What’s for Lunch?: Identifying and Comparing Subnational Jurisdictional Approaches to School Nutrition Regulation in English-Speaking Canada

by

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ABSTRACT

WHAT’S FOR LUNCH?: IDENTIFYING AND COMPARING SUBNATIONAL JURISDICTIONAL APPROACHES TO SCHOOL NUTRITION REGULATION IN ENGLISH-SPEAKING CANADA

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The objective of this research was to understand why each of the ten provinces of Canada and Yukon Territory has a unique approach to regulating the sale of foods and beverages on school property and assess what each approach entails. Qualitative case-oriented comparison was used to examine the regulatory levers used in the school food environments for each of the ten provinces and Yukon Territory. Content analysis was performed on the regulatory documents as well as interview transcripts to identify the presence and absence of themes relevant to the regulation of the internal school food environment. Federalism, different origins, different objectives, different approaches to regulation including the decision to create policies or guidelines for school food environments resulted in unique content in the regulatory documents. The content analysis of the regulatory documents and semi-structured interview transcripts showed that there are a variety of aspects of the school food environment to be regulated and each subnational jurisdiction has its own priorities and resources to put toward the improvement of the school food environment. Each subnational jurisdiction is also facing a variety of barriers to successfully implementing the school nutrition regulations and achieving the objectives of them. Each of the subnational jurisdictions created its own school nutrition regulations that reflect national nutrition guidance, but also the needs of its population and the resources it has to address concerns in the internal school food environment. If the objectives of regulating the food and beverages available for sale in schools is to address the link between nutrition and health, and increasing student access to healthy food, then maintaining a market-based internal school food environment that requires revenue generation to sustain itself is barrier to successful implementation. A voluntary school meal program would by-pass the barriers to successfully implementing school nutrition regulation.

Key words: school food environment; Canada; nutrition regulation; neoliberalism; liberal welfare regime
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Chapter 1
Introduction

In *The Physiology of Taste*, Jean Anthelme Brillat-Savarin famously wrote, “tell me what kind of food you eat and I will tell you what kind of man you are” (1825: 6). This notable quotation speaks volumes about the intimate relationship between food and its consumer. The aphorism preceding the one just given states, “The destiny of nations depends on the manner in which they are fed” (Brillat-Savarin 1825: 6). The manner in which nations are fed covers the history of empires, the development of nation-states, and welfare provision to name a few ways the destiny of a nation might be understood through food. Agricultural policy, production and distribution are often significant to the political economic profile of a country.

Schools can be an interesting environment for understanding “the destiny of a nation” (Brillat-Savarin 1825: 6) in relation to the food provided for them. Many countries offer some manner of meal to students during the school day (Harper, Wood, Mitchell 2008). How these meals are paid for, what is served, and how it is served are opportunities for the students to not only remain fed for the school day, but also learn about how to eat with others, and national cuisine. When food is made available to students at school, it also contributes to their overall health and development. The school as a location for formal learning and socialization, as well as the number of people who consume food in these spaces, also means that it is an excellent location to teach about nutrition and health. Additionally, school food provision is an opportunity for the public sphere to interact with the private sphere. The regulation of foods and beverages available at school becomes important to not just those consuming them, but also to many other aspects of the agro-food complex.

Canada, which does not provide a meal program for students in its public schools, has provided nutritional guidance for its citizens. Through subnational jurisdictional governments the nutrition of the foods and beverages available for sale to students on school property guided in part by the national nutrition guidelines – *Eating Well with Canada’s Food Guide* (Health Canada 2007a). In 1976, the Federal-Provincial Nutrition Committee created national school nutrition guidance presented in *Guidelines for School Food Programs in Canada* (Department of National Health and
In 2013, the Federal, Provincial, Territorial Group on Nutrition Working Group on Improving the Consistency of School Food and Beverage Criteria (FPTGN) created *Provincial and Territorial Guidance Document for the Development of Nutrient Criteria for Foods and Beverages in Schools* (FPTGN 2013). In the thirty-seven years between these documents, it is apparent from the content of each of these cross-Canada school nutrition guidelines that the nutritional concerns for Canadian school-aged children have evolved, but the approaches have not.

The document from the Federal-Provincial Nutrition Committee was created to “ensure adequate nutrition for children while they remain at school and to increase understanding and awareness of food as a health factor” (Department of National Health and Welfare 1976: 2). Poor nutrition and health can “have a significant effect” on the ability of children to perform as students because it can cause students to tire easily, become ill more frequently and miss school, develop a weight problem and be unable to “participate in all of the intellectual and social opportunities at school” (Department of National Health and Welfare 1976: 2). The eleven-page document outlines where foods and beverages might be sold at school, how to properly store them, as well as what should be considered when creating a school food program, specifically, what is and is not appropriate to sell to students and what facilities are necessary to meet their needs (Department of National Health and Welfare 1976). Of particular concern were empty-calorie foods or foods that are “detrimental to teeth” (Department of National Health and Welfare 1976: 3).

More than thirty years later, the Office of Nutrition Policy and Promotion, a division of Health Canada, brought together health professionals from across the country to form a Working Group On Improving the Consistency of School Food and Beverage Criteria, to attempt to harmonize the nutrient criteria for school food environments in each Canadian province and territory (FPTGN 2013). The resulting document makes recommendations for maximum levels of sodium, sugar, and fats in foods permitted for sale to Canadian students while on school property (FPTGN 2013). The document recognizes that having nutritious foods and beverages available to students in the school food environment helps students make healthier choices about foods and beverages, helps reduce the risk of school-aged youth developing nutrition related diseases, and contributes to “positive educational and social impacts that lead to productive learners” (FPTGN 2013: 1). The purpose of this document is to provide support for provincial and territorial governments in the development or revision of school nutrition policies, but also to assist those in the food industry who supply foods and beverages to schools to formulate or re-formulate products so they are appropriate for school food environments (FPTGN 2013). Presently, the provinces and Yukon
Territory have not harmonized their school nutrition regulations. Since 1976, the most significant change how the nutritional quality of food and beverages is addressed is the recognition of the role the food industry has in supplying for schools.

Concern for the nutritional quality of the foods and beverages sold in Canadian schools has not subsided since this time. Rising rates of overweight and obese children, as well as the increased number of children suffering from weight related illnesses like hypertension and type 2 diabetes has attracted the attention of academics and public health officials to understand this trend and, ultimately address it (Hodgson et al. 2011). It has been argued that the school may be contributing to these adverse health outcomes (Winson, MacRae, Ostry 2012). Efforts to enhance the health of the school food environment through some type of regulatory intervention can be found across the country. The provinces of Canada and Yukon Territory have recently instituted or updated policies and guidelines regulating the foods and beverages available for sale to students on school property. National nutrition guidelines exist, and yet each subnational jurisdiction has taken a unique approach to addressing how these are applied to their own school food environments.

This study approaches school food regulation from a sociological perspective. Sociology has offered much to food studies and continues to offer necessary and important contributions to this subject. Sociological lenses have been applied to issues of production and labour in agriculture (Gertler 1991; Preibisch 2010); sociology of work and feminist sociologies have studied the role of women in food purchasing and preparation in the home (Avakian, Haber 2005); political sociology has examined the impact of political economic trends on food and diet (Friendmann, McMichael 1989; Winson 2013); sociology of health has contributed social determinants of health as well as contributing to public health, including nutrition and policy (Germov, Williams 2008) to name only a few ways this discipline has contributed to food studies.

Sociology has the capacity to put each of these lenses, and more, on school food provision and regulation. In many countries where food is prepared daily for students during the school day, the school meal is an opportunity to not only keep students prepared for the afternoon portion of education, but to teach about the social aspects of dining, cultural aspects of food, while integrating an institution into the larger food production and distribution chain. Moreover, sociological analysis can provide insight on the relationships between citizens, industry, and state institutions. Primary and secondary education, as they are mandatory and thus relevant to all citizens, provide an excellent site for exploring these relations. The research put forward in this dissertation sug-
gests the absence of the provision of a school day meal to Canadian students is a missed opportunity to teach students to the aforementioned topics.

Examining the regulation of food and beverage sales in Canadian schools can highlight the political issues of nutrition regulation, demonstrate how the regulations are a public health intervention, and show a variety of ways nutrition education can be included throughout the curriculum, beyond a designated health class. Looking at the regulation of food and beverage sales in Canadian schools also offers an opportunity to highlight the differences between the subnational jurisdictions, referring to provinces and territories of Canada. Federal nutrition guidelines exist, namely the *Eating Well with Canada’s Food Guide* (Health Canada, 2007a). While there is consistency among subnational jurisdictions in referencing *Eating Well with Canada’s Food Guide*, each subnational jurisdiction has different regulations for foods and beverages suitable for sale on school property.

The remainder of this chapter describes the research objective of this dissertation, the research questions this dissertation attempts to answer, as well as provide the definitions of concepts that will be useful throughout.

1.1. **Research Objective, Questions, and Definitions**

**Research Objective:** The objective of this research is to understand why each of the ten provinces of Canada and Yukon Territory has a unique approach to regulating the sale of foods and beverages on school property and assess what each approach entails.

**Research Questions:** The following research questions have guided this research.

I. Why are the subnational jurisdictional regulations for food and beverage sales in schools different?

II. What are the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?

III. What are the objectives of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?

IV. What are the limitations to achieving the objectives within the scope of the relevant documents?
1.2. **Key Definitions:**

- “**Policy**” is defined as “the set of rules, spoken or unspoken, that determines how things are run” (McRae 2012: 310).

- “**Food Policy**” is defined as “guiding principles and sets of rules that direct the actions of public or private aspects of food provisioning (production, trade, processing and manufacturing, consumption, safety, waste management, etc.)”. (Koç, Sumner, Winson 2012: 384).

- “**School Food Policy**” is a set of rules that direct the actions of actors in the school food environment regarding aspects of food provisioning.

- “**School Food Guideline**” is a set of suggestions for actors in the school food environment to apply to aspects of food provisioning. It differs from policy in that it provides recommendations and not rules.

- “**Mandate**” is defined as “an authoritative command” (Merriam-Webster).

- “**Legislate**” means “to perform the function of legislation; specifically to make or enact laws” (Merriam-Webster).

- “**Regulate**” means “to govern or direct according to rule…b(1): to bring under the control of law or constituted authority” (Merriam-Webster).

- “**Regulation**” refers to the document or sum of documents that govern the food and beverage sales on school property. This is used to refer to policies and guidelines collectively. Also, school nutrition regulation.

The forthcoming chapters will address the research objective, answer the research questions, and do so by employing the definitions given above.
Chapter 2 provides a review of the research addressing school food environments in Canada, but it also covers research done on school food environments in other countries with similar political and economic systems. School food environments are an emerging area of study for academics from many disciplines; however the focus has primarily been on those environments that have meal programs, which is what makes this research novel. The United States and the United Kingdom are featured prominently because of the political ties Canada has to each country. Research from other European countries is also included as it provides information about alternative approaches to the provision of school food. The literature review also covers government documents from Nordic countries as their school food programs are different from Canada and their example provides a useful contrast for the literature review as well as for situating this research in political economic theory.

Chapter 3 theorizes school food in Canada for this dissertation and situates the work in the traditions of sociological thought. Concepts relevant to this research include federalism, neoliberalism, de-commodification, welfare regime, agro-food complex, and the public plate. In this chapter they are operationalized so that they are applicable to this research. Further, this chapter discusses school food environment as a theoretical concept by discussing how the school food environment is used in the literature and argues that the school food environment should refer to the areas where food and beverages are available for sale to students during the school day, including those areas not on school property.

