 5:_ Gloria is an elementary principal who has been in the teaching profession for 29 years and in administration for 15 years. She was actively involved in supporting and educating parents and students about healthy food choices through various resources including the policy guide and health curriculum (e.g., daily physical activity). She was first introduced to the policy three years ago during its development; however, she was already familiar with the policy’s goals since the implementation of a similar policy that mandated the sale of healthy snacks and drinks in vending machines in 2004. She had a good awareness of the long-term health effects that diet can have on individuals. Gloria believed that awareness of nutrition and healthy eating were the most important components of the policy.

Hailey is an elementary school teacher who has been teaching for 14 years. She was directed to me by the principal of the school as a key stakeholder to contact for this interview.
Her knowledge of the policy was limited, primarily due to lack of involvement in the planning, training, and preparation stages of implementing the policy prior to September 2011.

This school has approximately 17% of the student population living in lower income households with 20% of parents having some university education. This school is located in an area with no commercial food retailers within walking distance from the school.

**School 6:** Isabelle is a secondary school principal who has been in the teaching profession for 25 years and in administration for 5 years. She was involved in the regional meeting to learn about the policy and was jointly responsible for sharing this information with department heads, staff, parents, parent council, and students along with the stakeholders involved in coordinating health-related activities. She also mentioned that she led discussions with the aforementioned groups to answer and discuss how the policy would apply to their specific school situation. Cafeteria changes were initialized and planned by the board to aid in the process of compliance. She was introduced to the policy about a year and a half before its implementation.

Jessica is a special education teacher who has been teaching for almost 30 years and has taken a voluntary leadership role in organizing her school’s breakfast club. She became aware of the SFBP 1 year prior to implementation and was also familiar with the nutrition standards because they parallel the guidelines of the school’s breakfast club. The major difference was that donations of food to the breakfast club would always be accepted, welcomed, and available to students with or without following the nutritional guidelines. Jessica believed that the success of this breakfast club was due to the “friendly homelike atmosphere [with] interesting recipes” that the club provided. Also, the grants and support from board personnel were what really helped support the long-term operations of the program.
This school has over 10% of the student population living in lower income households with 31% of parents having some university education. This school is located in an area with a few (between 4 to 7) commercial food retailers within walking distance from the school.

**Qualitative Findings**

This chapter reports on the discussions of the interview questions. Responses have been coded, categorized, and then presented by themes in this chapter in order to provide insight and perceptions of administrators’ and teachers’ understanding of readiness to implement the School Food and Beverage Policy. When using direct quotations, *italics* were used during the transcription process to emphasize the change in inflection of the interviewee’s speech. **Bold** was used to show the stress that the participant put on a particular word during speech. All “ums,” “uh,” and repeated words/stutters were removed from all quotations. When possible, quotations were used verbatim; however, for clarity and purposes of presenting data, tenses have been changed.

Data analyses revealed three broad themes and have been presented in a logical sequence. These included: (1) pre-implementation planning, (2) policy’s technicalities, and (3) challenges of confronting implementation. Within each of these themes, sub-themes are discussed in further detail to provide insight into this study’s purpose.

**Pre-implementation planning.** One of the predominant themes related to preparation and planning prior to implementing the SFBP. This theme was examined through the organizational readiness lens discussed in chapter 2. Responses revolved around perceived school-wide and individual readiness and three areas that reinforced and aided in the preparation of implementation. This theme included the dissemination of the policy to the various school stakeholders, physical accommodations, and support availability.
**Level of readiness.** When asked about stakeholders’ overall perceived sense of readiness for implementing the policy in September 2011, responses varied from two extremes within the same school, but also varied across a spectrum of readiness between schools from the same board. Gloria confidently stated that:

Our school was very ready because we were already on board prior to September 2011. We were compliant last year in mid-October and were working towards compliance and education and this is coming and this is what we need to do.

In contrast, Hailey felt that she was not fully prepared for the policy at all.

We haven’t done anything because it hasn’t been fully - we weren’t forced to do it until now and so in the past if … because we weren’t going to be in big trouble if we didn’t do it - we didn’t.

Although Aaron might have felt prepared prior to September, after implementing the new policy, he asserted that:

In hindsight, I probably wasn’t as ready as I should have been. It would have been better for us to maybe try the whole wheat pizza back in June, so we knew that had done some taste tests and everything else and realized that we needed to do something differently.

In all of the secondary schools, both teachers and administrators agreed that their school was ready for this policy due to the preparation and changes that were made by the board and through the corporately managed cafeteria. In the elementary schools, individuals “thought” they were fairly ready. Denise hesitantly responded that “I think we were well informed and ready to go,” while Candice felt more confident in saying that, “I think we were ready … we’ve been hearing
about it and trying to accommodate it even last year. We were already looking into how we could accommodate, so putting it in place was not a concern.”

Although a majority of interviewees felt ready for the policy, the variation in perspectives gave rise to very different challenges that each school faced as discussed further in Chapter 5.

**Dissemination of policy.** The mode of communication through which school stakeholders were informed of the policy varied in the extent of information provided as well as the timing and method of communication. Four key stakeholders were identified: administrators, teachers, students, and parents.

*Administrators.* These participants included both principals and vice principals who were informed about the policy at least one year prior to its implementation; however, the mode in which they received the information varied from a brief talk from fellow colleagues to meeting with the health unit to finding information through the school board’s emailing system, which provided links, documentation, and resources to support the policy.

In Aaron’s school:

One superintendent made sure we were all accountable ... stating quite *explicitly* that we received the policy, that we understood it, and that we were making sure that our food providers were compliant and we had to sign off on that.

Brian, Gloria, Candice, Isabelle, and Elenor all received similar training through their respective school boards; however, their satisfaction with the training followed two distinct extremes.

Isabelle strongly felt that there needed to be:

More directives directed towards parents and informing people, like *none* of that - we weren’t told that we had to do any of the things that we did. We just went ahead and did them because it obviously made sense. So, I mean, if I were the ministry person and I
wanting this change to occur then I would think I would say, **these** things **must** happen, you know? I would have had a guideline ... [that states] this is how this bill should be implemented or I would have thought that I would have seen that from the board. We never got that. We were sort of just left on our own to do what we thought made sense which obviously, we tried to inform our participants - who are our stakeholders that are going to be affected.

The remainder of the administrators felt that the training was merely sufficient or “good” (Aaron). There was a heterogeneous mixture of knowledge that each participant had about the policy. Some had more general concepts of “promoting healthy eating” (Candice), while others had specific knowledge and understanding of the 80/20 rule and the “limit to the amount of fat, sodium, and sugar that are allowed to be in the foods that they sell” (Isabelle). Brian felt that an in-depth understanding of the policy was “not really required on our part. We don’t sell the food.” Although he was informed by the board as well as attending a corporate presentation from the board’s food service provider, he described his perspective as:

> I don’t think anyone was overly concerned about implementing the new policy - it is what it is. It’s very prescriptive. You asked, do I know specific aspects of it? We don’t have to live it every day so, I can pick up the policy ... we’re adhering to the policy that’s all I know.

With the wide variation in knowledge, awareness, and training of the policy among schools and even between teachers and administrators of the same school, it gave rise to a broad spectrum of responses that further illustrated the complexity of understanding individuals’ perspectives.
Teachers. Both administrators and teachers were asked to describe how they were informed about the policy. Candice claimed to inform her teachers through an in-service for staff once the policy was introduced:

We had some little flip guides every staff member was given. We spent some time at a professional activity day, talking specifically about the policy ... where they could find it and also because it’s on our board webpage and resources that you can access, i.e., the health unit, our board personnel ... but we spent time going through this and what the guidelines were and the fact that there was a 2 year - 2 years, 1 to get on board and 1 when we had to be compliant by. So, that’s what we have spent our time doing.

Denise described being informed “by the school principal and the teacher rep” and “it was just a little presentation” (Denise). All other administrators and teachers agreed they were informed through one staff meeting. Fiona mentioned that “they did have a special meeting after school for anybody that was interested in it” to find out more information; however, in all other schools, this additional meeting was not available unless teachers approached principals with specific questions or ideas that they wanted to pursue. Jessica vaguely remembered the policy being mentioned in a staff meeting, although “I don’t think I received a piece of paper that said exactly what was on it. I don’t really remember, other than looking for it myself” (Jessica).

Teachers’ knowledge of the policy content was limited. Hailey described it as, “basically, if it’s in a package, you can’t sell it” (Hailey). Denise was one of the only teachers who described her training beyond the one staff meeting. She was able to identify specific aspects of the resource guide and point out the food categories, while interpreting the colours on the table that represented food that was not permitted for sale and food that should be sold most as “the red we stay away from and the green is good” (Denise).
Denise felt that “anything short of going to the actual meeting ... [that was] the kind of model that we use all the time — where someone trains the trainer. Where they go get the training and they train us” (Denise). Hailey, Jessica, and Fiona all agreed that the staff meeting was sufficient in informing them about the policy, but did not support them in implementing the policy. “We briefly spoke about it in a staff meeting last year and that was pretty much it. And it wasn’t told very much about it until this is what I said, ‘this is what I would like to do’” (Hailey).

Hailey’s response posed some interesting insights into Gloria’s perspective as she recommended Hailey to be interviewed according to my participant recruitment criteria because of her involvement in the planning and preparation stages of implementing the SFBP. Yet Hailey herself did not identify as being a part of the planning team or the preparation process, and assumed that she was not formally trained or thoroughly informed about the policy because “for most teachers, it would be irrelevant unless you’re planning on selling food” (Hailey). The discrepancy between stakeholders’ views within schools was predominantly seen in Gloria’s school.

Students. The mode through which the policy was communicated to students also varied from school to school and even within schools. Gloria discussed how, “teachers have informal talks with students about differences between how they feel after they’ve eaten a high sugar content lunch versus how they feel after they’ve had vegetables and fruit and a well-balanced lunch.” This statement could not be confirmed by Hailey as she argued that “I don’t know if it really has been [communicated to students] yet” (Hailey). Similarly, Isabelle “informed students through - only through either the departments ... certainly some departments talked about it with their students”; however, Jessica could only confirm her own discussions with her class and her personal calls home to parents, but “as far as other students are concerned, I have no idea. I’m
assuming maybe newsletter?” (Jessica). Candice responded that it was discussed more in “small groups, it hasn’t been as a school-wide; although school council was informed.” Elenor and Fiona both established that “it was [only] discussed with all the clubs and groups in the school,” (Elenor) specifically those who previously engaged in fundraising events in order to apply for one of the 10 exemption days for their school.

Both teachers and administrators from elementary schools mentioned that it was also a part of curriculum and that students might not be aware of the policy specifically, but were aware of healthy living, healthy eating, and physical activity. Denise thought that teachers talked about healthy eating in their classrooms because “it’s such a big part of curriculum starting in Grade 2 or 1” (Denise), but not necessarily the specifics of the policy. Candice confirmed that the policy was not communicated to students school-wide, but rather “it’s more in small groups” (Candice). At the secondary level, Brian mentioned that students were also offered “foods classes that promote healthy eating” (Brian); however, in Elenor’s school, these classes are elective courses and are not mandatory for all students to take and, therefore, students may not have the benefit of obtaining the skills or information that these classes would provide to them.

Parents. The most common form of communication of this policy to parents was through parent council meetings. Another method of dissemination involved letters home to parents, newsletters, and the individual school website. Aaron indicated that parents were not informed prior to the implementation of the policy; it was only “when we sent the pizza order form home, that’s when we had told them it was going to be a whole wheat and meeting nutritional standards, but I didn’t do that until the pizza forms went home” (Aaron).

One of the concerns from Gloria and Elenor was that they did “not feel that the Ministry did a sufficient job in educating parents nor do they continue to do a very good job about
educating parents” (Gloria) and “why is it the schools’ job to do pretty much everything else in society” (Elenor). It was evident that all of the administrators would do as much as they could within the confines of their school to help encourage healthy eating habits:

But we cannot, in any way shape or form dictate what parents send in lunches and that’s the biggest issue. It’s not us. It’s not the compliance for schools with the nutrition policy. It’s compliance of parents, not compliance, it’s willingness of parents … period.  
(Gloria)

Brian asserted “it’s ultimately a parent’s responsibility to teach kids proper eating habits.”

Elenor felt strongly that:

We’ll do what we have to with the captive audience, but Mom and Dad? That’s not my job to tell them about this. It’s not my job to implement the policy … it is to implement it here in this building. It’s their job to get society on a whole and I understand that they’re trying to start with the kids - well, that’s good, but there’s a limit.

Almost all participants expressed some concern or acknowledgement that parents needed to be aware of the policy and its goals; however, many of the administrators felt that it was not their responsibility to educate parents.

**Physical accommodations.** A majority of the changes made were in the food choices at both the elementary and secondary level. Elementary schools did not have to make any physical changes to the school environment due to the fact that most of these schools did not have vending machines and did not have a cafeteria. For the most part, changes to food availability in their canteens, tuck shops, or hot lunch program were enforced by the principal. In secondary schools, there were changes in the vending machine content and the removal of fryers in the cooking area of the cafeteria. In those instances, the individual school board initiated and
completed any physical changes within the food preparation area, and food availability was
decided by food service providers that had been contracted out by their respective school boards.

*Food selection.* While elementary school principals were primarily responsible in
deciding on which foods were acceptable, some teachers and students were also able to
contribute ideas in food selection. Gloria recognized the difficulty in finding acceptable foods
asserting that:

> Baked potato chips are okay, but not if they’re flavoured [...] you can’t have baked chips
> with ketchup because they’re over the allotment of either trans-fat or the salt ... it’s that
> combo that’s really tough. (Gloria)

Aaron agreed that it was difficult to ensure compliance. Even when he requested that his vendors
sign a contract indicating the nutritional information of the food that they would provide, he was
unsure whether one of the vendors was able to abide by the standards since all nutritional
information was listed as individual ingredients rather than as a combination in one serving size.

It had also been a challenge to find foods that students actually enjoyed. Denise felt that
there was a little bit of resistance from students and complaints from parents who’s “kid didn’t
eat lunch because they didn’t like it.” Candice recalled explaining to students that it was “now
meeting healthy requirements containing whole wheat instead of white flour and that’s why it
tastes different.” Both Candice and Denise agreed that they needed to keep looking for better,
more appealing food choices.