The methods and methodological considerations are provided in Chapter 4. Since this research is comparative, a review of comparative methodological approaches and necessary considerations for qualitative case-oriented comparative analysis are discussed. Next, the chapter outlines how the cases were generated, including the process used for conducting the content analysis of the regulatory documents as well as the incorporation of semi-structured interviews and supplemental information to the construction of the cases for comparison.

Chapter 5 summarizes the results of the research and presents eleven cases according to subnational jurisdiction. The results are first organized into eleven cases, one for each of the school nutrition regulations of the subnational jurisdictions of Canada. The latter half of the chapter provides comparison of the results of the content analysis of the documents, as well as of the semi-structured interviews.
The discussion of the results is presented in Chapter 6 where the cases are compared and the results are examined analytically using the concepts operationalized in Chapter 3. This chapter identifies key similarities that exist among the nutrition regulation documents in spite of differences that do exist when comparing these documents. This chapter also highlights areas of interest mentioned by interview participants that are not addressed in the documents, specifically issues of food security in rural and remote areas. This chapter also discusses the role fundraising has in providing key components of schooling and that the regulations indicate in different ways alternatives to bake sales and chocolate bars must be used for these efforts.
This research offers insight into how the English-language subnational jurisdictional school nutrition regulations across Canada differ as well as some explanation about why these differences exist. Before discussing the relevant theoretical concepts and the methods employed to produce this information, this chapter provides a review of the existing literature addressing nutrition regulation of Canadian school food environments, as well as the literature about how this is done in other similar countries as well.

School lunches and school food more generally have recently become a subject of interest to social scientists. School meals, however, are not new. For more than a century, parents and educators have been concerned with how to make sure students are fed during the school day while governments have addressed other ways school food can positively impact the lives of students. This literature review provides the historical background of school food in the United States and United Kingdom. It also reviews the provision of school food and why school food is provided in each of those countries, as well as several other European countries. The geographical selection was guided by the comparative study by Harper, Wood, and Mitchell (2008) but does not include each country included in their comparison. This review does not include research about every country that provides a school food program, but it does cover the differing philosophies that guide the decision to offer school lunch programs in Organisation for Economic Co-operation and Development (OECD) countries and how they are provisioned. The National School Lunch Program (NSLP) in the United States appears frequently in the review because of the extensive of research done on the subject, as well as the political economic similarities between Canada and the United States. Otherwise, the scope is limited to the school food environments of a selection of European countries.

Because the academic interest in the subject of school food is recent, there are some notable gaps in the existing literature. More attention has been paid to countries with school meal programs than to the school food environments where programs do not exist. Research on school food environments without lunch programs does exist, and it is included in this review, but it is less com-
prehensive than the research completed on food programs. The dearth of research done on school food environments without food programs makes it more challenging to situate Canada in the existing literature. Further, since countries with food programs administer education and related costs at national rather than local levels of government, Canada’s federalist organization of education separates it from other countries in the literature. Even in the United States, where state governments administer education, the NSLP is administered at the federal level. The literature addressing the school food environments in Canada does not include information about the individual provinces or the territories. It is through this review that the research question for this dissertation is established.

While each province and Yukon Territory has its own approach to addressing school food and beverage nutrition, none of the provinces or territories in Canada offers a lunch program where students can receive a free or reduced price meal during the school day. Many other countries have such a program, including the United States, the United Kingdom, France, Spain, Italy, Sweden and Finland, yet Canada does not. Other industrialized countries that do not have some form of lunch program include Austria, Denmark, Norway, Switzerland and Belgium, but in these places, the school day typically ends early in the afternoon and children go home for lunch (Harper, Wood, Mitchell 2008). Since this is not the case for Canada or any of the Canadian provinces or territories, the absence of a government lunch program is unusual compared to other countries with similar political organization and resources.

To address the uniqueness of Canada’s federalist organization of education and the absence of a school meal program in any province or territory, it is useful to understand the role of school food in education and why other countries do provide a meal during the school day. This review focuses on the countries that have a school lunch program, and also includes the research about the role of school food more generally and the school food environment of countries without a program. The review brings attention to the many potential uses of school food for students and for society more generally.
2.1. The School Food Environment

The food served or sold at school and the environment it is purchased and consumed in are important for many reasons and have recently attracted the attention of many researchers. The school food environment deserves more attention, particularly from the sociological perspective. School food not only affects students’ health, it also affects teachers and administration through their roles of managing the lunchroom and the resources required for that task; school food can also be important for teaching students about food as well as the natural environment; school food is a way to reinforce identity and culture, and is also integrated into the food industry (Weaver-Hightower 2011). Many of these themes have been studied in relation to specific school meal programs, which will be reviewed in this section. More generally, the research on school foods and beverages has been focused on the role of the school in obesity promotion and prevention. In the United States, the school market place, the spaces where food and beverages are purchased at school, is dominated by what is often referred to as competitive foods, items like chips, candy, pop and fast food products (Story, Nanney, Schwartz 2009). While the federally reimbursed meals need to meet nutritional requirements, competitive food items do not, and make up a substantial portion of calories consumed by students during the school day (Story, Nanney, Schwartz 2009). The school food environment contributes to unhealthful food and beverage choices and is not helping in the fight against obesity (Story, Nanney, Schwartz 2009). The school meal program will be looked at in more depth later in this section.

To address the promotion of unhealthful foods in the school food environment, there have been efforts by school administrators and governments to intervene. Government interventions, much like what is taking place in the Canadian provinces and Yukon Territory, tend to involve policy interventions including nutrition guidelines, restrictions on allowable foods and beverages and price interventions (Jaime, Lock 2009; van Ansem et al. 2013). A review of these types of interventions found they are most effective for reducing fat intake and increasing fruit and vegetable availability in the school food environment and least effective restricting the sale of a certain food (Jaime, Lock 2009). The authors note that because many of these interventions have only recently been implemented, it is difficult to know if they will have a long-term impact. In the Netherlands, principals have the option to create and implement school nutrition policies (van Ansem et al. 2013). Netherlands, like Canada, also does not have a school meal program, though schools may choose to offer food and beverages for sale (Van Ansem et al. 2013). Many principals do create a
policy to regulate which foods and beverages are allowed for sale at school, but the resulting documents are vague and difficult to enforce (van Ansem et al. 2013).

The school food environment includes the classroom and many include classroom learning as part of healthy eating intervention strategies. There are some programs that comprehensively address the wellness of the school food environment including nutrition education, education about food preparation, preservation, and storage, the social and cultural aspects of food, eating and body image that include community groups and students’ families (Perez-Rodrigo, Aranceta 2001). While comprehensive programs such as the ones described in the study by Perez-Rodrigo and Aranceta (2001) are products of local initiatives, aspects of this type of program exist in meal programs in many countries, which will be covered in this review. The main point the authors make in their review of school-based food programs is that the school food environment is an effective location for promoting healthful eating and a healthy lifestyle (Perez-Rodrigo, Aranceta 2001). There is recognition that the school is not just a location for learning, but that it is a place where teachers, staff and more importantly students eat in. Whether done through government legislation or regulation or a product of local initiatives, using the school environment to encourage nutritious eating habits is an effective way to begin to address the weight related health concerns occurring in school-aged children. The rest of the literature considers what schools without meal programs do to address discouraging unhealthful eating or encourage healthful eating and how school meal programs treat food and nutrition.

2.2. Food Security and Nutritional Health of Canadian Children

The history of school meal programs in the United States and the United Kingdom are linked to food insecurity, which will be examined in greater depth later in this chapter. Although Canada does not have institutionalized school meal programs in any of the subnational jurisdictions, nor is this directly relevant to nutrition regulation in school food environments, because school meal programs are linked to food insecurity in other countries it may be helpful to discuss food insecurity in Canada. Before delving into institutional food provision in Canada and elsewhere, providing context for the state of Canadian children’s nutritional health and wellbeing may provide insight into why the school food environment is being regulated by the subnational jurisdictions. Addressing food security also helps situate Canadian school food environments among the United States and United Kingdom, which will be addressed in a later section of this chapter.
Food security exists “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and preferences for an active and healthy lifestyle (Food and Agriculture Organization 1996). Food insecurity exists in different capacities and to different degrees when these criteria are not met. Food insecurity then, can be defined as “inadequate or insecure access to food because of financial constraints” (Tarasuk, Mitchell, Dachner 2012: 2). This definition requires some unpacking. Health Canada (2007) defines household food insecurity as the financial inability of households to access adequate food. Insecure access to food and financial inability of households to access adequate food offers similar explanations for household food insecurity. In both cases, they refer to how frequently a household is unable to purchase enough food to feed all people in it. The inclusion of inadequate food in Health Canada’s definition means it resembles the aforementioned Food and Agriculture Organization’s (FAO) definition of food security because it suggests that the household is unable to purchase enough safe, nutritious food that not only meets dietary needs, but also food preferences. In other words, both definitions suggest that those who would be consuming the product recognize it as food, which allows for cultural preferences and restrictions to be accounted for. This definition of food insecurity includes the notion of being in a position to purchase and supply nutritionally balanced meals to all in a household.

Recent measurements indicate the rate of food insecurity in Canada at 12.6% (Tarasuk, Mitchell, Dachner 2012: 8). Further, research continues to show that households with children are more vulnerable to household food insecurity than those without (Mikkonen, Dennis 2010; Tarasuck, Mitchell, Dachner 2012). Among households with children, “5.2% experienced food insecurity at the child level—that is, at least one child in each of these households experienced food insecurity in the previous year” (Health Canada 2004: x). The same report found the prevalence of food insecurity was higher among “those with three or more children (15.0%), compared with those with one or two children (9.6%)”, and those with “at least one child under the age of 6 years (13.0%), compared with those without a child under 6 years of age (8.8%)” were more likely to experience household food insecurity (Health Canada 2004: x). These statistics show that in Canada, children are particularly vulnerable to food insecurity.

Food insecurity and hunger refer not only to insufficient amounts of food, but also to insufficient quality resulting in malnutrition and diet-related diseases even when the amount of food may sate hunger. Research has shown that:
high fuel prices, rising inflation of food, fuel, and living costs, has translated into families cutting back on fresh fruit and vegetables and buying cheap, sweet, fatty, salty, or processed foods that require little cooking leading to people living in poverty often having worse diets and contributing to the rising rates of obesity, diabetes, and other dietary-related diseases (Garthwaite, Collins, Bambra 2015: 39).

Hunger and malnutrition are “potential, although not necessary, consequences of food insecurity” (United States Department of Agriculture 1995). Hunger, experienced by school-aged children in the short-term, impacts upon individual concentration and activity levels, making it difficult to engage with the material being taught or the activity required (Sorhaindo, Feinstein 2006). Longer term, one study found children in food-insecure households consumed fewer servings of fruits and vegetables at 1–3 years old, and by males 14–18 years old (Kirkpatrick, Tarasuk 2008: 608). The same study revealed that food-insecure children between the ages of 1-3 and 4-8 years old consumed fewer milk products (Kirkpatrick, Tarasuk 2008: 608). Health Canada suggests that children in these age groups require four to five servings of fruit and vegetables, and two servings of milk or alternatives daily (Health Canada 2007a). Fruits, vegetables, and milk products contain micronutrients that are important to growth and development, and consequently children from food-insecure households are at risk of not meeting these daily nutrient requirements and subsequently, reaching their full potential.

Financial constraints may immediately point to insufficient household income to purchase food, and certain groups that tend to have a lower household income like Aboriginal populations and lone mothers are also more likely to experience food insecurity (Kirkpatrick, Tarasuk 2008; Tarasuk, Mitchell, Dachner 2012). There are, however other factors that contribute to food costs becoming unaffordable for a low-income household, such as the distribution of the products within the wholesale and retail activities associated with food, as well as the costs associated with transportation to purchase food (Garthwaite, Collins, Bambra 2015). Food prices are a key element to understanding why people, including children, experience food insecurity. As food prices rise, or the food budget shrinks, “the first items dropped from the diet are the most costly and most healthful options: high-quality proteins, meat and fish, vegetables and fruit” (Drewnowski, Eichelsdoerfer 2009: 1621). This leaves children in food-insecure households vulnerable to malnutrition and related conditions.

While previously this section discussed the reduction in nutritious foods purchased and consumed, the increase in non-nutritious food consumption also needs to be considered as a conse-
quence and a compounding factor in understanding food insecurity. Many households can purchase sufficient amounts of food but the quality of the food lacks sufficient nutrition for everyone in the household. In developed countries, like Canada:

the widespread availability of dietary energy is not always matched with proportional availability of micronutrients. This is due to the high proportion of ‘empty calories’ in the modern urban diet. Thus, during periods of rapid growth and increased micronutrient needs, such as adolescence, marginal micronutrient intakes may become relatively common (Caballero 2002: 4).

This means that while households may not be food insecure, the food they are able to access is not supporting the health and wellness of the people within those households, and may even contribute to diet related disease.

Lack of access to nutritious foods, and increased access to non-nutritious foods can be explained in part by food deserts. Food deserts are “low-income areas in which healthy foods are expensive, of poor quality, or inaccessible” (Shannon 2014: 248). Food deserts contribute to the understanding of food insecurity on a structural level. Food-insecure households may not have access to fresh produce because without a vehicle or appropriate transportation, the only food vendors nearby are convenience stores or fast food restaurants.

While no one should experience food insecurity, it is especially problematic when it is children who experience it because of the amount of physical, emotional, and intellectual development they undergo. A nutrient-poor diet leaves children vulnerable to a variety of short and long-term consequences. Physically, severe hunger can lead to impaired rate of growth and “increased incidence and severity of acute illnesses, particularly diarrheal and respiratory diseases” (Caballero 2002: 4). Living with food insecurity can be a predictor for childhood overweight and obesity (Jyoti, Frongillo, Jones 2005; Taylor, Evers McKenna 2005). Overweight and obesity among children has become a pressing public health concern over the last thirty years as the rates have increased and the long-term health consequences of being overweight or obese, including but not limited to type-2 diabetes and certain cancer, impact more people earlier in their lives. Between 1980 and 1996, the number of overweight and obese male children 7-8 years old increased by 31.4% and by 16.5% for 9-11 years old boys (Tremblay, Katzmarzyk, Willms 2002). The number of overweight and obese girls aged 7-8 increased by 17.3% 14.9% for girls between the ages 9-11 (Tremblay, Katzmarzyk, Willms 2002). More recent data suggest that the rates have plateaued (Public Health Agency of Canada 2011; Carroll et al. 2015) but this does little to address the
physical and mental health concerns that can accompany being overweight or obese, especially as a child. It is important to note that while overweight and obesity can be related to diet, other factors including genetic, environmental and lifestyle factors other than diet, contribute to this condition (Public Health Agency of Canada 2011). High-calorie, low-nutrient foods, like those found in many school food environments, as discussed in the previous section, do contribute to the problem.

In addition to the physical consequences of food insecurity in childhood, food insecurity also affects the psychological and emotional wellbeing of children. One study found school-aged children experiencing severe hunger had double the anxiety scores than children with no hunger (Weinreb, et al. 2002). After environmental, child, and maternal factors were controlled for, “severe child hunger was found to be associated with higher rates of… psychiatric distress” (Weinreb, et al. 2002: 4-5 of 9). Another study found that children from food-insecure households were more likely to experience symptoms of depression, and anxiety (Melchior, 2012). Other research has found that children from food-insecure households have increased psychological stress and reduced social skills. It has been found that children experiencing food insecurity struggle to maintain self-control, remaining attentive and have impaired interpersonal relations with their peers (Jyoti, Frongillo, Jones 2005; Howard 2011).

Impaired ability to pay attention accompanied with struggling to get along with peers increases the number of difficulties children from food-insecure households experience while at school. In addition to the physical, psychological, and social consequences that food-insecure children face, including increased absences due to hunger and hunger related illness (Kleinman et al. 2002; Jyorti, Frongillo, Jones 2005; Jackson 2015), they also more vulnerable to cognitive delays, further making school challenging. For brain development, the frontal lobes go through spurts of development between 0-2 years, 7-9 years, and the mid-teenage years (Bryan et al. 2004). These are areas of the brain responsible for higher-order cognitive activities, such as “planning, developing strategies, testing hypotheses when problem solving, focusing attention, inhibiting irrelevant stimulation, and collating memories” (Bryan et al. 2004:295-6). Therefore, experiencing poor nutrition throughout childhood may have detrimental effects on the developing functions of the brains of those children.

In addition to developmental delays or problems caused by insufficient nutrition, food insecurity in children also predicts “impaired academic performance in reading and mathematics for girls
and boys” and found that girls were especially vulnerable to these impairments (Jyorti, Frongillo, Jones 2005). As mentioned previously in this section, food security and quality of diet may not necessarily refer to the same condition. Research into diet quality and academic performance went beyond examining the link between food security and academic performance to find children who are not consuming sufficient fruits and vegetables, and children consuming higher amounts of dietary fats were more likely to perform poorly academically (Florence, Asbridge, Veugelers 2008).

Diets with low fruit and vegetable consumption and high dietary fat consumption are increasingly common in North America and around the world. Also, these nutrient-poor diets are not exclusively a product of insufficient income or problems with the distribution of food in the wholesale and retail sectors of the food industry. Many people with sufficient income and access to fresh fruits and vegetables are failing to eat nutritionally balanced diets because of the prevalence and convenience of calorie-dense, nutrient-poor edible products, or what Winson (2007; 2013) refers to as pseudo foods. The prevalence of these food products in North America and increasingly around the world is well documented by Winson (2004; 2013). What he calls the industrial diet will be included in other aspects of this research, as well as this chapter, but it bears mentioning in this section because of its role in the nutritional health of children. The overall acceptance in Canada, as well as around the world of low-nutrient, high-calorie edible commodities as food for adults as well as children, has contributed to the rise in overweight, obesity and diet related disease

2.3. School Food Environment in Canada

As the previous section showed, many children across Canada struggle to meet basic nutritional requirements. There is a limited amount of academic research done on school food environments in Canada. There are several government reports and guidelines on the subject, most of which are from the provinces and Yukon Territory, some of which contribute to the data for this dissertation. At the national level, the Federal-Provincial Nutrition Committee and Department of National Health and Welfare published Guidelines For School Food Programs in Canada in 1976. School food program is defined as “a wide range of possible sources of food in schools” including cafeterias, canteens, tuck shops or vending machines (Department of National Health and Welfare 1976:2). The purpose was to “ensure adequate nourishment for children while they remain at school and to increase understand and awareness of food as a health factor” (Department
of National Health and Welfare 1976: 2). There was not, nor has there been a school lunch program in Canada as there is elsewhere, but the concern for the health and wellbeing of students has been a concern for forty years. School food program in the same document refers to any food or beverage vending that occurs at school, ideally to meet the needs of students who attend (Department of National Health and Welfare 1976). Since then, there was a collaboration between the Health Canada and provincial and territorial administrators in health care, the Federal, Provincial, and Territorial Nutrition Working Group, however the document published in 2013 after each subnational jurisdiction issued its school nutrition regulation, and the guideline was recommendations only in an attempt to harmonize the regulations at the subnational jurisdiction level. The provinces and Yukon Territory worked independently from each other in producing their school nutrition regulations, although each makes reference to Eating Well with Canada’s Food Guide (Health Canada 2007a) as a resource for the nutritional guidance given in it.

In addition to Eating Well with Canada’s Food Guide (Health Canada 2007a), subnational jurisdictional nutrition regulations are also shaped by the comprehensive school health (CSH) approach. The Pan-Canadian Joint Consortium for School Health (JCSH) defines CSH as an integrated approach to promoting health in the school environment along with working to achieve educational outcomes (Joint Consortium for School Health). In short, CSH asks schools to develop all policy with health and wellness incorporated, rather than a health and wellness policy. Developed in 1985, CSH consists of four pillars: policy, teaching and learning, social and physical environment, and partnerships and services (Joint Consortium for School Health; Veugelers, Schwartz 2010). These pillars considered, the subnational jurisdictions, as well as the school boards/divisions/districts, and individual schools can create, and have created school environments with the support of the broader community that encourage students in developing and maintaining a healthy lifestyle. The pillars of community school health are useful for understanding the non-nutrition components of the subnational jurisdiction nutrition regulations because nutrition is a component of this approach (FPTGN 2013).

The focus of the research undertaken for this dissertation examines subnational jurisdiction nutrition regulations, and, as will be discussed later in this dissertation, within most of the nutrition regulation, requirements and suggestions for elements of health promotion other than nutrition are given. CSH provides additional context for what those elements are. While the pillars of CSH are meant to be the same for each school engaging with the approach, there is no standardized implementation because of the unique conditions and circumstances found in schools across the
country, including physical structure of the school environment, socio-economic factors, and community support, among others, (Veugelers, Schwartz 2010). As such, the absence of standardization for CSH helps address the research question of this dissertation. Considering the CSH approach critically may also provide a way to critically examine the regulatory documents. There has not been a critical evaluation of the effectiveness of CSH in Canada in the thirty years since it was developed (Veugelers Schwartz 2010). The rise in childhood overweight and obesity during this time (Tremblay, Katzmarzyk, Willms 2002; Public Health Agency of Canada 2011; Carroll et al. 2015), in addition to uneven implementation, and a lack of critical evaluation of the effectiveness of the CSH approach, may indicate that the approach is not, in fact, effective.

There has been limited academic research related to the school food environment in Canada. The focus of the existing research on this subject has been on the school food environment as being an obesogenic environment. The results of this research are similar to what has been covered to a greater extent by researchers examining the school food environment in the United States (Lautenschlager 2006; Nestle 2007; Levine 2008; Morgan, Sonnino 2008; Story, Nanney, Schwartz 2009; Poppendieck 2010). There has also been some research about alternatives to the high-calorie, low-nutrient diet characteristic of North America and increasingly the world, including alternatives to conventional agro-food networks in Canada that attempt to prevent the adverse effects of unhealthful food products entering the school food environment (Baker 2004; Mount et al. 2013). This section of the literature review covers the academic research of Canadian school food environments, which focuses heavily on the regulation of nutrition, or lack thereof.

The food and beverage consumption habits of students in the United States have been well documented as the previous section of this review demonstrated. The availability and overall student preference for pop, chips, candy, chocolate, pizza, French fries, and chicken nuggets among other nutrient-poor foods by students has been a concern for administrators, parents and researchers for years (Lautenschlager 2006; Nestle 2007; Levine 2008; Morgan, Sonnino 2008; Poppendieck 2010). As Canada faces many of the same nutrition related health issues as the United States does, both countries are addressing concerns about these dietary patterns among school-aged children. Evidence suggests that the school environment, the environment children spend the most amount of their time in after the home, has encouraged the consumption of nutritionally-poor foods like the ones mentioned (Winson, MacRae, Ostry 2012). To address this, concerned parents and community members across the country have collaborated to improve the quality of nutrition in the school food environment, food security, and promoting sustainable procurement.
(Winson, MacRae, Ostry 2012). The authors praise the collaboration and initiative of concerned citizens and community organizations to address the problems in school food provision in Canada instead of waiting for government to act (Winson, MacRae, Ostry, 2012).