In secondary schools, food service providers were hired by the board to cater to all high
schools. It was left to these vendors to interpret and comply with the standards as per the policy.
In Isabelle’s school, it was disappointing that “I still don’t think our cafeteria choices are that
appealing” (Isabelle). In Elenor’s school, however, she felt that the food in her cafeteria was
great that “they were giving out samples, but the kid [...] wants fries. So, they truck across the street and get the big ... greasy thing with gravy” (Elenor). Since French fries were no longer sold in schools, students were going elsewhere to get them.

**Support availability.** In most instances, teachers claimed that the administrators were helpful; however, Denise, Isabelle, Gloria, Jessica, and Candice did mention that “the health unit is there” (Denise) and “board personnel is always there to help” (Isabelle). For Candice’s school, the local health unit was a key supporter since it provided documentation on foods that met the nutritional guidelines of the policy and “we did not have to spend hours and hours figuring out every food item out” (Candice). On the other hand, Isabelle was not able to obtain a list of acceptable foods from the health unit and argued that “Time out! We don’t think that people are going to take the time to do this lengthy equation to figure out if food is good, bad, or indifferent” (Isabelle).

Isabelle had concerns about how much time it would take a staff person to calculate whether food in a mixed dish would fall into each category. Denise noticed that “the secretary is spending a lot of time making sure that it meets the criteria and something that kids would like” in order to make this transition as smooth as possible for the students. Isabelle recalled when requesting a pre-approved food list that it was not going to be provided because “if a food on that list is seen as a ‘good’ one that somehow legally, that they would be presenting one product over another” (Isabelle), leaving it solely up to schools to decide what food and beverages would be acceptable.

Fiona agreed that it would have been helpful to have “a database of recipes already vetted and already collected [to] save a lot of time and energy” (Fiona). “It’s ultimately a parent’s responsibility to teach kids proper eating habits and we’re not doing a good job.”
(Brian). Elenor questioned, “what’s the Ministry doing? What’s the Ministry of Health [and] the Ministry of Education doing to educate those parents about why they’ve done what they’ve done?”

The amount of support received varied from school to school. Each respective school board initiated the dissemination and training of the policy, but a majority of the planning occurred at the individual school level to establish its own support system.

**Policy technicalities.** This theme emerged through the various interpretations of the policy and when competing priorities challenged its compliance. As well, issues surrounding stakeholder engagement in abiding by the nutritional guidelines was also discussed. Stakeholders included parents, students, and teachers.

**Interpretation of the policy.** In this study, it was found that the interpretation of the policy could highly affect how it was implemented, how it was received by the stakeholders that it impacted, and the outcomes of implementing the policy itself.

All interviewees acknowledged that the nutrition standards of the policy only applied to food and beverages sold within schools; however, their understanding and interpretation of the 80/20 rule varied from school to school. Both Ken and Elenor had different views of what it meant to be compliant. Ken stated that “one fifth of your vending machines can be pop” and that pop sold within the vending machines could be “replaced as often as you want” (Ken). So, [if] kids want pop, they’ll get pop” (Ken).

Conversely, Elenor hesitantly justified the vendor’s choices saying that:

Well, the non-compliant pop would still have the sodium and the whatever. What they’re selling there actually does the sodium-free, caffeine-free, sugar-free. So, diet coke. I mean, you and I don’t necessarily buy it in the store, but clearly, the vending
machine company is getting it from *somewhere* because it's *diet* coke and got the - it’s got a little band at the top of it, it’s got the caffeine free, sodium free.

Elenor and Isabelle both questioned the food availability in their school cafeterias, but both admitted that it was up to their vendors to abide by the policy. “Some of the choices are ... odd. They’re supposed to be *healthier*, yet we have things like poutine chicken fingers ... hey, they must be [compliant], they’ve been very stringent with the food company so I’m sure they fit” (Isabelle). Secondary school principals did not play a strong contributing role in food selection and left the food choices to the discretion of their vendors. At the elementary level, Aaron mentioned having difficulty in understanding the specific aspects of the policy such as the 80/20 rule while Gloria and Candice did not express any difficulty. Discrepancies and lack of understanding of the core elements of the policy posed many challenges ahead especially when the implementation of the policy was based upon one’s interpretation of the goals.

**Competing priorities.** With all the obligations and responsibilities within the school and even outside of school and the conveniences of fast food, it is often difficult to pay close attention to all of the competing priorities that school administrators encounter. Aaron recalled his training about the policy as:

> It was tucked in with other meetings, so the initial sharing of the policy was tucked into a meeting ... it was one agenda item out of several agenda items. So, the other agenda items could have been way more important, way more pertinent and so, in our brain, it might rank 4 or 5, so we put it on the back burner until September 7th and that’s why it didn’t worry about my pizza and how it tasted until September 7th.

When participants were asked about the policy’s priority, all participants agreed that it had a relatively high priority; however, as one teacher said, “I’d prioritize it. I mean, there’s a lot
of issues of bullying and self-confidence, and mental health issues that are [also] super important in high schools” (Jessica). Although Aaron had known about the policy one year prior, he still would have like to have had “time to sit down [ ... ] get a day away from school ... to focus on how to implement this policy with colleagues or small groups or with a(n) (informational) DVD” (Aaron). He found that “it was at the bottom of the pile until September 7th” (Aaron). Brian felt that the policy was a “huge priority to make sure everything was in place ... to get the school running [ ... ] so, once we had it in place, it was no longer a priority” (Brian). Elenor disagreed. It was “not the highest priority for me” (Elenor). She argued that:

Every Ministry, every Ministry believes that they are the only people talking to me. And so, but it all converges right on us. And you know with school improvement and all the rest of it, this is an important thing, but I’m not losing sleep over it. I am complying with it. I have my 10 days. I’m talking to my kids, but I’m not - it’s not my job to ... I will do - I am doing my best to convince my kids that this is a good thing. Even if it’s not necessarily something that I understand ... because I have my own frustrations with it. But, it’s not the highest priority of things that I do in my day. I’m going to tell you, I am not going down to police the cafeteria. I am trusting that corporately, they are doing their job. I am talking to my kids about what they need to do and we are following along in that way, but it’s not going to be my job to teach the entire 11 hundred of them - this lesson. This lesson will be taught over time, because as I say, every Ministry believes that they are the only Ministry who’s making a decision that impacts me. And then there are people in the Ministry of Education who are - different parts of it - all think they’re sending it all down, but it all lands here and it all filters here and they all expect me to juggle and so, I can tell you that I’m complying with the parts that I absolutely have to.
The enforcement of the policy and the roles and responsibilities at the secondary school level were a challenge, especially for secondary school principals. Since each school board had contracted out the cafeteria and food sales to a food service provider, Elenor argued that “I don’t believe that it’s my job to police them. It’s their job to do what they’re supposed to do.” Isabelle agreed that:

We aren’t the nutrition police (laughing). We’re not going to be breaking down every piece of food that comes into the building or that’s going to be for sale to see if it fits the guidelines, I mean, we can’t ... there are a lot of things to do in a school and that’s just not reasonable.

In the participating secondary schools, a portion of the revenue generated from food sales, including both vending and cafeteria venues would be given back to the school. Isabelle noted that, “we used to have Pepsi and Coke ... [and] we got kick back to the school which was a huge amount of money.” Raising funds through food sales such as bake sales, pop, or chocolate bars tended to be the most lucrative. In all of the secondary schools, the extra funds helped pay for many student activities for those in need to attend trips, pay for uniforms, equipment or clubs; however, in the schools that were identified as having higher socioeconomic backgrounds, money instead would be donated to an outreach club or organizations to save wildlife or a special cause. Only one elementary school used the funds to pay for program fees that went beyond the allotted amount in the school’s budget. Ken argued, “is it right that we would sell French fries and then get all the money from that? Or is it better that we don’t sell French fries and then not have a revenue stream?” The competing issue between healthy eating and profit generation still remains a challenge for those schools that heavily rely on these funds to offset operational costs.
Stakeholder engagement. This sub-theme emerged through various questions of motivating change, mode of communication of the policy, and current and future challenges that the school faced with student and parent buy-in.

Administrators agreed that the policy had complemented what was being taught and “aligning what we say and do” (Ken). Denise mentioned that modeling expected behaviours was important in creating interest and compliance with children. You couldn’t just:

Walk around if you’re going out for lunch for a burger, like we try to be discrete about it - we are role models for kids and so we have to lead by example, right? So, I think teachers are pretty good about that.

Fiona enthusiastically exclaimed:

You do your best as a teacher, you model, model, model. ‘Look at this! This is great!’ pop it in your mouth ‘ah, yum!’ and you do all these things and some kids will follow your lead, and some kids will just look and go, ‘Ew! That looks gross!’

While modeling and consistency were ideal, Fiona also acknowledged that “it’s a matter of reinforcing the message.” On the other hand, Jessica spoke about the difficulty of trying to encourage any type of behaviour change in high school students. “They don’t want to be told that they can’t have this. If they were told that they can’t have this, that’s what they want, right?” (Jessica).

Another challenge she found was parent resistance “because I could get a parent to call me up and say, ‘how dare you tell my 17 year old what to eat - it’s none of your business!’” (Jessica). Even at the elementary school level, Gloria and Candice agreed that “parent engagement and the parent education is something that I strongly believe could have been done better and needs to be addressed because we have no control over what parents send their
students in lunches” (Gloria). Elenor supported this notion that “you need to be able to influence those that are influencing them” in order to affect change.

Gloria suggested some marketing tools such as a “flyer that goes on the fridge [similar to those from] hydro when then the rates are about to go up and down” (Gloria). She also suggested “a resource guide for parents [ ... ] nice and colourful, healthy hits for school lunches” (Gloria), while Aaron suggested changing the pricing of “prepackaged food so [it was] outrageous that it would be blatantly clear” to buy the raw bulk foods rather than the pre-made, prepackaged snacks such as “Lunchables” (Aaron). Denise asserted that:

It’s a whole convenience thing, right? It’s a lot easier to buy something that’s not healthy than it is to buy something that’s healthy and to make something that’s healthy ... we live in a world that’s so rush rush rush and it’s so easy to just grab something quick you know.

The variations in stakeholders’ responses were dependent upon the school context and stakeholders’ specific involvement in the planning and implementation process. Although a majority of participants claimed that the school was ‘ready’ for the policy, discussions regarding many of the challenges that schools were facing demonstrated otherwise. For example, directly asking questions about schools’ readiness tended to refute what stakeholders discussed in the following questions. First, Aaron confessed that, even though he thought he was ready, reflecting back on September’s implementation, he felt that he probably should have “informed parents a little bit more” (Aaron) to engage them in the process. Denise recalled that, although she was given training and supporting documentation, “not everyone got all the info,” which may have contributed to the lack of teacher engagement within the change process.

Jessica remembered this policy being discussed at a staff meeting, but was not even certain who was responsible for implementing it. “Was the principal in charge of it -
implementing it? Was it a *group* in the school? I’m not even sure” (Jessica). Fortunately for her, she was already familiar with the nutrition standards since they were similar to the breakfast club’s guidelines, and she had made arrangements to speak to her class and her students’ parents prior to September 2011.

Hailey had concerns about how the policy was introduced and suggested that a more gradual implementation process would have increased schools’ readiness to implement the policy. By allowing stakeholders to adjust by making step-wise changes before leading into full compliance, teachers and students alike would have been more welcoming of the policy. Instead, she insisted that, since the school wasn’t forced to make any changes prior to September, “up until last year, we were still selling chocolate bars” (Hailey). Most administrators, however, did mention making incremental changes within the year leading up to the policy’s enforcement, but this assertion was neither confirmed nor denied by their respective teaching staff.

**Confronting implementation.** There were a variety of factors that presented some level of difficulty or resistance in putting the policy into practice. As Fiona stated, “I agree with the policy in *theory*. *Logistically*, sometimes within the school, it’s hard to implement” since the guidelines are so strict. For example, “low fat cheese, you are still not under 5 grams of fat” (Fiona). Also, “it’s the coordination of everything ... we have 10 days a year that you don’t have to meet the guidelines, and so they’ve had meetings on which 10 days do we have as a school” (Denise). These challenges also included ones in area-level factors as well as the unintended consequences of enforcing the policy.

Isabelle suggested “making it more *appetizing* to them, *lowering* the prices” (Isabelle), while it was often difficult to find “cost effective and nutritious food” (Ken). Isabelle asserted that food improvements in “quantity, quality, and taste” should be at the forefront in attempting
to influence students’ eating habits because “I just see the prices and the serving sizes isn’t enough for kids ... kids could and should have healthy choices for a reasonable price and in a quantity that will fill them” (Isabelle). A majority of participants agreed that food selection needed to be addressed in order to appeal to students’ taste and liking.

**Area-level factors.** The location in which the school resided had a significant effect on the efforts of planning to implement this policy. Isabelle found that “some kids are choosing to go elsewhere [since] we’ve got fast food places reasonably close.” Everyone agreed that schools had no control over the surrounding environment off school property. “We fight a huge battle, although we promote healthy eating in all of our programs ... we no longer have the foods that kids like to eat” (Brian). Elenor added that:

> There’s nothing stopping my child from walking out of the building and getting all of the crap that they could get from surroundings. So, it’s interesting that within the confines of my building, I have great rules, but you just need to walk off the property and you can do whatever you want. And nothing’s stopping that, you know, nothing is stopping a business from selling that junk food and all those very fat, high sodium, you know, high everything, to my kids.

The challenge for vendors was that, “they could make pizza, but what would be the point because no one is going to buy it?” (Elenor). She questioned whether this policy would indeed change her students’ eating habits and insisted that it would not have an impact unless “you’re isolated and you haven’t got any choice ... you might have a better chance” (Elenor).

Being in an environment where fast food restaurants and convenient stores surrounded the schools, “we don’t have the same impact on kids” (Ken). Schools had agreed that they were
complying to the best of their ability, yet with no control over students purchasing behaviour or food preferences, area-level factors did not support students’ compliance of the SFBP.

\textit{Intended and contingent consequences.} A number of intended and contingent outcomes were evident immediately following the implementation of the policy. Issues surrounding the profitability of food sales, appealing to the students’ needs, and profitability and sustainability of running a business were all mentioned at various schools.

Gloria thought that her students had a “higher awareness [...] of salt content and trans fats” (Gloria), but it did not seem to change the food that students brought in their lunches. While it seemed too early in the implementation stage to determine the actual effects of the policy, it had really made Aaron and his staff “stop and think about using food as a reward [...] and being conscious of our food choices” (Aaron). Fiona stressed that it was particularly difficult to change one’s eating habits, especially “when it comes to eating habits that you’ve had most of your life” (Fiona). She emphasized the idea of reinforcing the message and allowing time to guide the intended changes. She asserted that “with familiarity comes acceptance” (Fiona).