A study conducted in Waterloo, Kitchener and Cambridge region of Ontario made an important contribution to understanding the school food environment in Canada as it highlighted the significant number of food and beverage options off school property, particularly within walking distance of urban and suburban schools (Winson 2008). The nutrient poor foods available on school property in cafeterias and vending machines are well known and Winson (2008) shows that the prevalence of food and beverages of low nutritional quality is as common in secondary schools in Canada as they are in the United States. The results from this research draw attention to how convenient it is for secondary school students to purchase food off school property and the importance of considering the geographical area around schools as part of the school food environment. This study adds to an earlier public health study, which found that there are fast-food restaurants in close proximity to Chicago-area high schools (Austin et al. 2005). These findings have significant implications for how nutrition guidelines and policies should be understood, especially in Canadian schools since they do not provide lunches for any students. If, in schools in the United States where a lunch program exists students still chose to leave school property, students who do not receive a lunch would be as likely or more likely to purchase food and beverages off of school property.

A similar situation occurred in Norway when the Norwegian government developed a school food policy in 2001. School food for Norwegian children is similar to that in Canada where most students bring lunch from home (Holthe, Larsen, Samdal 2010). Recently, some schools in Norway incorporated canteens into the school food environment as a measure to prevent students from purchasing unhealthful foods and beverages from convenience stores off property either as lunch or to supplement their lunches (Holthe, Larsen, Samdal 2010). The authors could not conclude whether incorporating canteens changed the school food culture after only a short period of time, however they did find students were more likely to supplement with the more healthful options offered through the canteen rather than leave school property (Holthe, Larsen, Samdal 2010). The authors found, however, that the physical structure of Norwegian schools, which are not equipped with sufficient seating or cooking facilities, do still encourage students who do not bring a lunch to leave school property and purchase fast-food items from convenience stores or restaurants (Holthe, Larsen, Samdal 2010).
As Holthe, Larsen and Samdal (2010) observed, encouraging healthy eating also requires infrastructure to support it. The strictest nutrition policy could be easily undermined when the school food environment includes convenience stores and fast-food restaurants. More recent research has found that the food environment off of school property plays a significant role in the food and beverage intake of students (Woodruff, Hanning, McGoldrick 2010). The authors suggest that policies should restrict student access to fast food, whether it be through their ability to leave school property to purchase it or restricting the ability of fast-food companies to vend on school property (Woodruff, Hanning, McGoldrick 2010).

While not academic, it is worth including the comparison of school nutrition policies in Canada by The Centre for Sciences in the Public Interest in this review (Leo 2007). It provides a useful starting point for understanding the objectives of Canada and each province in terms of addressing school food which is the focus of this proposed dissertation (Leo 2007). The report found the school and beverage policies of the provinces did not comprehensively address nutrition and had wide variations in criteria and in many provinces there were no limits on fat, sugar and sodium content of the foods and beverages that can be sold at school (Leo 2007). The focus was exclusively on the provinces as none of the territories had a policy to be examined at the time (Leo 2007). Alberta’s policy received the highest grade, a B, although the guidelines were still in draft form at the time of the report1 (Leo 2007). Saskatchewan, Ontario and Prince Edward Island’s policies received F’s (Leo 2007). Each province has updated the policies or guidelines addressing school food and nutrition since the time of this report, so the grades are not necessarily meaningful at this time. The report does show that each province considered different criteria in developing school food and beverage policies and those differences, even if the policies are improved, may still be present. Rather than evaluate the quality of the standards as this report did, this dissertation will use the updated policies as data to understand the objectives being addressed by school nutrition policies in Canadian provinces, as well as Yukon Territory.

The present research on school food in Canada emphasizes the foods and beverages available on school property where students purchase and consume their lunches, and the way it seems to promote unhealthful food and beverage choices. Further, the scope of the research addressing the Canadian school food environment is limited. Winson (2008) does present a detailed account of the school food environment in a school district in Ontario and wisely includes the geography of

1 Through e-mail communication dated February 16, 2016, AB_20150625 noted that by waiting, those drafting the regulations were able to benefit from the learning/experiences of the other jurisdictions, mostly stricter sodium guidelines.
foods and beverages available nearby school property, however it is limited to the one school dis-

Nutrition research in Canada recognizes the school food environment as one that is influential on

There are points that Henry et al. (2015) should have considered with greater attention. First the

Most importantly, Henry et al. (2015) note that when offered for free, “a greater percentage of

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discussion in the paper. If the concern is to get students to consume milk because of its nutritional value, it needs to be made available to them at no cost. Subsidizing the cost of milk would increase consumption, and potentially improve the nutritional health of the students. It is an argument in favour of subsidizing the cost of healthy foods in schools elsewhere, assuming this pattern would continue beyond milk products.

Research has been done to evaluate the effectiveness of newly implemented or updated policies on improving the school food environment. One of the first done in Canada was an evaluation of School Nutrition Policies for elementary school students in Prince Edward Island (Mullally et al. 2010). This study looked at the dietary habits among students in grades five and six in the 2001-2002 school year, before the policies were implemented, and in 2007, after the policies were implemented (Mullally et al. 2010). The results showed that the introduction of the policies resulted in children consuming fewer servings of all foods in general, including Vegetables and Fruit, Milk and Milk Alternatives and Low-nutrient density foods (Mullally et al. 2010). Controlling for the overall decline in the number of food servings reported, the results still suggested that students were less likely to consume low-nutrient density foods than before the policy change (Mullally et al. 2010). The authors saw this as evidence of the policies contributing to a more healthful school food environment.

This research is an important contribution to understanding Canadian school food environments and their regulation because it is “the first study in Canada to assess the association between the introduction of a province-wide school nutrition policy and improvements in students’ food consumption” (Mullally et al. 2010: 42). There are, however, considerations that are not made by Mullally et al. (2010) that other research shows as being important. First of all, Prince Edward Island does not have a province-wide school nutrition policy; as the authors note, the policies are written and administered by the two English language school boards (Mullally et al. 2010). While the policies are nearly identical and do cover all of English-speaking PEI, research done by Vine and Elliott (2014) show that provincial-wide policies have significant disconnect from local-level implementation considerations. The successes of the policies in the improvements to the consumption patterns of PEI students could be attributed to their local-level administration.

Secondly, the research done by Mullally et al. (2010) does not distinguish between food and beverages purchased at school and those that are brought from home. The home food environment is an essential consideration, as school food and beverage policies do not address those items.
brought from home (Prince Edward Island Eastern District School Board 2011; Prince Edward Island Western District School Board 2010). While it is commendable that the policies encourage nutrition education, which may have a positive impact on what is purchased and consumed in the home, this research does not control for whether it is the impact of the education that has led to the decline in consumption of low-nutrient dense foods or the elimination of their sale on school property.

Related to the loss of pertinent information by not distinguishing between food and beverages purchased at school and those products brought from home is the study of students in grades five and six. The decision for Mullally et al. (2010) to use students in grade five and six for their research was practical, because student in these grade levels were used in the Food Consumption Survey, which provided Mullally et al. (2010) with data on the food consumption habits of children in Prince Edward Island according to grade level and sex. In addition to having a data set to work with, an additional benefit to studying grades five and six students in this regard is that they have less income and are unable to leave school property to purchase foods and beverages so their consumption habits more closely reflect what is available to them on school property because it was purchased at school or brought from home. The existing research on school food environments in Canada, however suggests that it is secondary or high schools that require more attention when evaluating the effectiveness of the policy. A disadvantage of studying the food and beverage consumption habits of students in grades five and six to understand the efficacy of school nutrition policy is, because they have less spending money than their older counterparts, they are less likely to purchase food from the school food environment. The research done by Winson (2008) and Vine and Elliott (2014) highlights the importance of recognizing the Canadian school food environment is necessarily revenue driven and competes with businesses in close proximity to schools for student money. An area for future research in the Prince Edward Island context would be to learn how the policies have impacted the consumption habits of students at the secondary level.

A similar population level study of school food and beverage policy efficacy used grade five students in Nova Scotia (Fung et al. 2013). While using this age group makes it challenging to see the impacts of the changes of the school food environment on eating habits, the longer period of time between policy implementation and the time the research was done compared to Mullally et al. (2010) as well as distinguishing between food purchased at school and that brought from home allowed Fung et al. (2013) to see population level changes in eating habits in Nova Scotia.
schools. Fung et al. (2013) found that students were overall more likely to bring lunch from home than buy it at school since the implementation of the policy. The authors suggest this points to the students bringing the types of foods and beverages no longer available for sale at school from home (Fung et al. 2013). This type of result could be applied to secondary school-aged students who are able to leave school property to purchase foods and beverages.

McIsaac et al (2015) also used the baseline data for grade five students in Nova Scotia to measure the impact of the provincial school nutrition policy on physical activity and diet quality. Comparing the activity levels and diets of grade five students from 2003 (pre-intervention) with those of students in 2013 (post-intervention), the authors did find improvement in diet quality, but not in physical activity and saw obesity rates increase (McIsaac, et al. 2015). The authors note this result suggests improvements to diet were not sufficient to mitigate effects of decreased physical activity (McIsaac et al 2015). The authors include an examination of what percentage of schools are implementing the different aspects of the policy, which shows that not all schools are implementing all aspects of the policy and in turn may have some responsibility for why the policy is not having the desired outcome for students regarding physical activity and obesity rates (McIsaac et al. 2015).

An evaluation of the policy intervention for school food environments in Prince Edward Island was also conducted and it, like McIsaac et al. (2015) in Nova Scotia, found mixed results. Surveys of school principals across the province found that while they were implementing parts of the policy, not all parts of the policy were being implemented because of lost revenue, higher costs, and limited availability of permitted foods (Taylor et al. 2011). This study does not examine impacts on students as Fung et al (2013) and McIsaac et al. (2015) do; however this study may contribute to explaining why the policy interventions are not having the desired impact while identifying barriers that could be addressed to improve the implementation of the policy.

In Ontario, Vine and Elliott (2014) focused on the impact of school food and beverage policy on secondary school food environments and found that the policy restrictions for the sale of certain foods and beverages on school property have further encouraged students to leave the school food environment. In concert with this, the school administration, cafeteria managers, principals and vice principals are struggling to make up the increased costs of healthier foods and beverages because sales are too low (Vine, Elliott 2014). The policy is unable to change the taste preferences
of the students, who are the primary customers for the school food environments and consequently some schools are at risk of losing their cafeterias altogether (Vine, Elliott 2014).

Because research on school food provision in Canada is comparatively new and presents many logistical challenges, gaps in the literature are to be expected. This dissertation addresses one of these gaps by looking at the regulatory levers from each province and Yukon Territory to create a more complete picture of school food regulation in Canada while providing useful information for the other many research opportunities that this research cannot address but are relevant to the field.

2.4. Using the School Meal to Address Hunger

The United Kingdom and the United States provide free or reduced price lunches to students who are considered underprivileged. This type of means-tested program treats school lunch provision as an act of social justice, social welfare or charity, depending on the context of the discussion. The American case is well researched and the books dedicated to the topic are included in this review. Less has been published academically about the program in the United Kingdom but what is available will be included in this section as well.

Beginning with the United Kingdom, Vernon (2005) used a Foucauldian approach to argue that hunger evolved from a physical or biological condition into a moral or political one through “techno-politics” where experts, nutritionists or those in the medical field, exert power over the body (Vernon 2005). In doing so, he provided a brief history of the program. The author also noted “the seemingly mundane practicalities of identifying hungry children and feeding them at school were intricately connected to a broader history of the changing meanings of hunger and ideas about the responsibilities of government” (Vernon 2005: 695). The article emphasized the agency of those involved in the “techno-politics” of the school lunch, including the roles nutritional and social scientists in the formal political arrangements that were necessary to institute the program (Vernon 2005). It also offered useful historical background information about the origins of the formal politics of the school lunch program in the United Kingdom, which is useful for this review.

Compulsory education in the United Kingdom was the catalyst for the provision of school lunch (Vernon 2005). In the late nineteenth century, laws were passed that required all children to attend school, even though prior to the laws some children worked providing income to their fami-
lies (Vernon 2005). Concern about making families poorer by removing a worker from the house in combination with women’s involvement in school board politics created local school meal initiatives that were eventually formalized into a needs-based program in 1906 (Vernon 2005). While the focus of the article was on the techno-politics of defining hunger and nutrition, what is most relevant to this review is the institutionalization of moral obligation to ensure that children had enough to eat during the school day. While there were attempts to use the school meal to teach manners with the intent of having a civilizing effect on children from the lower classes, limited dining and seating resources caused school officials to abandon the goal (Vernon 2005). Sufficient food for hungry school children remained as the objective of the program.

Nelson, Lowes, Hwang (2007) addressed the contribution of school meals to overall nutrient intakes of students in the United Kingdom. For this review, it is particularly interesting that the authors addressed students in receipt of the free meal specifically, providing information about the current state of this program (Nelson, Lowes, Hwang 2007). Presently in the United Kingdom, children qualify for a free lunch if their parents receive either Income Support or Jobseekers Allowance, otherwise students may purchase a hot meal during the lunch hour or bring their own lunch (Nelson, Lowes, Hwang 2007). As of 2001, after more than twenty years of not having nutrition requirements for lunches purchased at school, the Department of Education and Skills instituted nutrition guidelines for caterers to enforce so that students would have balanced meals (Nelson, Lowes, Hwang 2007). Students purchasing a lunch after April 2001 would have to make sure that they had at least two items from starchy foods, fruit, vegetables (other than potatoes), fish, or red meat (Nelson, Lowes, Hwang 2007). A weakness of this study is that it relies on self-reported survey data, which can be unreliable due to respondents either intentionally or unintentionally misreporting what they are eating. The results, which show that soft drinks, starches and sugars are popular choices, would suggest that respondents overall did not feel pressured to dramatically skew their responses to appear more healthy (Nelson, Lowes, Hwang 2007). This result is particularly troubling for those who receive a free lunch, as the authors note students who qualify for the free lunch are particularly vulnerable to nutrient deficiencies because a larger proportion of their energy and nutrient intakes comes from school meals than those pupils who do not participate in the program (Nelson, Lowes, Hwang 2007). The authors concluded by suggesting that, when presented with a wide variety of options, students pick the least healthful ones, thus the United Kingdom should make the nutrition requirements stricter for the food and beverage available to students (Nelson, Lowes, Hwang 2007). The free lunch offered in the United Kingdom did not keep up with advances in nutrition science, in part because of the how the ethics of
hunger changed since the program began in the late nineteenth century. Consequently, the authors conclude school meals contribute to nutrition related health problems rather than helping them (Nelson, Lowes, Hwang 2007). It has remained, according to the academic literature, about making sure students have enough to eat.

Several authors have covered the history of the NSLP in the United States, thus the origins of the program are well known. The earliest versions of the NSLP in the United States began in the late nineteenth century under circumstances similar to that of the United Kingdom. Mandatory school attendance laws brought children to schools who had previously not attended and many of these children were hungry (Poppendieck 2010). The earliest versions of lunch provision began with food being provided by churches, women’s groups, or other charitable groups to poor children who were coming to school hungry (Levine 2008; Poppendieck 2010). Teachers found hungry students inattentive and disruptive because they were unable to concentrate as a consequence of being malnourished, but fortunately the aforementioned groups donated meals curbing the disruptive nature of the students as well as assisting their ability to learn (Lautenschlager 2006). For several reasons, the school lunches that had been provided charitably became policy, available to every child whose family fell below a certain income line, depending on which state the student lived in (Poppendieck 2008). Truman signed the National School Lunch Program into law in 1946 and that has been a program of the United States Department of Agriculture (USDA) ever since (Lautenschlager 2006; Levine 2008; Poppendieck 2008).

There are two key issues in both the United Kingdom and United States lunch programs. The first is stigma. Means-testing for this program has raised several issues that are endemic to any means-tested program. In the United Kingdom, less than three-quarters of eligible students took the free lunch (Nelson, Lowes, Hwang 2007). The authors suggest providing students with a smart card system to avoid being stigmatized by students who do not qualify for the program would improve uptake (Nelson, Lowes, Hwang 2007). Some schools in the United States, however, do provide this type of service, yet the stigma remains (Poppendieck 2008). In American schools, the rules of the NSLP make it easy to identify the socioeconomic differences between students. While there are other cues, some students who qualify for a reduced-price or free lunch are still reluctant to or refuse to take it due to the stigma that is associated with it, even when provided with a method of payment like a smart card (Poppendieck 2008). In addition to not paying cash for the meal, there are obvious differences between a compartmentalized tray containing the required allotments of each group and those students who are able to purchase the brightly-coloured packaged fast-food
and junk food type items (Poppendieck 2008). Stigma prevents a means-tested lunch program from being effective in addressing hunger when those students it is supposed to help will not partake. The second issue is the nutritional quality of the food served and sold. In both cases, programs aimed at providing children with enough to eat have resulted in children receiving too many calories and not enough nutrition, leaving both the United Kingdom and the United States attempting to improve the way these programs provide food to children in need (Nelson, Lowes, Hwang 2007; Poppendieck 2008).

Three authors that wrote about the NSLP each contribute differently to how the program is understood. Poppendieck (2008) provides the most comprehensive examination of the program because it is the only one of the three books that is focused entirely on school lunch in the United States. Poppendieck (2008) conducted participatory research as a cafeteria worker where she was able to gain knowledge about what food is prepared and how, what students actually eat, and the role of the school in the larger agro-food complex, which will be discussed in a later section. Because of the focus on the program and her level of involvement in the environment, Poppendieck’s (2008) book provides a comprehensive understanding of school food in the United States. The other two books that address the history of the NSLP have different focuses. Levine (2008) primarily addresses the political processes that drove the implementation of the program and the parties and forces that maintain and change the program. The author also included a chapter that examines how the policies work in practice and where ideals that drove the program are not met (Levine 2008). Lautenschlager (2006) more broadly looks at the history of lunch in the American workplace and in the school. The book observes the evolution of lunch in America and what brought about those changes including nutritional science, government, as well as the impact of World War Two and the link between women in the workforce and the impact on how people eat lunch (Lautenschlager 2006). The book does include information about the NSLP, but it is only a portion of the content. The coverage of the NSLP by each of these authors will be referenced as is relevant for the remainder of the review.

2.5. The School Meal as Fulfilling the Social Contract

There are countries that offer school meals to all students as a necessary component of their education. The link between food, nutrition and performance, both physical and intellectual has been known since the late nineteenth century (Vernon 2005; Lautenschlager 2006; Levine 2008). As mentioned in the previous section, this link was a significant component of implementing school
meal programs in the United Kingdom and the United States. The difference between the programs in the United States and the United Kingdom and the universal meal programs in other countries is that the latter removes financial need as a qualification for the program. By offering the meals to all students, the state treats the school meal as a fulfillment of a social contract with its citizens as part of their education costs.

The key distinction between using the school meal as a tool to address hunger as a consequence of poverty and the school meal as a fulfillment of the social contract is the universal element of its provision in the case of the universal program. When the state treats a school meal as part of the social contract, every student is entitled to the meal. Determining need is irrelevant. Accepting that each student has a right to be fed is the same when the meal is given as an act of social justice or when it is considered part of the education, but in the former the state only provides when the family cannot; in the latter the state provides for all as a cost intrinsic to public education. There are ways to provide a school meal that embrace elements of this philosophy even if the meal is not available to each student for free. This can include incorporating nutrition and health into other parts of the curriculum including teaching gardening, food preparation and handling, however the common theme that emerges from the research about school food is the link between nutrition and academic performance, thus it is the responsibility of the school to promote nutrition and healthful choices through what is served or sold in the school.

School food in Italy will be discussed in more detail in the next section of this review, however as a country, there are several points in its constitution that indirectly “guarantee children’s right to local and healthy food” (Morgan, Sonnino 2008: 67). For Italy, the concern is not about addressing inequality but quality. The process for procurement in Italy is meant to ensure that while at school, students receive locally and traditionally produced food, emphasizing sustainability and organic production (Morgan, Sonnino 2008). Guaranteeing the right to this type of food is done to protect students from industrially produced food products and fast food items. The goal of this regulation is to preserve traditional food customs and lunchtime subsequently becomes part of the education students receive and thus is available to each student. Culture and traditions are preserved while students benefit from consuming high quality foods and beverages.

While school lunch is made available to each student in Italy, it is not free for each student. Instead, families pay for the meal on behalf of their children, though the Italian government subsidizes the cost and discounts are given to families with more than one child in school (Harper,
Wood, Mitchell 2008). Sweden and Finland, however, have embraced the social contract aspect of school lunches completely. While the academic literature on Swedish and Finnish school lunches is limited, including information from their governments about their programs is important to this review because they each have a universal school lunch program. Both of these countries are considered social-democratic welfare states, meaning these countries emphasize the rights of citizens to goods and services from the government, where other welfare regimes require corporations and the market to provide them (Esping-Andersen 1990). When a good or service does not have to be purchased from the market, it is considered de-commodified (Esping-Andersen 1990). This concept will be discussed in greater depth in the next chapter (Chapter 3).

For the literature review, understanding de-commodification helps place the school food programs of Sweden and Finland in relation to the aforementioned cases of the United Kingdom and United States. While Esping-Andersen did not address school food as part of de-commodification in the social-democratic welfare regime, he did address education. Primary and secondary education is one service that is de-commodified in most of North America and Europe (Esping-Andersen 1990). What separates the school meal programs of Sweden and Finland from other countries is the extent to which this service is offered through the government than they are in other countries.

The concept of de-commodification can be applied to school food. For Sweden and Finland, part of making education de-commodified is to provide students with lunch. Finland most explicitly embraces the universality of the school lunch. In Finland “pre-primary and basic education are provided free of charge for all, and this includes school meals, teaching materials, school transport and pupil welfare services” (Finnish National Board of Education 2008). Finnish children are not allowed to bring lunches from home, although the reasoning for this is not clear (Harper, Wood, Mitchell 2008). The idea that each student requires materials to learn and should have equal access to them is clear in this policy.

In Sweden the idea is less explicit but the provision is the same. Nutrition, and taste of food, as well as the dining environment are all considered necessary for children to optimize their ability to learn and thus the meal guaranteed to each student in Sweden (Sweden National Food Agency 2013). Students receive equal access to this service without the stigma associated with means-tested programs. While there is little information currently about the funding, budget or procurement for these programs, the other apparent benefit from the content of the guidelines is the priority given to the quality of the food served in terms of taste and nutrition. This suggests that cost
recovery is not an issue for these programs and the food options can be controlled based on nutrition guidelines rather than financial pressures. With only government issued guidelines to review, it is not possible to see how these programs originated, are organized, funded, or the views of the citizens about these programs.

2.6. School Food as Socialization

For humans, food serves many purposes beyond fulfilling biological needs of bodies. Cooking and dining are opportunities for cultural transmission about what to eat and how to eat it as well as to socialize with family and friends. In this way conversational skills and manners are practiced. Additionally, in cooking and dining people learn what is appropriate to eat and how it is eaten. The cases examined in this section show how the prevailing attitudes towards food and dining are learned at home and reinforced in school and thus both agents are important for teaching principles about food or for changing them. While socialization as a process of learning how to interact in society begins in the home, it also occurs in the school and thus cafeterias and classrooms, and wherever food at school is eaten are important locations for how the youngest generation learn about food and eating (Gable, Lutz 2001). Positive and negative attitudes and habits held by parents, teachers and reinforced by the physical environment have an influence on the attitudes and habits children eventually develop toward food and eating, which has an impact on their overall health and wellbeing as adults (Gable, Lutz 2001). Those who do research about school food environments note that the school is not the only location where attitudes about food and eating are developed but school-aged children spend a significant portion of the day at school and thus the environment has an influence on how they learn about food (Gable, Lutz 2001).