Denise found that offering healthier food choices through the school’s hot lunch program, the school paid “$3.75 and we’re charging the kids 4 bucks,” rarely made the school any money and found that it was “the worst received. Kids didn’t like them at all!” (Denise). Fiona explained that there was “traditionally a lot of fundraising going on in this building ... to help defray the cost of meet[s] or new uniforms or whatever” and the money would generally be raised through bake sales or food and beverage sales. Aaron noted that “chocolate bars are definitely the most productive, profitable fundraiser” but the school tended to stay away from that revenue source. Elenor legitimized students’ perspectives by stating that they “immediately go to their capacity ... [to] bake a pan of brownies” in order to raise funds.
In all three secondary schools, there was an immediate effect on their revenue stream. Brian estimated that “we’re making $150 a day in sales and out of that we have to pay for wages, our repairs, and our food. It’s probably we’re breaking even or losing some money.” During the first week of school, Brian recalled that, “it was a ghost town in our line ups.” Elenor worried that in a school like hers, “what’s going to happen if kids aren’t going to buy it? Then there’s no point in having it. Therefore, the only option will be to go outside.” Brian already found that:

It’s just cut our sales by 70%. Kids aren’t going to eat in the cafeteria. We are abiding by the new policy and we no longer have the foods that the kids like to eat, so they leave our school and they go eat them.

In Isabelle’s case, it was “a considerable amount of money” (Isabelle) that was no longer coming into the school from the “kickback” that the food and drinks used to provide in order to “support students in need” (Isabelle). Ken explained that:

We obviously get a percentage of revenue of the sale of food so it’s always a bit of a tricky situation. It means less money, but it’s also we’re setting the more important issues and setting a better example for students about healthy choices, right?

In Elenor’s school, she found that the decrease in food sales resulted in “fewer employees in the cafeteria” (Elenor). She went on to explain “that’s hard on the woman down there who’s trying to pray that she’s [selling] enough food” (Elenor) to keep her job.

Elenor expressed the deepest concern from the vendors’ perspective. She worried that “the cafeteria isn’t just going to be put out of business.” She explained that:

I’m already down staff in there. So, my worry is that we’re not even going to have a cafeteria ... if those companies can’t make money - you know, they’re businesses - they’re going to have to look at it too. So, I do worry.
She also acknowledged that you “gotta pay employees and you gotta do the job so that’s what my worry is long term” (Elenor). The unanticipated effects of implementing the policy were discussed as future concerns for the viability of school cafeterias as businesses and also resulted in questions surrounding the actual impact of the SFBP had on students’ eating habits.

**Summary of Findings**

The preliminary analysis examined six dimensions of Pal’s (1987) framework including historical, content, and process analyses as well as empirical, logical, and ethic evaluations of the policy. This analysis provided insight into the development of the policy and some of the inconsistencies within the policy itself.

Responses to the interview questions were presented by themes and sub-themes according to the discussions of the interviews. These were reported in a systematic and logical manner rather than by frequency of discussion in order to build and clarify stakeholders’ perspectives of the process of readiness. Themes emerged with a wide variety of views on the following topics: (i) pre-implementation planning, including perceived readiness, dissemination of policy, physical accommodations, and support availability; (ii) policy technicalities, including the interpretation of the policy, competing priorities, and stakeholder engagement; and (iii) confronting implementation, including area level factors that challenged the policy’s goals and the unintended and contingent consequences for schools and food vendors. Results from both the policy analysis and interview responses are used to answer the research questions in Chapter 5.
Chapter 5

Discussion

The following chapter provides a summary of the purpose, methodology, and findings of the study. The findings are organized around each of the research questions of this study. Significant conclusions that can be drawn from the data analysis are discussed and linked to the relevant literature on organization readiness, school food policies, and evaluations of healthy eating initiatives. I also discuss the limitations and present the broader implications of this study for theory, policy, practice, and future research.

Overview of the Study

The purpose of this study was to examine schools’ readiness for implementing the School Food and Beverage policy through an organizational readiness lens. This study was guided by three research questions:

1. How does the School Food and Beverage Policy inform, influence, and support schools’ readiness to implement the policy?
2. What is the nature of school stakeholders’ perceptions on the actions of readiness for implementing the School Food and Beverage Policy?
3. What are the differences and similarities among elementary and secondary schools’ readiness to implement the policy?

Two data sources were used in this study: a policy analysis and qualitative interviews. First, the policy analysis was conducted in order to understand the foundational aspects upon which the policy was developed. A heuristic approach to document analyses was used to inform the analysis of the policy. The analyses also helped to direct the development of the interview guide questions to allow rich and meaningful data to emerge. Developing an awareness of
historical antecedents, the content of the policy, and the developmental process, as well as
evaluating the logical, empirical, and ethical issues helped to focus in on the potential issues that
school administrators faced when having to plan and coordinate actions for implementing the SFBP.

Next, using a purposive sampling method, I conducted qualitative interviews to obtain in-
depth perspectives of the specific stakeholders involved in the planning and preparation of
implementing the SFBP at the school level. Interviews were conducted with administrators and
selected teachers whom the administrators felt were a part of the planning and preparation
process. The original goal was to obtain two participants from each school, one at the
administrative level and one at the staff level from three different school boards within Ontario.

Participants were selected through a convenience sample to first identify those
individuals within the school who were directly involved in the planning, preparation, and
implementation of this policy. All principals were asked if they could recommend a key staff
person (e.g., teacher, food service staff) who was also involved in the preparation and planning
of the policy in order to gauge different perspectives within their school context. In one board, no
teachers were recommended and therefore I obtained information from 6 administrator
interviews and 4 teacher interviews. From this study, I interviewed a total of 12 participants - 9
individually and 3 in one unanticipated focus group. Each interview or focus group was
conducted in a semi-structured manner within the duration of 30 to 60 minutes, which, I believe,
allowed for depth of understanding of the various perspectives.

The interview questions were designed and guided primarily by the research questions of
this study; however, they were also informed by the policy analysis and the literature on
organizational readiness theory. Using this guide allowed me to “explore, probe, and ask
questions that will elucidate and illuminate” (Patton, 2002, p. 343) the subject matter and to
delimit the issues that would be explored. The interview guide was arranged into four parts: (i)
knowledge and understanding, (ii) preparedness, (iii) thinking about the future, and (iv) probing
questions on readiness in order to examine schools’ readiness to implement the SFBP.

Each interview session was audio-recorded and transcribed verbatim. Interviews were
read and re-read and then initially coded using an open coding technique for each semantic block
of text. This analysis was completed using Atlas.TI, a qualitative analysis software, for each of
the interview transcripts. Next, I used a selective or focused coding process to “sort, synthesize,
and conceptualize” (Gubrium & Holstein, 2001, p. 682) the initial codes to form my topics or
categories. Once the categories were established, the overarching themes emerged from
examining the frequency of the category being discussed. For example, implementation
challenges were highly discussed with respect to the specific barriers for implementation,
challenges for food controllers, and the unintended consequences of implementing this policy.
The overarching themes allowed me to understand participants’ meaningful and varied
perspectives of readiness to implement the SFBP.

Summary of Research Question Responses

The following section provides a brief summary of the findings related to the research
questions raised in the study.

*Question # 1 - How does the School Food and Beverage Policy inform, influence and support
schools’ readiness to implement the policy?*

**Inform.** The policy itself provides a rationale for establishing the nutrition standards and
how it would apply to schools. The Ontario Ministry of Education provided several resources
and guides to help inform, support, and influence schools’ readiness for this policy; however,
few were used and referenced prior to implementation as evidenced by the participants. These included the policy document itself and the School Food and Beverage Resource Guide (2010) or Quick Reference Guide. Although the online modules provided school surveys, checklists, and various tools to help assess the needs of the school and to ensure compliance with the policy, none of the participants used or was even aware of these online resources. The School Food and Beverage Policy Resource Guide 2010 and the ‘Quick Reference Guide” were used and referenced by all of the interviewees as two of the supporting documents that aided in the process of understanding, planning for, and implementing the policy within the individual schools. The Elementary Teacher Resource Guide was not prepared prior to implementation and therefore was not available to assist in schools’ readiness for the policy because of its recent release in 2011.

Influence. This policy influenced the kitchen facilities and the food choices offered in both the vending machines and cafeteria outlets in order to accommodate the policy’s goals. The strict nutrition guidelines affected how elementary schools were operating through their hot lunch programs, canteens, and fundraisers. At the secondary level, boards had contracted out all food and catering services to an outside food service provider and, therefore, it was left to those companies to interpret and comply with the standards, which tended to vary among school boards. Food choices were regulated and controlled by the principal at the elementary school level, which required more time and planning on the part of the administrator to facilitate the changes prior to September 2011. At the secondary school level, administrators were not a part of the decision-making process of food choices for the cafeteria or the vending machine content. All secondary principals felt that it was the food service providers’ responsibility to regulate and abide by the policy and the board’s responsibility to monitor it. Their primary responsibility was
to organize the special event days, in which all administrators from both elementary and secondary levels sought student representatives’ involvement.

Three of four teachers interviewed found that finding foods that met the guidelines and were also appealing to students’ taste was time-consuming for them and wished that there was a ‘pre-approved’ list to which they could refer rather than researching and reading food labels. Administrators agreed that it was difficult to find foods that their students would like and that met the guidelines. Since schools were no longer offering food that students liked, students often purchased their lunches elsewhere. This behaviour was predominantly found within secondary schools. Principals discussed both immediate concerns within their school as well as the broader implications of the policy with respect to developing a broader educational plan for society, while teachers mainly focused on their specific situations in having access to food lists and recipes they could easily access and, moreover, how the policy had impacted them directly.

A common theme found among schools was the presence of food retailers nearby. One of the major challenges discussed in the interviews was the competition of food outlets within walking distance from the schools and the problem this competition presented for encouraging healthier eating habits when students could just leave the premise and purchase their food elsewhere. All stakeholders claimed that the closer the proximity of schools to food retailers, the more difficulties schools had with students’ compliance of the policy. Both administrators and teachers mentioned the lack of control over students’ purchasing behaviour off school property, which challenged the overall goals of the policy. This challenge posed the question of whether or not this policy would indeed improve their students’ eating habits or change students’ attitudes towards healthy eating when inconsistent messages did not support the policy goals. School stakeholders indicated that other schools in more rural areas, or those with limited food retailers
within their neighbourhoods, tended not to have these issues and compliance was more easily controlled.

Support. The SFBP encouraged schools to “work with students, parents, school staff, community members, public health professionals, and food service providers to ensure that appropriate strategies are in place” (Ontario Ministry of Education, 2010, p. 5) to aid in the implementation of this policy. Supportive collaborations amongst stakeholders were not heavily emphasized in the discussions except with the public health unit if it offered additional resources to schools.

Having a variety of different resources to assist schools in implementing the policy, 11 of 12 participants noted that their local health unit was a strong supporter and resource for implementing the policy; however, only one school had provided evidence of the health unit’s support. This one elementary school was able to obtain a list of acceptable foods and retailers within its area that agreed to abide by the nutrition standards in order to service the school, while a school from another board, at the secondary level, was explicitly denied access to this information due to some unclear legal issues that it may invoke. The remaining four schools mentioned that the health unit would be called upon if needed, but was not necessarily used at these schools. All teachers relied on the principals’ support and guidance; however, depending upon the teachers’ knowledge and responsibilities within the school, they were able to obtain additional support from their own sources.

Since the policy’s release in October of 2010, dissemination began at least one year prior to implementation and involved various approaches and depth of training. For school administrators, training ranged from a 15-minute talk by fellow administrator colleagues to a more extensive full day in-service training on the inner workings of the policy and how to plan
and prepare their school for implementation. The greater the type and extent of the training as well as the prior knowledge and experience the administrator or teacher had on the SFBP, the more it influenced their own personal readiness for the policy. Thus, prior knowledge, lead time, and depth of training allowed for the necessary changes to be made and to influence the actions involved in implementing the policy.

Teachers’ perceptions of their own individual readiness also varied depending on their role within the school. Since most teachers did not have a direct ‘selling’ role, they were not highly affected by the policy; however, one teacher who was affected by the policy was frustrated at the idea of finding food that she could sell that actually met these guidelines and raise enough money to fund her program. She and one secondary teacher mentioned that they were not ready to meet the guidelines because the policy was not made a priority until September and no formal training was provided in order to support the implementation of the SFBP. The other two teachers attended a staff meeting where the policy was discussed. Three of the four teachers thought that the school, as a whole, seemed to be ‘ready’ for the policy, but their discussions regarding many of the challenges surrounding the planning and preparation for the policy indicated otherwise.

With more time spent on administrators’ training, the more ready administrators felt they were for implementing the policy, while the less time they spent on training, the more hesitant their responses with regards to their level of readiness. The greater the support and direction from the board as well as the public health unit, the more ready schools felt they were for the policy.
Question #2 - What is the nature of school stakeholders’ perspectives on the actions of readiness for implementing the School Food and Beverage Policy?

The battle among stakeholders. Administrators were fairly confident in their readiness to implement the policy in September 2011 because of the lead time they had upon release of the policy in October 2010. Some principals were even aware of the policy prior to its development and provided feedback to help create supporting documents and guides to aid in implementation. Only one principal had reflected back and thought he could have been more ready by planning and making small and gradual changes sooner. Three of the four teachers hesitantly admitted to being ready for the policy; however, one teacher conceded that she was not ready at all. She felt that it was due to the lack of communication and the lack of “gradually implementing” the policy in incremental phases to acclimate the school for these changes. The principal from this same school was very confident that her school was ready for the policy and that the teachers within their school were sufficiently prepared and knew what to expect. The contrasting perspectives displayed a clear disconnect between the stakeholders’ perceived level of readiness even within the same school. The remaining teachers were not involved with selling food and thus did not feel as much pressure to strictly comply with the standards until September 2011.

Administrators were highly involved in the planning, dissemination, and coordination of special event days, while the teachers had limited roles and responsibilities in the preparation stages of the policy. Administrators were informed of the policy through their respective school board’s in-service training and listed various modes of communication to teachers, parents, and students within their schools. While teachers were not formally trained about the policy, they were under the assumption that the policy was disseminated to students and parents, but could only confirm how they were made aware of the policy.
Teachers were rarely involved in the planning or dissemination of the policy through any directives by the principal, but only informed their own classes if it was pertinent to curriculum expectations or personal beliefs. The staff meeting informed teachers of the policy’s arrival; however, it did not provide clear direction on how teachers would be affected or how they would play a role in implementing the policy. Schools just did what “made sense” in complying with the policy without necessarily discussing their actions amongst the stakeholders. Schools’ actions or inactions were clearly illustrated by administrators who wanted more support and direction from the school board and other support networks to help implement the policy.

**Question #3 - What are the similarities and differences among elementary and secondary schools’ readiness to implement the policy?**

With the goal of determining key differences between elementary and secondary schools’ readiness for implementing the SFBP, my hope was to identify how readiness could possibly be explored within these two contexts. It was found that there were obvious similarities between how schools prepared and disseminated the policy. As well, there were some common challenges with the implementation of the policy; however, many of the differences were evident in the control and monitoring of the food sales and the interpretation of the policy.

**Similarities.** Both elementary and secondary schools experienced varying levels of readiness; however, they all had the common perception that they were “ready” to implement the policy in September 2011. Depending on their support availability, some were more confident than others in acknowledging their readiness to implement the policy. Administrators from elementary and secondary schools disseminated the policy to their key stakeholders in a similar manner such as staff meetings, newsletters, and speculative teachings within teachers’
classrooms. All schools experienced difficulty in finding appealing foods that met the guidelines of the nutrition standards and that students would enjoy.

One of the predominant challenges found in all schools was the concern around parent engagement and educating society on healthy eating. At both levels, stakeholders encountered similar questions about the support and responsibility of disseminating to parents and the wider community with regards to healthy eating strategies. Administrators agreed that they played a minor role in doing so, but required much more support and planning from other sectors such as their respective school boards and the Ministry of Health Promotion. All participants were in agreement that implementing a school food policy would tend to be more effective at a younger age where students were more likely to adopt proper eating habits earlier on and sustain these habits later in life.

Differences. The general difference between elementary and secondary schools was the presence of vending machines and full-service cafeterias within the secondary level and having to make physical changes to the food choices and removing all fryers from the kitchen facilities. Two of the three elementary schools did not contain any vending machines. One, relatively remote elementary school had one vending machine in its school. Another difference was the responsibility and management of the schools’ food choices.

In elementary schools, the principals were responsible for enforcing the nutrition standards within the school; however, students and teachers were generally involved in suggesting and selecting food choices. As long as they met the guidelines, these foods were approved by the principal. In the secondary schools, each school board had contracted out their cafeteria and vending machine responsibilities to an outside company that was responsible for catering to all the schools within that board and was also expected to read and comply with the
nutrition standards. Secondary principals did not play a strong role in the decision-making process of food offering. Also, principals at the elementary level did their best to strictly adhere to the nutrition criteria to follow the 80/20 rule for the sale of food but also tried to encourage students to bring healthy snacks to school as well. At the secondary level, there were multiple interpretations of the policy that allowed schools to continue to sell pop.

Since most young children tended to bring food from home due to the limited food available for sale at schools within their canteen or tuck shop, or due to the lack of a cafeteria, the initial challenges for implementation at the elementary level were far less than in secondary schools. Parents of young children complained only when their child came home hungry from not eating their lunches because of the taste; however, in high school, parents were more offended when told what their child was allowed to eat. In elementary schools, students were less likely to go off school premises to purchase food, while high school students more frequently left their school to buy food at a nearby food retailer if their cafeteria did not offer food that they preferred. As a consequence, the implementation of the SFBP inadvertently caused a cascade of problems in secondary schools. These problems resulted in a decreased volume of food sales, which led to a decrease in the revenue generated by the food sales, causing less profit for the food service provider and ultimately, less money given back to schools. The revenue generated had negatively affected some schools that often used this money to help fund or offset the cost of various school activities and uniforms, or to support students in need.

**Conclusion and Discussion**

Within this study, qualitative interviews and a policy analysis provided insight into schools’ readiness to implement the SFBP by examining stakeholders’ perspectives of the process and actions for preparing for this policy. My goal was to uncover areas of readiness
according to the five predominant themes from the literature that, if supported, could potentially be associated with an increased readiness for change: resource availability, communication, social influences, contextual factors, and individual factors. In this study, both participant interviews and document analyses revealed that there were some areas that were adequately supported and others that still needed to be addressed among the five aforementioned factors in supporting readiness to implement the policy. Below, I summarize each of the five areas, combining contextual and individual factors, from the results of my study, and compare them to the relevant literature. I also discuss some outstanding issues that emerged from the results of this study that require closer attention.

**Resource availability.** Two of the predominant material resources used were the policy itself and the School Food and Beverage Resource Guide 2010 to aid in understanding and preparing stakeholders for implementation. While few participants felt they needed further supporting documents, a majority of the interviewees felt that there were sufficient resources to understand the policy and were ‘ready’ for the policy (although some of the resources did not adequately support putting the policy into practice). Financial resources did not play a leading role in the preparation stages of implementing the policy; however, revenue generated by food sales declined as a contingent consequence of the policy. Similar results were found in other studies by Callaghan et al. (2010) and Winson (2008). In this study, human resource challenges, such as lost staff or even the staff demand needed to understand the complexity to determine each food category, represented a significant factor in creating resistance for the policy. Having insufficient food sales to justify staffing needs to prepare food in the most health conscious way was a competing challenge. Winson (2008) found similar hindrances when comparing the time and staff effort to prepare healthy food from raw ingredients versus quickly prepared pre-made
foods that were not necessarily the healthiest. Staffing needs were reflective of the revenue generated by food sales. Therefore, with a decrease in revenue, staffing needs were also decreased. In a study by MacLellan and colleagues (2010), staff shortages were shown to cause some level of difficulty in complying with nutrition and cooking guidelines.

**Communication.** Policy dissemination is a key component of informing various stakeholders of the process and details of the policy. Even though most administrators received some form of training with regards to the policy, school stakeholders such as teachers and students received limited information through a brief staff meeting to a “PA announcement” that did not allow for much dialogue between the stakeholders who were implementing and experiencing the change. Research showed that training and education tended to improve eating behaviours of students (Crawford-Watson, Kwon, Nichols, & Rew, 2009; Powers, Struempler, Guarino, & Parmer, 2005) and has been recognized as a fundamental aspect of a comprehensive model promoting school health (McKenna, 2010).

A challenge for many of the administrators was engaging parents to help support their child’s eating habits at home; however, communicating to parents seemed to go beyond the call of duty of a principal or school. With respect to the dissemination to and education of parents, most principals believed that it was not solely their responsibility to do so except within the boundaries of the school. A similar study found that many parents were not aware of the nutrition policies (MacLellan et al., 2010). Studies have shown that engaging parents and family in promoting health practices are key in supporting behavioural changes (Christensen, 2003; MacLellan et al., 2009, 2010; Suarez-Balcazar et al., 2007). Thus it became clear that future research was needed to examine parents’ awareness of the policy and the factors associated with
influencing eating habits. In addition, examining the government’s role in disseminating to the broader society and stimulating and motivating change was necessary.

**Social influences.** Few participants discussed modeling healthy eating habits to their students as part of their teaching practice, but more participants agreed that parents were the strongest influences on eating habits, yet felt that they were not in the position to inform and educate parents. Peer modeling was only mentioned by one teacher as an influential model for supporting healthier eating habits. Lewin’s social ecological model (as cited in Suarez-Balcazar et al., 2007) indicated the importance of targeting various levels of influence to support and encourage healthier eating habits; however, it was evident in this study that these supports were either overlooked or could not be controlled by the school. Although the local health unit was a strong supporter in one particular school, this was not the case for the others. Research shows that having direct and indirect support networks from various arenas within and outside the school helps facilitate change in health promoting initiatives (Deschesnes, Martin, & Hill, 2003; Gillies, 1998; McKenna, 2010). In the current study, schools failed to establish a supportive system that would have minimized the resistance to the policy’s goals.

Consistency is key in improving eating patterns. Teachers acknowledged that modeling healthy eating behaviours was important, but also reinforcing the message at home and outside of school would be ideal to achieve the policy’s goals. Proactive models that address the various levels of influence should be targeted in order to increase compliance and decrease resistance to the policy. Policy changes alone may not have long-standing effects on students’ eating patterns unless they are incorporated into a more comprehensive health approach.

**Contextual and individual factors.** The participants from the secondary schools discussed the questionable food and beverage choices, which in some cases, tended to be costly,
unappetizing, and served in smaller portions, all of which may have contributed to students purchasing their food elsewhere. Those participants from elementary schools did not necessarily resist the changes, but it was found that students did not always favour the new menu choices and would often complain to parents about not eating their lunches. Since it has been found that taste, cost, and convenience are some of the factors that influence food choice (Carillo et al., 2011; Holmberg et al., 2010), it is of utmost importance that schools find quality, appealing, and cost-effective foods that students will like in order to promote healthy eating and sustain these changes.

Another challenge that all secondary schools encountered was the location of the school in proximity to retail food establishments. It was apparent for many of the stakeholders that schools that were situated within walking distance of fast food restaurants, experienced pronounced effects on the schools’ cafeteria sales. Thus the number of food establishments was negatively correlated with schools’ food revenue. In a study by Seliske, Pickett, Boyce, and Janssen (2008), having exposure to food retailers nearby schools was not associated with an increased likelihood of Canadian youth being overweight; however, a more recent study investigated adolescents’ overall diet quality using a Healthy Eating Index (HEI) and showed that when schools were within 1 km of convenience and fast-food establishments, HEI scores tended to be low (He et al., 2012). Further research is required to determine pre- and post- policy effects on students’ eating habits and purchasing habits at nearby food establishments.

**Outstanding issues and potential effects.** Although informational resources were readily available to try to help understand the policy goals, the interpretation and subsequent implementation of the policy varied across the various schools, especially at the secondary level. Hill (as cited in Honig, 2006, p. 67) noted that there is always the potential to distort or interpret
policy messages differently and construct meaning based on the implementers’ motives or interests. In secondary schools, food service providers were primarily responsible for complying with the nutrition standards, and since they are also businesses interested in the profitability of food sales, they had conveniently interpreted the policy’s 80/20 rule to allow either a specifically labelled pop or merely a limited amount of pop to be sold in school vending machines. More research is needed to understand the process of stakeholders’ interpretations and understanding of the policy.

CTV News (2011) reported that “students at an Ottawa-area high school are being forced to get their food elsewhere” after caterers declined to make meals due to the unprofitable nature of healthy foods. As food service providers declined to make meals in the cafeteria due to the nutrition standards and the lack of profitability in making healthier foods, an Ottawa-area high school closed down its cafeteria (CTV News, 2011). The Toronto public school board projected over a $700,000 loss of revenue due to the policy (Rushowy, 2012). The president of the Ontario Public School Boards’ Association, Catherine Fife, stated that “students are voting with their feet” (Rushowy, 2012) and walking to nearby food establishments.

Schools reported cafeteria revenues dropped to 30% after enforcing the new nutrition standards (Rushowy, 2012). Food service providers were attempting to renegotiate their commissions and questioning the sustainability and viability of their business in school boards (Rushowy, 2012). Although this research suggests that revenues have declined after the implementation of the policy, more definitive research is needed to determine the actual revenue generated by Ontario schools after the implementation of this policy.

The concept of food marketing was addressed by two principals as a means of creating awareness for parents and influencing food purchasing behaviours. Previous research has shown
that food marketing has the potential to affect children’s food choices and subsequent
cconsumption (Ofcom, 2007). Ontario’s Bill 53, An Act to Amend the Consumer Protection Act,
2002 restricted commercial advertising for food or drink directed at minors (Legislative
Assembly of Ontario, n.d.); however, this bill does not restrict opportunities to advertise
healthier food alternatives. This provides a powerful medium through which social marketing
and commercial marketing can relay messages that may positively influence food choices and
their subsequent consumption.

Throughout this research, I focused on stakeholders’ readiness for implementing the
SFBP, however, a predominant concern discussed by stakeholders encompassed issues regarding
parent engagement and student buy-in of the changes. It was understood that this policy was
intended to help improve students’ skills, knowledge, and attitudes towards healthy eating and to
subsequently improve students’ eating behaviours; however, stakeholders were unsure whether
or not these would indeed be the outcomes. Stakeholders’ perspectives and levels of readiness
were mediated by their individual beliefs, attitudes, experiences, and situational factors (e.g., the
surrounding food environment and consequences of the change). In spite of the fact that all
schools claimed they were ready, the concerns, challenges, and questions that predominated the
conversations may have suggested otherwise. Overall, a strong message has been emphasized to
re-examine policies that may not sufficiently consider barriers to implementation, such as fast
food establishments near schools and educating society as a whole to make better food choices to
maintain health.

Since each municipality regulates and governs all fast food establishments within its
jurisdiction and can authorize the location in which these businesses reside, it is important that
the government support the goals of this policy by minimizing the development of retail food
outlets in close proximity to schools. This may help promote school food sales by decreasing the
competition with outside vendors and strengthen the efforts of achieving the overall goals of the
SFBP.

**Implications for Theory**

In the literature that I reviewed, it was found that organizational readiness for change is
the essential antecedent for change acceptance and implementation success (Armenakis et al.,
1993; Weiner, Amick, & Lee, 2008). There has been limited research available that examines
organizational readiness for policy implementation in education; thus my study offers an
exploration of the concept of readiness in terms of implementing a school food policy. This study
also provided a suggested framework in which organizational readiness could be achieved.

The current study sheds light on administrators’ and teachers’ perspectives of readiness
for the SFBP and corroborated some of the issues that schools had already faced when
implementing similar food policies. Examining stakeholders’ opinions about the process and
actions of how their school had planned and prepared for policy illuminated the disparity and
disconnection between stakeholders’ perspectives and their thoughts on the readiness process.
Since research on organizational readiness in the field of education is limited, studies from
business sectors have shown promising results in utilizing organizational readiness to bridge the
gap between policy planning and effective implementation.

John Kotter, an internationally renowned expert on leadership and transformation,
described eight stages to successful organizational change: (i) creating a sense of urgency, (ii)
forming a coalition of change agents, (iii) establishing a vision and a strategy, (iv)
communicating the vision, (v) empowering the action, (vi) creating short-term goals, (vii)
consolidating achievements, and (viii) integrating the change into the existing culture (Kotter,
Michael Fullan (2008), a Professor Emeritus at the University of Toronto and special advisor and consultant on organizational transformation in education, described similar conditions but added the notions of investing in the individuals who initiate the change, providing continuous and meaningful interactions to support individuals, and enhancing the ability of individuals within the organization to achieve, maintain, and sustain the desired change.