Socialization involves many agents including social institutions such as the family and the school (Wentzel, Looney 2007). Dining occurs both in the home and the school for most people meaning both locales are spaces for learning what is appropriate to eat and how to appropriately consume it. Learning what to eat, how to prepare it, and how to dine with others has always been taught at first at home. It occurs in the kitchen while food is prepared as well as sharing the meal around the table with the family. It is around the table with family that the art of conversation and storytelling are taught from older generations to the younger ones, facilitating intergenerational bonding (Flammang 2009). Hospitality and table rituals, including manners are reinforced by eating with others, while often distinctions between dining with family and dining with guests are made (Flammang, 2009). Once these skills have been taught at home they can then be practiced when
eating with others in their homes, or more recently in restaurants, and most importantly to this research, at school (Flammang 2009). The focus of Flammang’s (2009) book is to note the importance of food, the meal, including and dining with others, as a space for civil society to take place while addressing concepts regarding consumer culture and gender. It does not discuss learning about food, cooking and dining as part of socialization, but it is not difficult to see how it would fit into the themes addressed in the book.

Cooking and dining habits are culturally specific and are influenced by time and geography. With time, cooking and dining habits change and consequently, the transfer of knowledge between generations does too. A country with a strong food culture imparts the importance of food, cooking and dining to the next generation. Italy has been, perhaps, the European country most resistant to encroaching North American values and attitudes towards food and eating. Italian food traditions are well known and the importance placed on food and mealtimes has largely been preserved even as other countries embrace industrial foods and mealtime cultural norms. Italy is where the Slow Food Movement began (Simonetti 2012) and the efforts to preserve the terroir of local food, especially in resistance to those wishing to copy the products unique to the regions of the country, makes Italy an ideal location for understanding actions and attitudes taken as a reaction against the encroaching North American industrialized diet, which will be discussed later in this section (Simonetti 2012).

Italy maintains these ideals about food and dining in schools as well. For Italian school children, the school day meal is served with locally sourced food, prepared in the school, and served with proper table settings (Harper, Wood. Mitchell 2008). Italian school meals contribute to the student’s right to education by facilitating health and nutrition. The greater emphasis in Italy for school meals is that they are meant to teach schoolchildren “the values of territoriality and local traditions [and to] help them to acquire a sense of taste that would contribute to personal development” (Morgan, Sonnino 2008: 67). School food environments can foster appreciation for taste and quality as well as the social aspect, which gives school aged children an opportunity to learn that food and dining are important to overall health and wellbeing, including the social components of the meal rather than being solely a functional, or biologically necessary component of the day.

Predictably, the situation is quite different in North America. Food and meal times are functional, meaning they are meant to refuel the body so it is able to perform more work and is taken in
quick breaks, often at a desk (Lautenschlager 2006). The concerns about where food comes from or the quality of the dining environment or diner conversation do not seem to be held in North America as they are in Italy. This is as true in the workplace as it is in homes and most relevant to this dissertation, the school food environment. Balancing the number of hours in the school day with the amount of instruction students are meant to receive does not necessarily leave much time for a proper sit-down meal (Poppendieck 2010). Additionally problematic is the growing number of children attending schools built for smaller student populations, resulting in more students than a lunch room can hold (Poppendieck 2010). Staggered lunch periods are offered, sometimes beginning as early as 10 in the morning, leaving too much time between the midday meal and the end of the day for students to remain satiated and able to concentrate (Poppendieck 2010). This results in hastily eaten meals in crowded, noisy lunchrooms. Table manners and conversation are not practiced in any meaningful way in these scenarios. It is not difficult to learn through this culmination of factors that food is not important. School lunchroom experiences can vary greatly depending on available facilities, but the experience in the United States is repeatedly described in the literature as being loud, dirty, poorly-lit and crowded (Lautenschlager 2006; Levine 2008; Poppendieck 2010). The absence of care for the physical environment makes it difficult to consider other components of the dining experience, like socializing during mealtimes, a priority.

Research about how dietary habits are practiced in the Canadian context occurs most often from a public health perspective. This makes it difficult to use peer-reviewed research to discuss Canadian dietary habits in a social or cultural manner. It is, however, possible to discuss the North American diet, as has been discussed in part in terms of lunch and use this to understand Canadian dining habits from a cultural perspective. The North American diet since the end of World War Two is characterized by industrialization of foodstuffs for a variety of purposes, including slowing spoilage (Winson 2013). Important for this section of the review is to understand that processed foodstuff of low-nutritional value or pseudo foods, have not always made up the North American diet, but have been embraced by people due to social and political changes (Winson 2013). The industrial diet of North America came to dominate the dietary habits of the world through a “social process firmly rooted in the prevailing political economy” (25). Winson (2013) identifies mass marketing as being a highly influential force in this process. While not the only factor, television advertising made pseudo foods acceptable to North American middle class women, who were both typically in charge of grocery shopping as well as cooking and in the middle of the twentieth century, were entering the workforce (Winson 2013). In this culmination of factors, the ideas and values of the prevailing political economy are visible: women entering
the paid workforce, increased prevalence of value added foodstuffs which are products of factories more than farms, advertising and mass marketing encouraging market growth and increased purchasing by consumers, further encouraging increased market participation. While the family evening meal was still the norm, the woman of the family was not expected to make it from whole ingredients; frozen food and mixes were equally acceptable, as was reinforced by the images seen on television.

Television advertising provided the support women needed to purchase prepared foods without being perceived as foregoing her duties as a wife and mother (Flammang 2009; Winson 2013). This led to children learning that these foods and preparation methods were and are appropriate as well which has carried forward into adulthood, as can be seen by the continued proliferation of this diet in North America and since the 1980s, globally (Winson 2013). The school food environment, including time to eat, reinforces these dining habits that have been learned at home. The family is where people first learn about food. As reviewed in the previous paragraph, increased prevalence of two parents working outside the home has led to a preference for prepared, ready-to-eat pseudo foods (Winson 2013). The school food environment reinforces this normalization of pseudo food consumption because they can be eaten quickly or come in packages that can be resealed. The structure of the school food environment, including time to eat, teaches students that nutrition, or enjoyment of the food or the dining experience are not a priority for many students and socialization North American children receive regarding food and beverages, including through peers and teachers is reinforced by the physical school environment. Research about this topic is important because it offers some structural explanation for large scale health trends including socioeconomic status as it correlates to the rising rates of overweight and obesity among children, as well as evaluation of how public health resources are addressing issues regarding rates of overweight and obesity and are able to propose new solutions (Veugelers, Fitzgerald, Johnston 2014). It does recognize the role of the family in how children learn eating habits, however socialization as a process is not included as a concept in this type of research. This is reasonable given the research is not necessarily a social science, but socialization is implicit in the discussion and can be useful in justifying why public health programs targeted at parents to improve the health of their children are important. It is also important to consider, as was mentioned earlier in this review, that school food environment, especially for secondary school aged students, consists of locations to purchase food and drink off of school property as well. Fast food outlets, convenience stores, and grocery stores are direct competition for cafeterias and vending machines on school property (Winson 2008; Vine, Elliot 2014).
Schools reinforce the prevailing political economy because they have to engage with it. Schools do not need to provide foods and beverages for sale; it is only done when the sales can at least cover the necessary costs. If the vending operations in schools are unable to cover their costs, they must close.

The preference for convenience food and beverages is not exclusive to school-aged children. In *The Industrial Diet*, Winson (2013) introduces the concept of dietary regimes. Dietary regime is a concept that “is meant to capture the commonalities in dietary experience and to help us understand why they exist and the specific issues or contradictions that characterize a society’s dietary arrangements” (Winson 2013: 14). Recognizing that for an increasing number of people, diet is no longer a product of what nature provides for a population, Winson (2013) argues the most recent industrial dietary regime is defined by the globalization of the industrial diet, focusing primarily on the developing world. Mass marketing of durable foods have meant that edible commodities with high caloric content but low nutrient value are readily accepted as food and beverages for more of the world’s population (Winson 2013). Research from Sweden shows that, even though gender equality has progressed much farther there compared to similar countries, “mothers, above all, are bombarded with advertising and expert advice, often of a contradictory nature” (Anving, Thorsted 2010:33). The responsibilities of teaching children how to eat healthily, embrace diversity, as well as negotiate the child’s wants and needs in conjunction with the family schedule fall to the mother (Anving, Sellerberg 2010; Anving, Thorsted 2010). Mothers are the key agent of socialization for their children to teach children about food and appropriate behaviours toward food and they are receiving at least part of their information from government as well as mass media (Anving, Sellerberg 2010). Even when parents know what is healthy for mealtimes, they will negotiate what is healthy with what is easy or palatable to make meal times more pleasant, implicitly teaching children that health is negotiable (Anving, Thorsted 2010).

School food, even when it is partially subsidized by the state, is still an opportunity to employ concepts from the prevailing political economy. The government evaluates the NSLP the way a restaurant might evaluate the state of its business – by counting the number of customers. Neoliberalism, the political economic ideology that minimizes the role of the state in the affairs of individuals, including in the market, so that the market may operate unfettered and individuals succeed or fail according to the market (Esping-Andersen 1990; O’Connor, Orloff, Shaver 1999; Harvey, 2005), is dominant in the United States, as well as Canada. The NSLP, as a means-tested program, is a product of this ideology as it is a product of government involvement in the lives of
individuals where the market has failed to provide for individuals. While subsidized by the government, the state still expects the NSLP to perform as an unregulated business would. In the NSLP, a reimbursable meal must meet minimum nutritional standards, leaving cafeteria workers to police the lunches of students who qualify (Poppendieck 2010). The ability to participate in the NSLP, however, requires a minimum number of students to participate (Poppendieck 2010). Success is measured by participation. This has put cafeteria workers in an uncomfortable position of either rejecting the meals that do not qualify for reimbursement by students who otherwise would participate in the program or allowing them to break the nutritional rules of the program by allowing them to include foods and beverages that do not qualify for reimbursement (Poppendieck 2010). Measuring success of a government-funded program by participation has, in this case, resulted in treating children as customers. There is incentive to have as many eligible students participate in the program, meaning the less appealing, but comparatively nutritionally balanced meal is competing with the aptly named competitive foods being sold alongside them.

Schools are places where societal values are taught formally in the manifest curriculum and informally through the informal curriculum, which includes the organization of the school and by providing opportunities for young people to socialize with their peers. This has an impact on messages about diet and eating as it does about other aspects of social life. While socialization is not explicitly addressed, the literature naming the school food environment as an obesogenic environment, meaning obesity promoting (Winson 2008, Winson, MacRae, Ostry 2012), implicitly suggests the school food environment has potential to be a health-promoting environment. The research reviewed in this section suggests the school is an important agent in socializing children about food and dining habits. The school food environment reinforces cultural and political ideas about food and eating that are learned first in the home. This means the school food environment has the ability to either reinforce unhealthful eating preferences or can be a health promoting environment.