According to these theorists, organizational change occurs when stakeholders are prepared for the change through the aforementioned elements. Both Kotter (1996) and Fullan (2008) tend to take a top-down approach to leading change with policy implementation following suit. The difference in implementing the SFBP was that principals were often facilitators for the change and acting as the ‘middle-man,’ without choice and sometimes without sufficient direction to mediate the change. As a consequence, readiness must be mediated at the Ministry level in which the policy was created, although collaboration can still occur. Thus creating a sense of empowerment for change and providing continuous and meaningful interactions to support individuals in the change process is necessary for organizational change (Fullan, 2008); however, decisions for the direction of achieving the policy goals must be established at a higher level of control in order to optimize change efforts.

One of the predominant themes that emerged from this study that these models do not mention was the idea of identifying and minimizing obstacles or assessing the needs of the organization. Many of the schools had implemented the SFBP using various strategies and approaches depending upon their specific context and situation. The Ministry also recognized that schools would implement the SFBP differently; however, creating readiness to implement
the policy are the same. Therefore, establishing a high level of readiness for implementing a policy would be beneficial to all stakeholders involved in the change.

The combination of these two models that encompass the concept of readiness for change highlights some of the deficiencies of readiness for implementing the SFBP. Organizational readiness for policy implementation was purposefully adapted from the collective ideas of organizational readiness theory and the existing challenges surrounding the implementation of school food policies. The current study refined the definition of organizational readiness for policy implementation as: (i) being cognitively aware of the current needs and characteristics of the individuals within the school; (ii) creating a sense of urgency and need for the change; (iii) identifying challenges or barriers for the school and developing a plan accordingly to execute the changes within a reasonable timeframe; (iv) informing, engaging, and involving all stakeholders in the change process to establish visions and strategies; and (v) facilitating meaningful interactions and providing on-going support to sustain and maintain the change.

**Implications for Practice**

Although responses varied from school to school, findings were reflective of the context and situation of the individuals and their schools. The schools where teacher and administrator perspectives misaligned illustrated insufficient communication of the policy and the lack of stakeholder engagement to the policy. From the findings of this study, it is recommended that schools and school boards effectively disseminate the policy to each level of the organization including students, teachers, administrators, and parents. It is also recommended that ongoing in-service training be provided to all teachers and administrators, not merely the ones who are just “interested” in the policy.
Since education has been identified as one of the contributing factors for change, the SFBP Teacher Resource Guide may help to better disseminate the policy and educate students on healthy eating. Disseminating information through various modes of communication and at various phases prior to implementation would also help to reinforce the message and support readiness for the policy. More importantly, providing opportunities for stakeholders to interact and engage in the change process would stimulate greater interest and would make stakeholders accountable for their actions.

Almost all respondents stressed their concerns about finding healthy foods that their students would like. Only one school was able to obtain a food list from its local health unit indicating acceptable foods, vendors, and restaurants that were willing to comply with the nutrition standards. Although it has been noted that there may be legal implications for providing such a list, it is recommended that school boards collaborate with one another to share resources and create a broader community network for opening discussions and providing feedback and support to one another. With all the responsibilities that administrators have, it is recommended that other stakeholders take part in leading the change process and initiating dialogue with outside vendors and organizations to help support the change.

Some participants suggested the idea of marketing and advertising to engage parents and society to make healthier choices. It is equally important to engage students and to make healthy eating more fun. It is also recommended that food service providers collaborate with students, parents, teachers, and administrators to devise innovative ways to stimulate interest in healthy eating. For example, initiating healthy eating games, lowering the prices of healthy food, offering fun daily food specials, having taste tests, and offering loyalty points or rewards are just some of the ways that students may buy into the change.
In order to adopt change, modeling and reinforcement have been mentioned by a few respondents as a means of encouraging healthy eating. According to the social ecological model (SEM), various key stakeholders must be engaged in order to influence a behaviour change. Parents were discussed as being the prime model and dictator for influencing young children’s eating behaviour; however, peers can also play an influential role in eating behaviour (Suarez-Balcazar et al., 2007). Creating initiatives that enable peer mentors to lead and promote healthy eating would have a powerful impact on fellow peers. It is recommended that developing skills to empower and engage students in the decision-making process would help influence and encourage healthy eating behaviours (Boyd, 2009). Thus creating student health teams that have student-led activities to bring awareness, identify needs of the school, and allow students to prioritize and initiate the projects should help create a healthy school culture that enables students to support and encourage each other rather than having solely top-down approaches to leading change.

**Implications for Policy**

Although the policy states that schools may approach implementation differently, some of the resources provided on the Ministry website did not offer clear direction. One principal was adamant about needing clearer direction and support from the board as to how to proceed. Due to the lack of directives, schools were left to interpret and plan for themselves how to implement the policy, which may explain the various interpretations of the policy and the lack of responsibility principals felt towards disseminating and enforcing these strict guidelines. Policies should provide some guidelines for distributing responsibilities.

Since principals did not believe that it was their primary responsibility to communicate and control this policy beyond the school grounds, the government was called into question for
its contributions to this policy. Future research is needed to examine the government’s role in disseminating and enforcing a plan for society that may help stimulate and motivate change as a collective whole to support schools’ efforts in encouraging healthier eating habits. It is strongly recommended that providing consistent messages that model and reinforce healthy eating behaviours outside of school may prove to be beneficial, especially with the support of government actions.

At the time of analyzing the policy in September 2011, I had examined the resources provided by the Ministry through their online modules. From closer inspection, these documents were vague and unclear. I examined the usefulness and value that these resources would bring to schools through a readiness lens and found that there needed to be clearer guidelines to include additional information for schools to think about when planning and preparing for implementation. During this time, I had noted some changes in order to provide implications for the policy. These included: expectations, goals, timelines, clear indicators (e.g., benchmarks for achieving goals), the necessary resources, and opportunities for follow-up and monitoring the progress for future changes.

Concurrently, I was working as a research assistant on the Healthy School Strategy for the Ministry of Education through Queen’s Social Program Evaluation Group. As a research assistant, I had indicated to the project manager that improvements could be made to the resources provided by the Ministry website in order to provide clearer guidelines and information for schools to consider through a change theory lens, more specifically, identifying tools to support readiness for policy implementation.

It was unknown whether this information was given to the Ministry during the time I had suggested these changes and it is not known when the document was updated; however, two
possibilities could explain this result. The first possibility could be that independent work was completed for the Ministry that coincided with the ideas from my suggestions and the website was updated accordingly. The second possibility could be that my suggestions were subsequently passed along to the Ministry and changes were made to the document using similar terminology and updated through its website.

The Ministry’s online modules provided a variety of tools, checklists, assessments, surveys, and templates for planning for implementation. In this study, none of the participants seemed to be aware of these resources. Since stakeholders were not obligated to use these documents as guides, these resources were not utilized to their fullest potential. Improving the content of the templates provided for assisting in implementation is highly recommended.

**Implications for Future Research**

It was noted that schools with a higher socioeconomic background tended to display a higher level of readiness for change, while those schools of lower socioeconomic background were moderately ready for the policy. This difference may have been due to the fact that schools located in lower sociodemographic areas relied heavily on fundraising and food sales to help offset costs of student activities, trips, and supplies. In turn, the new nutrition standards negatively affected their schools’ budgets or their ability to support these student activities. Future research is needed to investigate the effect of food sales and fundraising on those schools with lower socioeconomic background.

It is rather difficult to influence change solely through school food policies and hence the current models have often gone beyond nutrition standards and have incorporated a more comprehensive approach that encompasses an educational, social, environmental, and parental support component, similar to the Foundations for a Healthy School framework. For example,
the Actions Schools! BC - Healthy Eating Research initiative utilized family and community partnerships in order to achieve long-term, measurable health benefits. Students were surveyed about physical activity levels; food frequency; knowledge, attitudes, and perceptions; and food choices. Results showed some positive effects of healthy eating programs on students’ knowledge, attitudes, and willingness to try new foods (Day, Naylor, & McKay, 2009).

In another study, a farm to school salad bar project in BC was designed to improve student health by increasing access to local and nutritious foods and bring awareness of the health benefits and importance of supporting local food systems. Students were surveyed pre- and post-test to assess their nutrition knowledge, understanding of the economic relevance, and the skills for preparing a healthy salad bar lunch. This program showed an increase in students’ fruit and vegetable consumption both at school and at home and also increased their self-esteem and practical skills in preparing and handling food (Tobin, 2008).

In Alberta, a study examining teachers’ perceptions of the Alberta Project Promoting active Living and healthy Eating (APPLE) in schools, reported that programs that offer slow changes and small steps were important in making a difference to students’ health behaviour, attitudes, and self-efficacy (Storey, Spitters, Cunningham, Schwartz, & Veugelers, 2011). These studies demonstrate the need for schools to identify and support other determinants that influence dietary habits and not merely restrict food in order to change eating habits.

Since readiness was not defined for the participants but they were asked questions with respect to the readiness criteria, a majority of participants asserted that they were ready even though responses showed otherwise. In previous research, quantitative research studies have shown an effect of school food policies on purchasing behaviour and eating habits (Mullally et al., 2010; Neumark-Sztainer et al., 2005; Rovner et al., 2011); however, qualitative studies have
illustrated the unintended or contingent consequences of such policies (Callaghan, Mandich, & Meizi, 2010; MacLellan et al., 2010; Vecchiarelli et al., 2006). Although research has shown both the benefits and challenges to implementing school food policies, neither quantitative nor qualitative approaches alone provide a complete understanding of the effects of the policy.

A limitation of this qualitative study was the inability to generalize findings due to the small sample size; however, this study explored an adaptation of organizational readiness theory in the educational context and provided a fairly comprehensive guide to support readiness for policy implementation. Future research may take a quantitative approach by developing a survey that may better gauge schools’ readiness through all stakeholders’ (e.g., board members, administrators, teachers, students, and parents) perspectives in order to inform policy makers in refining policies to support the implementation of the policy at the individual school level. In particular, since parents were mentioned as a key stakeholder for influencing children’s eating habits, more research is needed to examine parental awareness of the policy and their roles and responsibilities in eating behaviour. Utilizing a quantitative approach would help determine the organization’s collective readiness, while qualitative approaches uncover the details of the various contextual challenges that would need to be addressed at the individual school level.

**Concluding Thoughts**

As I come to the end of my research, I am challenged by questions surrounding how I may use this information to create a practical and useful framework of readiness to prepare schools for implementing change. How can I help schools overcome some of the challenges that they have encountered? How will readiness be monitored, measured, and assessed? These were questions that appeared as I worked through my research as well as being a research assistant for Queen’s University Social Program Evaluation Group on the Ministry of Education’s Healthy
School Strategy. This project allowed me to examine how research often informs practice, but also how practice can and should inform research.

In identifying readiness as a theory of change, I began to reflect on the practicality and transferability of change theories within other contexts. As a previous manager, I encountered many challenges to implementing new policies and procedures, and even greater resistance when creating structural changes within the organization. However, I recognized that change could only occur if all members of the organization were ready for that change. As seen in the literature, readiness for change is often examined through business models. So, why can we not use this framework in schools? There are similar hierarchical structures, mission statements, and individuals who collectively work towards a common goal. Having a strong leader who approaches change through collaboration, shared responsibilities, and clear direction can help organizations facilitate the change process.

Through this study, I have obtained administrators’ and teachers’ perspectives that have confirmed some of the existing research on barriers and challenges to implementing school food policies. It is with this information that I hope to inform policy makers in refining policy goals to prevent misinterpretation, but also to influence how administrators and schools, as a whole, plan to execute change within their specific organizational context. It is often difficult to employ “best practices” that are suitable for all different circumstances; however, understanding and supporting readiness may establish optimal conditions to which schools can initiate change.

Influencing individuals’ eating habits is a multi-faceted and complex process that involves a variety of different factors encompassing theories from social-cognitive perspectives, social ecological modeling, and situational and experiential aspects that coexist simultaneously to contribute to one’s eating behaviour. It is with this readiness framework that we begin to
identify the needs of the organization and the factors with which to support the preparation for implementing school food policies.

One aspect that I felt was not considered in many of the research studies on school food policies was the idea of balanced diets and regular daily exercise. It is important to understand that there are no “bad” foods, merely “bad” or unbalanced diets. The misnomer that all ‘fat’ is “bad” and the amount of fat should be limited to a specific daily intake is contradicted by research that has shown many benefits to some fats. These “good fats,” also known as polyunsaturated fats or omega fatty acids, are essential to cognitive development and brain function (Uauy & Dangour, 2006). As the policy states a specific gram of fat a food item may contain, it does not address the type of fat, which may lead to confusion and misunderstanding of the nutrition guidelines within the policy.

It is also important to incorporate the idea of energy expenditure into food consumption. For example, if one is generally active, the amount of calories consumed may be more than one who leads a sedentary lifestyle. Although educating stakeholders about the logistics and benefits of healthy eating have become secondary to merely implementing the policy, I believe, along with the participants from this study, that education is the critical piece that is missing from school food policies.

The SFBP was readily accepted and welcomed by all the participants in this study for the goals it aimed to achieve; however, acceptance of the policy was only one side of the story. Establishing readiness for this policy implementation involves a collaborative, multi-disciplinary approach that was rarely discussed by participants in this study. Research has shown that organizational readiness could perhaps be the missing link between theory and practice — what assists stakeholders in putting the policy into action.
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school food environment and adolescent obesity: Qualitative insights from high school


INTRODUCTION

The Ontario government is committed to making schools healthier places for students in order to establish the conditions needed to realize the potential of all students. A healthy school environment enhances student learning and success, and enhances students’ social and emotional well-being. Schools have an important role to play in helping students lead healthier lives, including teaching students the skills to make healthy choices and reinforcing those lessons through school practices.

The purpose of this memorandum is to set out nutrition standards for food and beverages sold in publicly funded elementary and secondary schools in Ontario.

APPLICATION

School boards\(^1\) are required to ensure that all food and beverages sold on school premises for school purposes meet the requirements of this memorandum, including the nutrition standards set out in the Appendix to this memorandum, by September 1, 2011. The nutrition standards apply to all food and beverages sold in all venues (e.g., cafeterias, vending machines, tuck shops), through all programs (e.g., catered lunch programs), and at all events (e.g., bake sales, sports events).

The standards do not apply to food and beverages that are:
- offered in schools to students at no cost;
- brought from home or purchased off school premises and are not for resale in schools;
- available for purchase during field trips off school premises;
- sold in schools for non-school purposes (e.g., sold by an outside organization that is using the gymnasium after school hours for a non-school–related event);

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1. In this memorandum, *school board(s)* and *board(s)* refer to district school boards and school authorities.
• sold for fundraising activities that occur off school premises;
• sold in staff rooms.