The inclusion of the family as a source of information about food and eating for children in a discussion of school food environments may appear out of place. The purpose of including this information is meant to show that the prevailing attitudes to food and eating are taught to children in the home as well as in school. Learning about what a meal looks like and how to eat it occurs in both spaces. It is challenging to change the unhealthy patterns and attitudes towards eating that are learned in many Canadian homes by altering the school food environment. The school food environment can intervene, however, by improving the quality or nutritional value of the foods
and beverages sold in the space. Recognizing the importance of the school in learning other information, including that which is taught in the hidden curriculum does suggest that the school can re-socialize its students’ eating habits. Anving and Sellerberg (2010) found that children in Sweden could have a positive impact on food choices in their home food environment when a new food or recipe was introduced at childcare or school. If Canadian school food environments can be obesogenic, there is potential for them to be health-promoting environments as well.

2.7. School Food as Part of the Conventional Food Network

As was mentioned in an earlier section of this review, the USDA oversees the NSLP. The literature agrees that it is problematic having the department responsible for producing food regulating not just school food, but also the nutrition guidelines for Americans as well (Nestle 2007; Levine 2008; Poppendieck 2010). The difficulty is the politics of agriculture has had considerable influence over what is considered nutritionally appropriate for the country, but also in schools (Nestle 2007; Levine 2008; Poppendieck 2010).

The earliest versions of the lunch program in the United States were also meant to aid farmers during the depression (Poppendieck 2010). After the depression ended, the link between America’s farms and schools may not have needed to be as strong, but congressmen representing rural areas of the country pushed to have the link institutionalized in the law that was eventually passed in 1946 (Levine 2008). The school lunch program received a large portion of its support from politicians maintaining supply chains for their constituents rather than support for the lunches for students (Levine 2008). Regardless of the reasoning, the School Lunch Bill was passed, and the NSLP became entrenched in America’s social fabric and agro-food complex.

The School Lunch Act meant that school lunches would receive support in terms of federal funding and surplus crops (Levine 2008; Poppendieck 2010). The USDA was and still is in charge of this oversight. This department is also responsible for creating nutrition guides for the country (Nestle 2007). As an agricultural body, being responsible for nutrition guidelines has meant negotiating what dietary science says about recommended daily intakes of fats, sugars, and sodium with the concerns of the food producers (Nestle 2007). The agricultural lobbies, as they did with the initial passing of the School Lunch Act, influenced the final drafts of the United States Food Guide (Nestle 2007). In general, the food guide, in its many iterations and updates, has not been able to discourage consumption of a food or food group, but instead can only encourage people to eat more of the more healthful ones (Nestle 2007). This has notably been an issue for red meat
and sugar, where agriculture and food lobbies discourage the approval of versions of the food
guide that recommended lower amounts of each (Nestle 2007).

The surpluses come as a consequence of subsidies for certain crops, especially wheat, corn, and
soy (Nestle 2007; Poppendieck 2010). As a result of the subsidies given to farmers for growing
these crops, they are abundant and cheap (Nestle 2007; Poppendieck 2010). Some of the excess is
distributed as part of international aid, some of it becomes livestock feed, and some becomes in-
tegrated into food products, most famously high-fructose corn syrup (Poppendieck 2010). Cheap
ingredients are found in cheap food, which is in turn given to schools as part of the NSLP. The
additional ingredients also contribute additional calories with no additional nutrition, which is
linked to the dietary crises facing North Americans, especially children (Nestle 2007; Winson
2013).

The United States Food Guide is the basis for school lunch nutrition regulation for the NSLP
(Nestle 2007; Poppendieck 2010). For those students who qualify to have a meal reimbursed in
part or in full, the meal must meet the nutrition standards of the food guide, even though the tar-
get group for this guide is adults, not children (Nestle 2007; Poppendieck 2010). These require-
ments include ensuring the meal has fruits and vegetables and no more than thirty percent of calo-
ries from fat; it is meant to make sure that students are receiving a nutritionally balanced meal
(Poppendieck 2010). These requirements are not adequate, however, as the food supplied to the
schools is courtesy of the USDA and the cheap, durable food products that are purchased to sup-
ply the rest of the kitchen meet the guidelines without having any nutritional value (Poppendieck
2010). The most popular vegetable in many cafeterias is the Tater Tot or Potato Puff, and the
Reagan administration famously declared ketchup was a vegetable (Levine 2008; Poppendieck
2010). Subsidized crops in the United States like corn, wheat and soy, are so abundant that they
are incorporated into many food products as high-fructose corn syrup, for instance (Nestle 2007).
These products, including breakfast cookies, cereals, and processed meat products form the foun-
dation of school lunches (Poppendieck 2010).

American students who are not eligible for a free or reduced-price meal are able to purchase food
from the cafeteria and a la carte elsewhere on school property including vending machines and
canteens. These students can choose to purchase pop, chips, candy, and chocolate on school prop-
erty (Storey, Nanney, Schwartz 2009). Pouring rights and other exclusive contracts between food
and beverage companies and school boards are lucrative for under-funded public schools (Nestle
The food and beverage companies that will pay millions of dollars to school boards for exclusive access to the property see it as a way to build brand loyalty early (Lautenschlager 2006; Nestle 2007; Winson 2008). The school food environment, especially in the United States is tainted by this contradiction; on the one hand students are taught about balanced meals in the classroom while some are expected to meet the requirements of a dietary guideline for their lunch and on the other hand junk foods fill canteens, cafeterias, and vending machines, and sometimes supply educational materials (Nestle 2007).

By allowing agriculture and food lobbies to influence nutrition standards and food and beverage companies fill in funding gaps for schools, it is not surprising that there has been a dramatic increase in the number of overweight and obese children in the last thirty years (Nestle 2007). The school is not the only location where children eat junk foods and consume sugary beverages; as mentioned before, these foods and beverages are consumed in the home and restaurants as well. The role of the school in promoting eating and overall lifestyle choices needs to be acknowledged. Public education should be space to foster a different culture that promotes healthful dietary and lifestyle choices, as has been done in Italy (Flammang 2009). This is part of the education students receive.

2.8. School Food as Part of Alternative Food Networks

While the challenges of a school lunch program being entrenched in the agro-food complex are most noted in the United States, other countries with lunch programs also experience difficulties with obtaining or maintaining healthy, sustainable, affordable foods and beverages for lunch programs. The school food environment has become a place of resistance in some instances as a consequence of displeasure with the current arrangements. Some who procure food and beverages for school food environments are using the opportunity to include products obtained from producers external to the conventional production and distribution channels, often with the objective of improving environmental or social sustainability. As mentioned earlier in this review, Winson, MacRae and Ostry (2012) address a few key examples of alternative supply chains for school food environments. Morgan and Sonnino (2008) dedicate a book to looking at schools or school districts with programs that aim to participate in an environmentally sustainable food network. Poppendieck (2010) highlights local heroes who through hard work and innovation have partnered with local producers to source for the school, begin school gardens, or make healthful school food more appealing in general. Farm-to-school programs are perhaps the most popular of
the alternative food networks for schools since they are not only a way of obtaining fresher produce for students and providing a buyer for often smaller scale suppliers who do not always have access to large contracts like this, but also because they are teachable moments where students who otherwise may not be aware of the link between the food they eat and the farm it comes from (Allen, Guthman 2006; Poppendieck 2010).

While Morgan and Sonnino (2008) and Poppendieck (2010) laud the efforts of those who are improving their local school food environments, these alternatives are not without their challenges. The former concludes its examination of these sustainable school initiatives with an optimistic overview of what needs to be done in order to turn independent initiatives into regular practice (Morgan, Sonnino 2008). Poppendieck (2010) does address the difficulties of having parents, teachers, school administrators, students, community members organize and maintain these programs and meet their typical responsibilities as well. It is easy to become burnt out trying to build and maintain a program while the conventional one receives systematic support (Poppendieck 2010). Many alternative food networks struggle with finding adequate, sustained financial support for enough time to become self-sustaining in addition to other policy and infrastructure barriers (Mount et al 2013). Additionally, these programs tend to occur in more affluent areas where people have the time and resources to dedicate to an alternative lunch program, frequently leaving those most in need without the benefits of an alternative program (Poppendieck 2010).

There is further suggestion that these well-intentioned programs support the increasing neoliberalization of schooling because these programs, relying on the strengths and resources of small groups of individuals demonstrate that it is possible to run these programs without institutionalized support (Mount et al. 2013). Consequently, the voluntary nature of alternative procurement programs can hinder the growth and development of them (Allen, Guthman 2006). Instead of localized programs, the system itself, in this case the NSLP, needs to make changes to address the nutritional and environmental concerns farm-to-school programs are trying to address (Allen, Guthman 2006).

Allen and Guthman (2006) raised an important point. The efforts made by community organizers to address the concerns are admirable, however for a program providing school food, the alternative needs to become the conventional to appropriately address the concerns related to the program. The only way to ensure that the benefits of such a program are available to everyone is to have government infrastructure to maintain it. Requiring a local group to run programs like these means that only those who have the resources to run and maintain such a program will be able to
have one, and not every community has those resources. This is true in the United States as elsewhere.

2.9. Conclusion

School food and school food environments in North America and Europe serve many purposes in society. Examining the existing literature about school food in these regions has emphasized the political nature of school food and the profound implications these meals have for the students and their families. The role of the state, market, and family in each country changes the way school food is procured, prepared and served. Some countries focus on the student as consumer while other cases highlight students as citizens on their own accord, and deserve a meal at school as a right. School meals may also be a way to address food production and distribution problems. Though Canada is a comparatively wealthy country, belonging to the Group of Seven, its citizens are not immune from household food insecurity and dietary diseases. Each of these reasons is accompanied by discussion of the role of government in these two intimate areas, children and food. The thread that connects these themes is the political nature of school food. Since the Canadian provinces and Yukon Territory have implemented or adjusted their policies and regulations regarding the nutritional quality foods and beverages sold at school, understanding what the objectives of these governments are and how the differing approaches were developed requires understanding the ways in which children and food are politicized in each subnational jurisdiction. The next chapter (Chapter 3) operationalizes key concepts that are useful for understanding the underlying political and economic considerations of school nutrition regulations in Canada.
Chapter 3
Theory

School food in Canada is an extension of the larger political economy of the country. As the literature review showed, food and children are often politicized. The provision of school food and beverages involves: the health and wellbeing of a vulnerable population, the political economy of agriculture and reinforcement larger societal ideals. This topic also requires discussing the role of public education in society. The intersection of these concepts in the Canadian context has forced school administrators to balance regulation with encouraging individual freedoms. In Canada, the school nutrition policies and guidelines of the provinces and Yukon Territory appear to address public health but in a way that allows or insists that personal responsibility remains intact as well as maintaining the school food environment as a viable market. This chapter provides an examination of the ways neoliberal political economic policies have shaped food and dietary regimes, welfare provision, and the school food environment. This chapter will also operationalize key concepts relevant to analyzing the results of the research including federalism and the school food environment.

3.1. Federalism

A necessary part of researching school food regulation is to understand what is being regulated and by whom. To understand how school food environments are regulated in Canada requires a brief examination of federalism, since it is the provinces that regulate education and health care, both of which can claim responsibility for this type of regulation. Canada is a federation. This means the distribution of powers is done in a manner that privileges “regional and societal diversity” and preserves “self-government at a local level” (Bakvis, Baier, Brown 2009: 3). This definition is quite broad and does not include the many cases in the Canadian context where multiple levels of government cost-share programs, or when bilateral decision-making occurs (Banting 2012). Briefly, however, in Canada, this means two levels of government, provincial and federal, govern the political, social and economic concerns of the country.
A brief review of Canada’s history shows that once it gained independence from the United Kingdom, granting powers to the provinces, including newly separated Ontario and Quebec which were formerly the United Province of Canada, was necessary for preserving Quebec’s unique linguistic and cultural characteristics (Bakvis, Baier, Brown 2009). This is an oversimplification of the origins, but granting certain powers to the provinces was intended to allow them to address their own unique circumstances in areas that were not deemed important for maintaining consistency across the country.