LEGISLATIVE AUTHORITY

Paragraphs 29.3 and 29.4 of subsection 8(1) of the Education Act provide the Minister of Education with the authority to establish a policy with respect to nutrition standards for food and beverages and for any ingredient contained in food and beverages provided on school premises or in connection with a school-related activity, and to require school boards to comply with the policy.

RATIONALE FOR A SCHOOL FOOD AND BEVERAGE POLICY

The school food and beverage policy contributes to improved education and health outcomes for all students. Research shows that “health and education success are intertwined: schools cannot achieve their primary mission of education if students are not healthy” and that “healthy eating patterns in childhood and adolescence promote optimal childhood health, growth, and intellectual development.”

The school environment profoundly influences students’ attitudes, preferences, and behaviours. Research also shows that when nutritionally inadequate food and beverages are available and promoted at school every day, even along with healthier food and beverages, it becomes increasingly difficult for students to have a healthy diet.

The implementation of the school food and beverage policy in Ontario’s publicly funded schools will contribute to reducing students’ risk of developing serious, chronic diseases, such as heart disease, type 2 diabetes, and certain types of cancer.

The school food and beverage policy constitutes a comprehensive approach to the sale of food and beverages in schools province-wide. The implementation of this policy is another important step in creating healthier schools in Ontario. It also reinforces the knowledge, skills, and attitudes regarding healthy eating that are developed through the various subjects and disciplines in the Ontario curriculum.


5. For further information, see Foundations for a Healthy School, at www.ontario.ca/healthyschools.
NUTRITION STANDARDS

The nutrition standards embody the principles of healthy eating outlined in Canada’s Food Guide, and are intended to ensure that the food and beverages sold in schools contribute to students’ healthy growth and development. The nutrition standards for food and beverages are set out within the following two sections:

Nutrition Standards for Food. Food is divided into “Vegetables and Fruit”, “Grain Products”, “Milk and Alternatives”, and “Meat and Alternatives”, following Canada’s Food Guide. There are also “Mixed Dishes”, for products that contain more than one major ingredient (e.g., pizza, pasta, soup, salads, and sandwiches), and “Miscellaneous Items”, for items that are to be used in limited amounts (e.g., condiments, sauces, dips, oils, dressings) and for confectionery, which is not permitted for sale (e.g., candy, chocolate).

Nutrition Standards for Beverages. Standards for beverages are provided separately for elementary schools and secondary schools.

The above two sections outline nutrition criteria that food and beverages must meet in order to be sold in schools. The nutrition criteria are provided in the following categories:

Sell Most (≥ 80%). Products in this category are the healthiest options and generally have higher levels of essential nutrients and lower amounts of fat, sugar, and/or sodium. They must make up at least 80 per cent of all food choices that are available for sale in all venues, through all programs, and at all events. The same requirement applies to beverage choices.

Sell Less (≤ 20%). Products in this category may have slightly higher amounts of fat, sugar, and/or sodium than food and beverages in the “Sell Most” category. They must make up no more than 20 per cent of all food choices that are available for sale in all venues, through all programs, and at all events. The same requirement applies to beverage choices.

Not Permitted for Sale. Products in this category generally contain few or no essential nutrients and/or contain high amounts of fat, sugar, and/or sodium (e.g., deep-fried and other fried foods, confectionery). Food and beverages in this category may not be sold in schools.

Often a type of food or beverage (e.g., bread, meat, cheese) will fit in all three of the above categories, depending on its nutritional value. To determine whether a specific product may be sold in schools, it is

6. The nutrition criteria are based on scientific research, on the Canadian Food Inspection Agency’s Guide to Labelling and Advertising (http://www.inspection.gc.ca/english/fssa/labeti/guide/toce.shtml), on a cross-jurisdiction scan, and on market research on available food and beverage products.

7. The following are examples of food choices: a bran muffin is one food choice and a banana muffin is another food choice; an apple is one food choice and an orange is another food choice.

8. The following are examples of beverage choices: plain milk is one beverage choice and chocolate milk is another beverage choice; orange juice is one beverage choice and apple juice is another beverage choice.
necessary to read the information on the food label – particularly the Nutrition Facts table and the ingredient list – and compare this information with the nutrition criteria.

Food should always be prepared in a healthy way – that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

EXEMPTION FOR SPECIAL-EVENT DAYS

The school principal may designate up to ten days (or fewer, as determined by the school board) during the school year as special-event days on which food and beverages sold in schools would be exempt from the nutrition standards outlined in this memorandum. The school principal must consult with the school council prior to designating a day as a special-event day. School principals are encouraged to consult with their students in making these decisions.

Notwithstanding this exemption, on special-event days, schools are encouraged to sell food and beverages that meet the nutrition standards set out in this memorandum.

ADDITIONAL REQUIREMENTS

The following requirements must also be met:

- School boards must comply with Ontario Regulation 200/08, “Trans Fat Standards”, and any other applicable regulations made under the Education Act.
- Principals must take into consideration strategies developed under the school board’s policy on anaphylaxis to reduce the risk of exposure to anaphylactic causative agents.
- Food and beverages must be prepared, served, and stored in accordance with Regulation 562, “Food Premises”, as amended, made under the Health Protection and Promotion Act.
- School boards must ensure that students have access to drinking water during the school day.
- The diversity of students and staff must be taken into consideration in order to accommodate religious and/or cultural needs.

PRACTICES FOR CONSIDERATION

Boards and schools should take into consideration the following when food or beverages are sold or provided in schools:

- Offer, when available and where possible, food and beverages that are produced in Ontario.
- Be environmentally aware (e.g., reduce food waste, reuse containers, recycle food scraps).
- Avoid offering food or beverages as a reward or an incentive for good behaviour, achievement, or participation.
IMPLEMENTATION AND MONITORING

Any existing school board policies or guidelines related to food and beverages sold in schools must be in accordance with this memorandum. The ministry recognizes that there may be differences in approaches and implementation at the local level. School boards and schools are encouraged to continue to work with students, parents, school staff, community members, public health professionals, and food service providers to ensure that appropriate strategies are in place to implement this memorandum.

School boards are encouraged to consult with their board of health to implement the nutrition standards. Under Ontario Public Health Standards, 2008, boards of health have a mandate to work with school boards and schools on healthy eating in schools.

School boards are responsible for monitoring the implementation of this memorandum.

At the end of the 2010–11 school year, school boards will be required to attest that they will be in full compliance with this memorandum on September 1, 2011.

For more information on support that is available to assist with implementation, see www.ontario.ca/healthyschools.
APPENDIX: NUTRITION STANDARDS FOR ONTARIO SCHOOLS

Read the information on the food label – particularly the Nutrition Facts table and the ingredient list – and compare this information with the nutrition criteria outlined below in order to determine whether a food or beverage may be sold at the school.

Products in the “Sell Most” category must make up at least 80 per cent of all food choices and at least 80 per cent of all beverage choices that are available for sale in all venues, through all programs, and at all events on school premises.

Products in the “Sell Less” category must make up no more than 20 per cent of all food choices and no more than 20 per cent of all beverage choices that are available for sale in all venues, through all programs, and at all events on school premises.

Nutrition Standards for Food

All food sold in schools must meet the standards set out in Ontario Regulation 200/08, “Trans Fat Standards”, made under the Education Act.

Vegetables and Fruit

- Compare the nutrition criteria below with the Nutrition Facts table and the ingredient list on the food label.
- See the section “Nutrition Standards for Beverages” for the nutrition criteria for vegetable and fruit juices and juice blends.
- Food should always be prepared in a healthy way – that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

<table>
<thead>
<tr>
<th>Fresh, Frozen, Canned, and Dried Vegetables and Fruit</th>
<th>Sell Most (≥ 80%) Nutrition Criteria</th>
<th>Sell Less (≤ 20%) Nutrition Criteria</th>
<th>Not Permitted for Sale Nutrition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable or fruit is the first item on the ingredient list and Fat: ≤ 3g and Sodium: ≤ 360mg</td>
<td>Vegetable or fruit is the first item on the ingredient list and Fat: ≤ 5g and Saturated fat: ≤ 2g and Sodium: ≤ 480mg</td>
<td>Sugar** is the first item on the ingredient list or Fat: &gt; 5g or Saturated fat: &gt; 2g or Sodium: &gt; 480mg</td>
<td></td>
</tr>
<tr>
<td>Examples:</td>
<td>Examples:</td>
<td>Examples:</td>
<td></td>
</tr>
<tr>
<td>Fresh or frozen vegetables with little or no added salt</td>
<td>Some dried fruit and 100% fruit leathers</td>
<td>Vegetable and fruit products prepared with higher amounts of fat, sugar, and/or salt, including deep-fried vegetables</td>
<td></td>
</tr>
<tr>
<td>Fresh or frozen fruit with no added sugar</td>
<td>Lightly seasoned or sauced vegetables and fruit</td>
<td>Some packaged frozen and deep-fried potato products, including hash browns and French fries</td>
<td></td>
</tr>
<tr>
<td>Canned vegetables</td>
<td>Some prepared mixed vegetables</td>
<td>Some fruit snacks made with juice (e.g., gummies, fruit rolls)</td>
<td></td>
</tr>
<tr>
<td>Canned fruit packed in juice or light syrup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsweetened apple sauce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some low-fat frozen potato products, including French fries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some dried fruit and 100% fruit leathers*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Examples: Dried fruit products made with 100% fruit, including chopped, dried, or dehydrated fruit, but not fruit products made with added sugar, fat, or sodium.
<table>
<thead>
<tr>
<th>Vegetables and Fruit (cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sell Most (≥ 80%)</strong></td>
</tr>
<tr>
<td><strong>Nutrition Criteria</strong></td>
</tr>
</tbody>
</table>
| **Canned Tomatoes and Tomato-Based Products** | **Examples:**  
Fat: ≤ 3g  
and Sodium: ≤ 480mg | **Fat: > 3g**  
**or** Sodium: > 480mg  
**Examples:**  
• Whole, crushed, or diced tomatoes  
• Pasta sauce that is higher in fat or sodium |
| **Vegetable and Fruit Chips** | **Examples:**  
Fat: ≤ 3g  
and Sodium: ≤ 240mg  
**and** Saturated fat: ≤ 2g  
**and** Sodium: ≤ 480mg  
**Examples:**  
• Some vegetable chips (e.g., potato, carrot)  
• Some fruit chips (e.g., banana, apple, pear) | **Fat: > 5g**  
**or** Saturated fat: > 2g  
**or** Sodium: > 480mg  
**Examples:**  
• Some vegetable chips that are higher in fat or sodium  
• Some fruit chips that are higher in fat or sodium |

*Food high in sugars and starches (natural or added) can leave particles clinging to the teeth and put dental health at risk. Vegetable and fruit choices of particular concern include fruit leathers, dried fruit, and chips (potato or other). It is suggested that these foods be eaten only at meal times and that foods that clear quickly from the mouth be eaten at snack times, such as fresh (raw or cooked), canned, or frozen vegetables or fruit.  
*Look for other words for sugar, such as glucose, fructose, sucrose, dextrose, dextrin, corn syrup, maple syrup, cane sugar, honey, and concentrated fruit juice.
Grain Products

- Compare the nutrition criteria below with the Nutrition Facts table and the ingredient list on the food label.
- Food should always be prepared in a healthy way— that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

<table>
<thead>
<tr>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Criteria</td>
<td>Nutrition Criteria</td>
<td>Nutrition Criteria</td>
</tr>
</tbody>
</table>

**Bread**

- Whole grain is the first item on the ingredient list and Saturated fat: ≤ 2 g
- and Sodium: ≤ 240 mg
- and Fibre: ≥ 2 g

*Examples:*
- Whole grain breads, including buns, bagels, English muffins, rolls, naan, pitas, tortillas, chapattis, rotis, bannock
- Whole grain pizza dough and flatbread

- Saturated fat: ≤ 2 g
- and Sodium: ≤ 480 mg

*Examples:*
- White (enriched) breads, including buns, bagels, English muffins, rolls, naan, pitas, tortillas, chapattis, rotis, bannock
- White (enriched) pizza dough

**Pasta, Rice, and Other Grains**

- Fat: ≤ 3 g
- and Saturated fat: ≤ 2 g
- and Sodium: ≤ 240 mg

*Examples:*
- Whole wheat or white (enriched) pasta, including couscous
- White, brown, and wild rice, rice noodles, and soba noodles
- Quinoa, bulgur, wheat berries, spelt, and other whole grains

- Fat: ≤ 5 g
- and Saturated fat: ≤ 2 g
- and Sodium: ≤ 480 mg

*Examples:*
- Some pasta, rice, and other grains

**Baked Goods**

- Fat: ≤ 5 g
- and Saturated fat: ≤ 2 g
- and Fibre: ≥ 2 g

*Examples:*
- Some muffins, cookies, grain-based bars
- Some whole grain waffles and pancakes

- Fat: ≤ 10 g
- and Saturated fat: ≤ 2 g
- and Fibre: ≥ 2 g

*Examples:*
- Some muffins, cookies, grain-based bars, snacks
- Some waffles and pancakes

- Fat: > 10 g
- or Saturated fat: > 2 g
- or Fibre: < 2 g

*Examples:*
- Most croissants, danishes, cakes, doughnuts, pies, turnovers, pastries
- Some cookies and squares
### Grain Products (cont.)

<table>
<thead>
<tr>
<th>Grain-Based Snacks</th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Criteria</td>
<td>Fat: ≤ 3g and Saturated fat: ≤ 2g and Sodium: ≤ 240mg</td>
<td>Fat: ≤ 5g and Saturated fat: ≤ 2g and Sodium: ≤ 480mg</td>
<td>Fat: &gt; 5g or Saturated fat: &gt; 2g or Sodium: &gt; 480mg</td>
</tr>
<tr>
<td>Examples:</td>
<td>Some whole grain crackers, pita chips, and flatbreads and Some packaged crackers and popcorn</td>
<td>Some crackers, pretzels, and popcorn</td>
<td>Crackers, pretzels, and popcorn higher in fat and sodium and Most corn chips and other snack mixes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Criteria</td>
<td>Whole grain is the first item on the ingredient list and Saturated fat: ≤ 2g and Fibre: ≥ 2g</td>
<td></td>
<td>Whole grain is not the first item on the ingredient list or Saturated fat: &gt; 2g or Fibre: &lt; 2g</td>
</tr>
<tr>
<td>Examples:</td>
<td>Some breakfast cereals, including oatmeal, some granola, and cold cereals containing fibre</td>
<td></td>
<td>Some breakfast cereals</td>
</tr>
</tbody>
</table>
### Milk and Alternatives

- Compare the nutrition criteria below with the Nutrition Facts table and the ingredient list on the food label.
- See the section “Nutrition Standards for Beverages” for the nutrition criteria for fluid milk and fluid milk alternatives.

<table>
<thead>
<tr>
<th>Yogurt/Kefir</th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
</tr>
</tbody>
</table>
| Fat: ≤ 3.25% M.F.* or ≤ 3g | Sodium: ≤ 480mg and Calcium: ≥ 15% DV | Fat: > 3.25% M.F. or > 3g | **Examples:**
|  | *Plain and flavoured yogurt, yogurt tubes* |  | • Yogurt higher in fat, such as Balkan-style |

**Cheese**

<table>
<thead>
<tr>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
</tr>
<tr>
<td>Fat: ≤ 20% M.F. and Sodium: ≤ 360mg and Calcium: ≥ 15% DV***</td>
<td>Sodium: ≤ 480mg and Calcium: ≥ 15% DV</td>
<td>Sodium: &gt; 480mg or Calcium: &lt; 15% DV</td>
</tr>
</tbody>
</table>
|  | **Examples:**
|  | • Cheeses lower in fat and sodium, including part-skim mozzarella, light cheddar, some Swiss and ricotta |
|  | • Most hard and soft, non-processed cheese, including cheddar, mozzarella, brick, parmesan, some feta, Monterey jack, havarti, and gouda; cottage cheese, cheese curds, and cheese strings |

**Milk-Based Desserts**

<table>
<thead>
<tr>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
</tr>
<tr>
<td>Fat: ≤ 5g and Sodium: ≤ 360mg and Calcium: ≥ 5% DV</td>
<td></td>
<td>Fat: &gt; 5g or Sodium: &gt; 360mg or Calcium: &lt; 5% DV</td>
</tr>
</tbody>
</table>
|  | **Examples:**
|  | • Some frozen yogurt, puddings, custards, ice milk, gelato |
|  | • Some puddings |
|  | • Most frozen desserts high in fat and sugar, including ice cream, ice cream bars, ice cream cakes, and ice cream sandwiches |

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*M.F. = Milk Fat. The amount can be found on the front of the food label.

**Encourage selection of lower-fat cheese options.

***DV = Daily Value.
## Meat and Alternatives

- Compare the nutrition criteria below with the Nutrition Facts table and ingredient list on the food label.
- Food should always be prepared in a healthy way – that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

<table>
<thead>
<tr>
<th>Fresh and Frozen Meat</th>
<th>Sell Most (≥ 80%) Nutrition Criteria</th>
<th>Sell Less (≤ 20%) Nutrition Criteria</th>
<th>Not Permitted for Sale Nutrition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fat: ≤ 10g and Sodium: ≤ 480mg</td>
<td>Fat: ≤ 14g and Sodium: ≤ 480mg</td>
<td>Fat: &gt; 14g or Sodium: &gt; 480mg</td>
</tr>
<tr>
<td><strong>Examples:</strong></td>
<td>Extra-lean ground meat</td>
<td>Lean ground meat</td>
<td>Meat that contains higher amounts of fat or sodium, including chicken wings, bacon, pork and beef ribs</td>
</tr>
<tr>
<td></td>
<td>Lean beef, goat, lamb, pork, or poultry</td>
<td>Beef, goat, lamb, pork, or poultry</td>
<td>Some wiener</td>
</tr>
<tr>
<td></td>
<td>Some breaded chicken strips and nuggets</td>
<td>Some breaded chicken strips and nuggets</td>
<td>Most pepperoni sticks</td>
</tr>
<tr>
<td></td>
<td>Some lean meatballs</td>
<td>Some meatballs</td>
<td>Most beef/turkey jerk products</td>
</tr>
<tr>
<td></td>
<td>Some lean hamburger patties</td>
<td>Some hamburger patties</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deli (Sandwich) Meat</th>
<th>Sell Most (≥ 80%) Nutrition Criteria</th>
<th>Sell Less (≤ 20%) Nutrition Criteria</th>
<th>Not Permitted for Sale Nutrition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fat: ≤ 5g and Sodium: ≤ 480mg</td>
<td>Fat: ≤ 5g and Sodium: ≤ 600mg</td>
<td>Fat: &gt; 5g or Sodium: &gt; 600mg</td>
</tr>
<tr>
<td><strong>Examples:</strong></td>
<td>Some lean deli meat</td>
<td>Some lean deli meat</td>
<td>Deli meat higher in fat or sodium</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fish</th>
<th>Sell Most (≥ 80%) Nutrition Criteria</th>
<th>Sell Less (≤ 20%) Nutrition Criteria</th>
<th>Not Permitted for Sale Nutrition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fat: ≤ 8g and Sodium: ≤ 480mg</td>
<td>Fat: ≤ 12g and Sodium: ≤ 480mg</td>
<td>Fat: &gt; 12g or Sodium: &gt; 480mg</td>
</tr>
<tr>
<td><strong>Examples:</strong></td>
<td>Fresh, frozen, or canned fish</td>
<td>Some frozen, breaded fish (e.g., fish sticks)</td>
<td>Some breaded or battered fish higher in added fat or sodium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh, frozen, or canned fish</td>
<td>Fresh or frozen fish with a higher mercury content</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eggs</th>
<th>Sell Most (≥ 80%) Nutrition Criteria</th>
<th>Sell Less (≤ 20%) Nutrition Criteria</th>
<th>Not Permitted for Sale Nutrition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fat: ≤ 7g and Sodium: ≤ 480mg</td>
<td></td>
<td>Fat: &gt; 7g or Sodium: &gt; 480mg</td>
</tr>
</tbody>
</table>

Policy/Program Memorandum No. 150, “School Food and Beverage Policy”, October 4, 2010
## Meat and Alternatives (cont.)

<table>
<thead>
<tr>
<th>Nuts, Protein Butters, and Seeds</th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nutrition Criteria</td>
<td>Nutrition Criteria</td>
<td>Nutrition Criteria</td>
</tr>
<tr>
<td><strong>Nuts, Protein Butters, and Seeds</strong></td>
<td>Not coated with candy, chocolate, sugar, or yogurt and Sodium: ≤ 480mg</td>
<td>Fat: ≤ 8g and Sodium: ≤ 480mg and Protein: ≥ 10g</td>
<td>Coated with candy, chocolate, sugar, and/or yogurt or Sodium: &gt; 480mg</td>
</tr>
<tr>
<td></td>
<td>Examples: Nut, legume, and seed butters, including peanut, almond, walnut, soy, sesame, and sunflower and Nuts and seeds, including almonds, walnuts, peanuts, sunflower seeds, pumpkin seeds (papitas)</td>
<td>Examples: Some vegetarian burgers, simulated meat strips, veggie meatballs, veggie ground round, veggie wieners and sausages, tofu and tempeh and Beans and lentils</td>
<td>Examples: Coated nuts and Some roasted and salted nuts</td>
</tr>
</tbody>
</table>

Fat: > 8g or Sodium: > 480mg or Protein: < 10g

**Examples:** Some vegetarian products high in sodium and Some meat alternatives that are higher in fat or sodium or lower in protein

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*Certain types of fish may contain levels of mercury that can be harmful to human health. Fish caught in local lakes and streams may have different levels of mercury from those found in stores. Canned “light” tuna contains less mercury than “white” or “albacore” tuna, and salmon generally has low levels of mercury. See Health Canada’s website for continually updated information and a list of fish with low levels of mercury, at [http://www.hc-sc.gc.ca/fn-an/securit/chem-chim/environ/mercur/cons-adv-etud-eng.php](http://www.hc-sc.gc.ca/fn-an/securit/chem-chim/environ/mercur/cons-adv-etud-eng.php).*
Mixed Dishes

Note: Mixed dishes are products that contain more than one major ingredient.

### Mixed Dishes With a Nutrition Facts Table

- Compare the nutrition criteria below with the Nutrition Facts table and the ingredient list provided by the supplier.
- Food should always be prepared in a healthy way— that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

<table>
<thead>
<tr>
<th></th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrées</strong></td>
<td>Fat: ≤ 10g</td>
<td>Fat: ≤ 15g</td>
<td>Fat: &gt; 15g</td>
</tr>
<tr>
<td>(e.g., frozen pizza, sandwiches, pasta, hot dogs)</td>
<td>and Saturated fat: ≤ 5g</td>
<td>and Saturated fat: ≤ 7g</td>
<td>or Saturated fat: &gt; 7g</td>
</tr>
<tr>
<td></td>
<td>and Sodium: ≤ 960mg</td>
<td>and Sodium: ≤ 960mg</td>
<td>or Sodium: &gt; 960mg</td>
</tr>
<tr>
<td></td>
<td>and Fibre: ≥ 2g</td>
<td>and Fibre: ≥ 2g</td>
<td>or Fibre: &lt; 2g</td>
</tr>
<tr>
<td></td>
<td>and Protein: ≥ 10g</td>
<td>and Protein: ≥ 7g</td>
<td>or Protein: &lt; 7g</td>
</tr>
<tr>
<td><strong>Soups</strong></td>
<td>Fat: ≤ 3g</td>
<td>Fat: ≤ 5g</td>
<td>Fat: &gt; 5g</td>
</tr>
<tr>
<td></td>
<td>and Sodium: ≤ 720mg</td>
<td>and Sodium: ≤ 720mg</td>
<td>or Sodium: &gt; 720mg</td>
</tr>
<tr>
<td></td>
<td>and Fibre: ≥ 2g</td>
<td>and Fibre: ≥ 2g</td>
<td></td>
</tr>
<tr>
<td><strong>Side Dishes</strong></td>
<td>Fat: ≤ 5g</td>
<td>Fat: ≤ 7g</td>
<td>Fat: &gt; 7g</td>
</tr>
<tr>
<td>(e.g., grain and/or vegetable salads)</td>
<td>and Saturated fat: ≤ 2g</td>
<td>and Saturated fat: ≤ 2g</td>
<td>or Saturated fat: &gt; 2g</td>
</tr>
<tr>
<td></td>
<td>and Sodium: ≤ 360mg</td>
<td>and Sodium: ≤ 360mg</td>
<td>or Sodium: &gt; 360mg</td>
</tr>
<tr>
<td></td>
<td>and Fibre: ≥ 2g</td>
<td>and Fibre: ≥ 2g</td>
<td></td>
</tr>
</tbody>
</table>
Mixed Dishes Without a Nutrition Facts Table

- For every ingredient used, refer to the nutrition criteria in this appendix for the appropriate food groups.
- Food should always be prepared in a healthy way – that is, using cooking methods that require little or no added fat or sodium, such as baking, barbequing, boiling, broiling, grilling, microwaving, poaching, roasting, steaming, or stir-frying.

<table>
<thead>
<tr>
<th></th>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Entrées</strong> (e.g., pizza, sandwiches, pasta, hot dogs)</td>
<td>All major ingredients* are from the “Sell Most” category.</td>
<td>One or more major ingredients are from the “Sell Less” category.</td>
<td>Cannot be sold if prepared with any ingredients from the “Not Permitted for Sale” category.</td>
</tr>
<tr>
<td><strong>Soups</strong></td>
<td>All major ingredients are from the “Sell Most” category.</td>
<td>One or more major ingredients are from the “Sell Less” category.</td>
<td>Cannot be sold if prepared with any ingredients from the “Not Permitted for Sale” category.</td>
</tr>
<tr>
<td><strong>Side Dishes</strong> (e.g., grain and/or vegetable salads)</td>
<td>All major ingredients are from the “Sell Most” category.</td>
<td>One or more major ingredients are from the “Sell Less” category.</td>
<td>Cannot be sold if prepared with any ingredients from the “Not Permitted for Sale” category.</td>
</tr>
</tbody>
</table>

*A major ingredient is any product that is identified in one of the food groups set out in the nutrition standards – that is, Vegetables and Fruit, Grain Products, Milk and Alternatives, and Meat and Alternatives. All pizza toppings are considered major ingredients.
## Miscellaneous Items

### Minor Ingredients

- The following are considered minor ingredients and are to be used in limited amounts, as defined under “Serving Size”.
- Choose products that are lower in fat and/or sodium.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condiments and Spreads</td>
<td>≤ 15ml (1 tbsp)</td>
</tr>
<tr>
<td>Gravies and Sauces</td>
<td>≤ 60ml (4 tbsp)</td>
</tr>
<tr>
<td>Dips</td>
<td>≤ 30ml (2 tbsp)</td>
</tr>
<tr>
<td>Fats</td>
<td>≤ 5ml (1 tsp)</td>
</tr>
<tr>
<td>Oils and Dressings</td>
<td>≤ 15ml (1 tbsp)</td>
</tr>
<tr>
<td>Other (e.g., chocolate chips, coconut, olives, parmesan cheese)</td>
<td>≤ 15ml (1 tbsp)</td>
</tr>
</tbody>
</table>

### Not Permitted for Sale: Confectionery (Examples)

- Candy
- Chocolate
- Energy bars
- Licorice
- Gum
- Gummies
- Popsicles and freezies, if not prepared with 100% juice

---

Policy/Program Memorandum No. 150, “School Food and Beverage Policy”, October 4, 2010
### Nutrition Standards for Beverages

Separate beverage standards are provided for elementary and secondary schools.

All beverages sold in schools must meet the standards set out in Ontario Regulation 200/08, “Trans Fat Standards”, made under the Education Act.

#### Nutritional Standards for Beverages

Beverages sold in schools must meet the standards set out in Ontario Regulation 200/08, “Trans Fat Standards”, made under the Education Act.

<table>
<thead>
<tr>
<th>Beverage Category</th>
<th>Sell Most (≤ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk and Milk-Based Beverages (Plain or Flavoured)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yogurt Drinks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soy/Milk Alternative Beverages (Plain or Flavoured)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juices or Blends: Vegetable or Fruit Flavoured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Chocolate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee and Tea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iced Tea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Drinks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Drinks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Beverages</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Criteria**

- Fat: ≤ 2% M.F. or ≤ 5g
- Sugar: ≤ 28g
- Calcium: ≥ 25% DV
- Container size: ≤ 250ml
- Unfortified

**Not Permitted for Sale**

- Fat: > 2% M.F. or > 5g
- Sugar: > 28g
- Calcium: < 25% DV
- Container size: > 250ml

**Notes**

- M.F. = Milk Fat. The amount can be found on the front of the food label.
- **DV** = Daily Value.

Policy/Program Memorandum No. 150, “School Food and Beverage Policy”. October 4, 2010.
**Beverages – Secondary Schools**

Compare the nutrition criteria below with the Nutrition Facts table and ingredient list on the food label.

<table>
<thead>
<tr>
<th>Sell Most (≥ 80%)</th>
<th>Sell Less (≤ 20%)</th>
<th>Not Permitted for Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
<td><strong>Nutrition Criteria</strong></td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Plain</td>
<td></td>
</tr>
<tr>
<td><em><em>Milk</em> and Milk-Based Beverages (Plain or Flavoured)</em>*</td>
<td>Fat: ≤ 2% M.F.** or ≤ 5g and Sugar: ≤ 28g and Calcium: ≥ 25% DV***</td>
<td>Fat: &gt; 2% M.F. or &gt; 5g or Sugar: &gt; 28g or Calcium: &lt; 25% DV</td>
</tr>
<tr>
<td><strong>Yogurt Drinks</strong></td>
<td>Fat: &lt; 3.25% M.F. or ≤ 3g</td>
<td>Fat: &gt; 3.25% M.F. or &gt; 3g</td>
</tr>
<tr>
<td><strong>Soy/Milk Alternative Beverages (Plain or Flavoured)</strong></td>
<td>Fortified with calcium and vitamin D</td>
<td>Unfortified</td>
</tr>
<tr>
<td><strong>Juices or Blends: Vegetable or Fruit</strong></td>
<td>100% juice, pulp, or purée and Unsweetened/No sugar added</td>
<td>&lt; 100% juice, pulp, or purée or Sugar in the ingredient list</td>
</tr>
<tr>
<td><strong>Hot Chocolate</strong></td>
<td>Fat: ≤ 2% M.F. or ≤ 5g and Sugar: ≤ 28g and Calcium: ≥ 25% DV</td>
<td>Fat: &gt; 2% M.F. or &gt; 5g or Sugar: &gt; 28g or Calcium: &lt; 25% DV</td>
</tr>
<tr>
<td><strong>Coffee and Tea</strong></td>
<td>Decaffeinated</td>
<td>Caffeinated</td>
</tr>
<tr>
<td><strong>Iced Tea</strong></td>
<td>Calories: ≤ 40 and Decaffeinated</td>
<td>Calories: &gt; 40 or Caffeinated</td>
</tr>
<tr>
<td><strong>Energy Drinks</strong></td>
<td>All Energy Drinks</td>
<td></td>
</tr>
<tr>
<td><strong>Sports Drinks</strong></td>
<td>All Sports Drinks</td>
<td></td>
</tr>
<tr>
<td><strong>Other Beverages (e.g., soft drinks; flavoured water; “juice-ades”, such as lemonade, limeade)</strong></td>
<td>Calories: ≤ 40 and Caffeine-free</td>
<td>Calories: &gt; 40 or with caffeine</td>
</tr>
</tbody>
</table>

*Milk can be sold in containers that hold multiple servings.

**M.F. = Milk Fat. The amount can be found on the front of the food label.

***DV = Daily Value.
Appendix B

Letter of Information and Consent Form (Administrators)

Project Title: The School Food and Beverage Policy - Examining Schools’ Readiness to Implement the Policy with Organizational Readiness for Change

Researcher: Lisa Chaleunsouk, Master of Education student, Faculty of Education, Queen’s University

This study has been granted clearance according to the recommended principles of Canadian ethics guidelines and Queen's policies.

Purpose: I am writing to invite you to participate in my thesis research aimed at understanding how schools have prepared for implementing the School Food and Beverage Policy (PPM No. 150) in elementary and secondary schools in Ontario. The ultimate goal of my research is to identify factors that may influence schools’ readiness by examining the preparation process for implementing the policy. As well, I wish to highlight the potential implementation design strategies that have been effective at your school. Results of this study may help inform key stakeholders and policy makers in adapting and refining the policy as well as support successful outcomes for schools when implementing the policy.

Involvement: In this part of the research, I wish to conduct a one-on-one interview with you as well as other school personnel in your school that are directly involved in the preparation process, implementation, and evaluation of the School Food and Beverage Policy. Interviews will be conducted at a time and place that is convenient to those who participate and will each be approximately 1 hour in length. Each interview will be recorded and transcribed verbatim. None of the data will contain participants’ name or the identity of any participating school. Data will be secured in a locked office and confidentiality will be maintained to the extent possible.

Participation: There are no known risks to participating in this study. Your participation is completely voluntary. You may consent to (a) your own participation and your schools’ participation, (b) to your own participation and not your schools’ participation, and (c) to your schools’ participation and not your own. If you choose to participate, you are not obliged to answer any questions you find objectionable or discomforting, and you are assured that no information collected will be reported to anyone who is in authority over you. You are free to withdraw from the study without reason and without consequence, at any point, and you may request removal of all or part of your data.

Results of this Study: This research may be presented at conferences and result in publications such as journal articles, professional publications, and instructional materials for schools. Data from this study will be stored on a password-protected computer at Queen’s University and will be destroyed after 5 years. Only my supervisor and I will have access to this data. Your signature below indicates that you understand these provisions around confidentiality. If the data are made
available to other researchers for secondary analysis, it will contain no identifying information of participants or your school.

Any questions about study participation may be directed to Lisa Chaleunsouk at 8lc41@queensu.ca or my supervisor Dr. Benjamin Kutsyuruba at 613-533-3049 or ben.kutsyuruba@queensu.ca. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at 613-533-6081 or chair.GREB@queensu.ca.

Yours sincerely,

Lisa Chaleunsouk

Please sign one copy of this Consent Form and return to Lisa Chaleunsouk. Retain a second copy for your records.

Check only box that applies:

a) You agree to participate and agree that members of school personnel can participate  
b) You agree to participate but do not agree to have school personnel participate  
c) You do not wish to participate but allow school personnel to participate

Name (please print): ____________________________________________________

Signature: ___________________________ Date: ____________________________

If you would like to obtain a copy of the results of the study, please provide your email and/or mailing address below:

Email: ____________________________

Mailing Address: ____________________________

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
Appendix C

Letter of Information and Consent Form (Teachers)

Project Title: The School Food and Beverage Policy - Examining Schools’ Readiness to Implement the Policy with Organizational Readiness for Change

Researcher: Lisa Chaleunsouk, Master of Education student, Faculty of Education, Queen’s University

This study has been granted clearance according to the recommended principles of Canadian ethics guidelines and Queen's policies.

Purpose: I am writing to invite you to participate in my thesis research aimed at understanding how schools have prepared for implementing the School Food and Beverage Policy (PPM No. 150) in elementary and secondary schools in Ontario. The ultimate goal of my research is to identify factors that may influence the school’s preparation process for implementing the policy. As well, I wish to highlight potential implementation design strategies that have been effective at your school. Results of this study may help inform key stakeholders and policy makers in adapting and refining the policy as well as support successful outcomes for schools when implementing the policy.

Involvement: In this part of the research, I have been informed of your direct involvement in the School Food and Beverage Policy. I wish to conduct a one-on-one interview that will be approximately 1 hour in length. Interviews will be conducted at a time and place that is convenient to you. This interview will be recorded and transcribed verbatim. None of the data will contain participants’ name or the identity of the participating schools. Data will be secured in a locked office and confidentiality will be maintained to the extent possible.

Participation: There are no known risks to participating in this study. Your participation is completely voluntary. You are not obliged to answer any questions you find objectionable or discomforting, and you are assured that no information collected will be reported to anyone who is in authority over you. You are free to withdraw from the study without reason and without consequence, at any point, and you may request removal of all or part of your data.

Results of this Study: This research may be presented at conferences and result in publications such as journal articles, professional publications, and instructional materials for schools. Data from this study will be stored on a password-protected computer at Queen’s University and will be destroyed after 5 years. Only my supervisor and I will have access to this data. Your signature below indicates that you understand these provisions around confidentiality. If the data are made available to other researchers for secondary analysis, it will contain no identifying information of participants or your school.
Any questions about study participation may be directed to Lisa Chaleunsouk at 8lc41@queensu.ca or my supervisor Dr. Benjamin Kutsyuruba at 613-533-3049 or ben.kutsyuruba@queensu.ca. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at 613-533-6081 or chair.GREB@queensu.ca.

Yours sincerely,

Lisa Chaleunsouk

Please sign one copy of this Consent Form and return to Lisa Chaleunsouk. Retain a second copy for your records.

Name (please print): ____________________________________________________

Signature: __________________________ Date: ____________________________

If you would like to obtain a copy of the results of the study, please provide your email and/or mailing address below:

Email: ____________________________________________________________

Mailing Address: ________________________________________________

________________________________________

________________________________________

________________________________________
Appendix D

Preliminary Information (Administrators)

Position/Job Title: ___________________________ Date: ______________

1. How many years have you been in:
   a. the profession? ______  b. the administration? ______  c. your current position? ______

2. What kinds of healthy eating initiatives have you or your school been involved in prior to the implementation of the School Food and Beverage Policy? Briefly describe each.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. What role did you play in those initiatives?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

4. What specific aspects of those initiatives contributed to their success?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

5. If you could change anything about those initiatives, what would you have done differently? Please, explain.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
Appendix E

Preliminary Information (Teachers)

Position/Job Title: ____________________________ Date: ______________

1. How many years have you been in:
   a. the profession? ______  b. your current position? ______

2. What kinds of healthy eating initiatives have you or your school been involved in prior to the implementation of the School Food and Beverage Policy? Briefly describe each.

   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

3. What role did you play in those initiatives?

   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

4. What specific aspects of those initiatives contributed to their success?

   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

5. If you could change anything about those initiatives, what would you have done differently? Please, explain.

   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
Appendix F

Interview Guide

Knowledge & Understanding

1. When did you hear about the policy?
2. What do you know about the School Food and Beverage Policy?
3. What is the most important component of the policy?
   a. Are there any other key components?

Preparedness

4. How did the school prepare for those [important/key] components (processes/practices/tools)?
   a. How did you prepare for implementing those components?
5. Describe to me how ready the school (as a whole) was for implementing this policy by September 1st, 2011.
   a. Describe to me your level of readiness for implementing the policy?
   b. Was there something that would have increased the schools’ or your level of preparedness?
6. How did the policy and nutrition standards get communicated to students? parents? teachers? community?
   a. How were you trained/educated about the policy and the nutrition standards?
      i. Do you think these modes of communication have helped to support healthier eating habits and the compliance of the policy?
7. In an ideal situation, what would you need in order to help you effectively plan and implement the School Food and Beverage policy?
   a. How is this different from what you actually received?

Future

8. What kinds of issues do you think you may face down the road? (Or have you faced already?)
   (probe: competing issues/priorities, barriers)
9. What do you think would help motivate people to change their eating habits and comply with the policy?
Readiness criteria probing questions:

Resource availability (e.g., financial, material, human)
10. What resources have you used to support your school in implementing this policy?
   a. How have they assisted you in the planning and preparation for implementing this policy?

Social structure/support (e.g., working with students/parents/teachers/community)
11. What kinds of support networks do you have within or outside the school to promote healthy eating? (probes: people? programs?)

Contextual/environmental factors (e.g., food availability/choices, school climate, marketing/advertising)
12. What kinds of changes have you made to accommodate this policy? (probes: physical?)
   a. What are the benefits and challenges to these changes (on students, staff?)

Communication (e.g., dissemination, education/training)
13. How has your training of the policy and nutrition standards contributed to your understanding of and compliance to the policy?

Individual factors (e.g., attitudes/beliefs about healthy eating; collaborating with students)
14. How has the policy influenced people’s attitudes or beliefs towards healthy eating?

Priority
15. How would you prioritize this policy with all the other obligations (e.g., programs/policies) at your school?
Appendix G

Ethics Clearance Letter

September 07, 2011

Ms. Lisa Chaleunsouk  
Master’s Student  
Faculty of Education  
Duncan McArthur Hall  
Queen's University  
511 Union Street  
Kingston, ON K7M 5R7

GREB Ref #: GEDUC-573-11; Romeo # 6006240  
Title: “GEDUC-573-11 The School Food and Beverage Policy: Examining Schools’ Readiness to Implement the Policy with Organizational Readiness for Change”

Dear Ms. Chaleunsouk,

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled “GEDUC-573-11 The School Food and Beverage Policy: Examining Schools’ Readiness to Implement the Policy with Organizational Readiness for Change” for ethical compliance with the Tri-Council Guidelines (TCPS) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (article D.1.6) and Senate Terms of Reference (article G), your project has been cleared for one year. At the end of each year, the GREB will ask if your project has been completed and if not, what changes have occurred or will occur in the next year.

You are reminded of your obligation to advise the GREB, with a copy to your unit REB, of any adverse event(s) that occur during this one year period (access this form at https://eservices.queensu.ca/romeo_researcher) and click Events - GREB Adverse Event Report). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes to the level of risk, applicant characteristics, and implementations of new procedures. To make an amendment, access the application at https://eservices.queensu.ca/romeo_researcher and click Events - GREB Amendment to Approved Study Form. These changes will automatically be sent to the Ethics Coordinator, Gail Irving, at the Office of Research Services or irvingg@queensu.ca for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

Joan Stevenson, PhD  
Professor and Chair  
General Research Ethics Board

cc: Dr. Derek Berg, Faculty Supervisor  
Dr. Lesly Wade-Woolley, Chair, Unit REB  
Celina Caswell, c/o Graduate Studies and Bureau of Research
Appendix H

Ethics Clearance Amendment

April 11, 2012

Ms. Lisa Chalcunsouk
Master’s Student
Faculty of Education
Duncan McArthur Hall
Queen’s University
511 Union Street
Kingston, ON K7M 5R7

GREB Romeo #: 6006240
Title: “G E D U C-573-11 The School Food and Beverage Policy: Examining Schools’ Readiness to Implement the Policy with Organizational Readiness for Change”

Dear Ms. Chalcunsouk,

The General Research Ethics Board (GREB) has reviewed and approved your amendment request of April 10, 2012 to change your supervisor from Dr. Derek Berg to Dr. Benjamin Kutsyuruba including the revised Letter of Information and Consent Forms for Principals and Personnel reflecting this change. The ROMEO file has been updated accordingly.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

Joan Stevenson, Ph.D.
Professor and Chair
General Research Ethics Board

e.c.: Dr. Benjamin Kutsyuruba, Faculty Supervisor