The territories are also part of the federation, albeit in a different manner than the provinces. The governments of the three territories have publically elected governments and are able to exercise power in a manner similar to the provinces, but due to the high administrative costs combined with fewer fiscal resources, they rely heavily on the Federal government (Bakvis, Baier, Brown 2009). Yukon Territory successfully petitioned for devolution of powers in 2003, receiving the ability to govern over the same areas as the provinces (Alcantara, Cameron, Kennedy 2012).

The provinces have autonomy over education and health care and both spheres are relevant to Canadian school food environments. Eleven unique regulatory levers for school food environments in place across Canada as a consequence of this. As the content analysis will show, there are certain similarities among the regulatory documents, but they also contain features reflecting the unique circumstances of each province or territory. Because Nunavut and Northwest Territories do not have the same level of power as Yukon Territory, they do not have the same regulatory power for school nutrition regulations and are not included in this research.

This raises the question of whether the decentralized approach to regulation is more effective than a centralized approach, given the commonalities among the school nutrition regulations. In terms of education, there has been at least one argument for a common curriculum in Canada (Cohen 2008). A concrete instance of centralization can be found in Canadian health care; through the Canadian Health Act, certain features of health care are guaranteed in each province and territory, which suggests that some efficiencies can be achieved by creating a more centralized approach to administration as well as adhere to a sense of universalism across Canada (Collier 2010; Banting 2012). There has been an attempt among regulators in each province and Yukon Territory in partnership with the food and beverage industry to unify some of the standards for nutrition criteria across the country (FPTGN 2013) but consensus has not be reached and is not present in the current regulatory documents. If the spirit of Canadian federalism lies in ensuring each province and
territory can protect its own unique interests, the differences present in each of the documents must be of importance to the jurisdiction.

3.2. Neoliberalism and Global Agro-Food Systems

Both federal and provincial levels of government in Canada have been influenced by neoliberalism. Neoliberalism refers to a theory of political economy that “proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade” (Harvey 2005: 2). The component of this definition that is most useful for this research is the prioritization of the free market. Harvey (2005), among others (Bakker, Scott 1997; Palley 2005; Connell 2010) noted the rise and institutionalization of this political economic philosophy in the United Kingdom, United States and throughout the world including Canada beginning in the 1980s. National leaders began to minimize the role of the state in terms of private sector regulation as well as welfare provision (Bakker, Scott 1997; Harvey 2005; Palley 2005; Connell 2010).

Canada as a nation has embraced neoliberal economic policy in many capacities, including agriculture. Notably, the Free Trade Agreement between Canada the United States and the North American Free Trade Agreement with the United States and Mexico have permitted the exchange of many goods between borders with no or few restrictions (McMichael 2009). Specifically addressing agriculture, food regimes have been used to identify and analyze patterns of activity in the agriculture sector of the global economy (Friedmann, McMichael 1989). There is agreement among food regime scholars that two food regimes have taken place. In brief, the first food regime was “centered on European importers of wheat and meat from the settlers states between 1870 and 1914” (Friedmann, McMichael, 1989: 95). In the second food regime, between the 1950s and the 29070s, the United States is the hegemonic power, and is characterized by the “completion of the state system through decolonization and its simultaneous weakening through the transnational restructuring of agricultural section by agro-food capitals” (Friedmann, McMichael, 1989: 95). A possible third regime, accepting it exists, began in the late 1980s to present is defined by increased industrialization and consolidation in agriculture and food, especially in the retail sector, where a strong argument could be made for the transnational corporation is the hegemonic power as a consequence of the reduced role of the state due to the trend towards neoliberal policies (McMichael, 2009; Pechlaner, Otero 2010). The opposing forces are the conventional food network and the niche alternative food networks as they compete with each other for cus-
tomers (McMichael, 2009). The question is not whether this describes the current food system, but instead whether this is a regime or a transitional period between regimes because characteristics of the second regime are still present (McMichael, 2009). The dominance of transnational corporations in the global-agro food economy does provide evidence of the presence of neoliberal political economic ideology.

The power of transnational corporations and increased free trade globally in the agro-food sector of the economy has changed diets around the world. Winson (2013) extends the notion of food regimes to dietary regimes, which was briefly discussed in the previous chapter (Chapter 2). Dietary regime is a concept that “is meant to capture the commonalities in dietary experience and to help us understand why they exist and the specific issues or contradictions that characterize a society’s dietary arrangements” (Winson 2013: 14). Winson (2013) identifies three industrial dietary regimes, the first of which began in the 1870s characterized by the industrialization of farming, and food preservation and the introduction of mass marketing of food products. The second industrial dietary regime began in the 1950s along with the second food regime, which saw the biodiversity of foods be reduced, increased adulteration of food products to increase palatability for consumers and reduce costs for manufacturers (Winson 2013). Finally, the third industrial dietary regime beginning in the 1980s is defined by the role of the food retailer in influencing what people eat. Supermarkets, as well as restaurants, especially casual dining and fast food restaurants account for a significant portion of the foods the average person eats daily (Winson 2013). These spaces are significant because of the types of food they sell. Food and beverages with high sugar salt and fat and low nutritional quality have become popular among most people, especially in North America, but increasingly around the world (Winson 2013). More people are eating food outside of the house more often and because of the spatial colonization of supermarkets by pseudo foods, many people including school-aged children have developed a taste for food and beverages high sugar, salt and fat (Winson 2013). The allowance for transnational agriculture and food corporations to colonize food environments and to advertise their products are a product of neoliberal policies. This is, in turn, shaping the diets of North Americans as well as others around the world for the worst, as rising rates of overweight and obesity are linked to the increased consumption of these food products.

The money and time spent marketing pseudo foods and beverages, especially to children, are high, without significant regulation (Winson 1993; Nestle 2007). Concern about the impact of advertising on children, who are understood to be unable to critically assess the media they con-
sume, Sweden, Norway, Greece and Quebec have implemented restrictions on companies who would otherwise advertise to children (Dhar, Baylis 2011). The Quebec Consumer Protection Act of 1980, however has been criticized for being weak, as it includes a loophole for snack food to be advertised to adults during children’s programming, has narrow applicability and is poorly enforced (Canadian Health Care and Scientific Organization 2010). In the rest of Canada, businesses may market to Canadian children with few restrictions (Canadian Health Care and Scientific Organization 2010). This pattern of few or weak restrictions on business is characteristic of neoliberal policy.

The provinces have a significant amount of political autonomy through federalism. As demonstrated above, with Quebec having its own Consumer Protection Act to regulate advertising to children, each province has control over numerous affairs within its boundaries without necessarily impacting other subnational jurisdictions. While the economy falls under the jurisdiction of the federal government, the provinces have sufficient autonomy to augment funding to the areas that do fall under their jurisdiction, including education and health care. Winson (2008; 2013) has written about the impacts of neoliberal economic policies specifically on the school food environment as schools increasingly rely on contracts like pouring rights to generate funding in the wake of cuts to public education at the provincial level in Ontario (Gidney 1999). Beyond the school food environment, the hidden curriculum teaches students to be competitive (Wotherspoon 2004), which is compatible with neoliberal ideals of individual entrepreneurial liberties (Harvey 2005). The hidden curriculum also teaches students about responsible choice making and how to respond to success and failure (Wotherspoon 2004). This idea is present in the school food environment insofar as it is not appropriate to provide students with only healthy options, but instead to expect them to choose the healthier options over the less healthy options.

The focus of this research is not on the presence of neoliberal ideals in the curriculum. One of the research questions guiding this study asks how school nutrition regulations in Canada are limited. Understanding neoliberal ideology as it pertains to economic regulation, especially in the agro-food sector of the economy helps address this question, and it is useful to see how political ideals are manifested in schools. As will be discussed later in this chapter, the space surrounding schools is important to the food and beverage choices students make as many students have some access to them. Even if schools restrict access to pseudo food and beverages\(^2\) during the school

\(^2\) As discussed in Chapter 2, pseudo foods, from Winson (2007; 2013) refer to low nutrient, high-calorie edible products
day through regulation of the food environment on school property and were to restrict student access to convenience stores and fast food outlets, many still would pass by these outlets before and after school providing them with opportunities to purchase pseudo foods and beverages regardless of the school regulations. Research has noticed clustering of these outlets around schools (Austin et al. 2005; van der Horst et al. 2008; Winson 2008; Davis, Carpenter 2009; Kestens, Daniel 2010; Vine, Elliot 2014). Where these products are available to students before and after the school day, even if they are not sold at school or students are restricted from accessing them during the school day, they remain a problem for those who are trying to limit students’ consumption of these products because young people can still choose to access these spaces. The preference for them is still present among students and in a neoliberal political environment, placing restrictions on food and beverage vendors located near schools or restricting these businesses from locating near schools at all, is unrealistic. Schools can influence dietary habits (Pyle et al. 2006; Story et al. 2009), but they alone are unable to change the dietary habits of the students through regulation. Student ability to choose fast food and convenience foods, influenced by family eating habits, further influenced by marketing and supermarkets, may be stronger than the interventions schools are capable of enacting.

Neoliberalism manifests in policy when industry is involved in policy development. Nestle (2007) showed the impact food and beverage industry lobbyists had on national nutrition standards in the United States, resulting in a general “Eat More” approach to nutrition guidance and an inability to restrict or limit servings of certain foods or components of food like sugar and salt. For schools without a meal program that offer food and beverages for sale because there is a market for them, regulating these products requires the cooperation of industry to conform to the nutrition regulations. If industry is unwilling or unable to conform to the nutrition requirements, the schools lose their vendors. As a consequence of this relationship, industry is directly or indirectly involved in the development of food and beverage regulation. The revenue generated from the food and beverage sales is increasingly necessary, as the trend towards neoliberalism in Canada has resulted in cuts to public education (Gidney 1999) and left schools looking for alternative revenue streams. The global agro-food system is shaped by neoliberal ideology, which means most pertinently to this research that food policy and diets are shaped by it as well. The next section of this chapter helps explain how alternatives to neoliberalism can impact policy.
3.3. Welfare Regimes

As with food and dietary regimes, welfare regimes are an attempt to provide structural explanation for a wide-reaching phenomenon. While there are many aspects of the political economy of Canada’s agriculture and food sector that can be explained through a food regime lens, the Canadian school food environment and its regulations can be better understood by applying welfare regimes to the analysis since the environments are not tied to agricultural policy the way they are in the United States. While school food is not a part of welfare provision in Canada, as this section of the chapter will show, welfare regimes as a concept allow for this. By using welfare regimes in this research, there is an opportunity to include comparison between Canada and other countries, which is especially useful for including countries that have not embraced neoliberalism to the same extent as Canada but consider school food a form of welfare provision. While the focus of this research is on school food and beverage regulation in Canada, part of the argument this research makes is that while Canada can be generous with its welfare provision, it is less generous than other similar countries. In this context, welfare regimes provide an additional level of focus beyond neoliberal policy in food regimes by allowing for school food to be discussed as a component of welfare provision like education, which many countries do in some respect, as was evident in the literature review.

Welfare regime refers to the “ways in which welfare production is allocated between the state, market, and household” (Esping-Andersen 2000). Esping-Andersen’s (1990) typology of welfare state regimes is useful for providing a framework for understanding the political economy of Canada as well as for other countries belonging to the Organisation for Economic Cooperation and Development (OECD). The concept of welfare regime applies to the allotment of social services including health care, education and related costs like school food. The literature review used the welfare regime framework to describe Sweden and Finland as social-democratic welfare states and this section of this chapter will unpack this idea further.

Esping-Andersen (1990) described three welfare regimes: liberal, conservative, and the aforementioned social-democratic, to classify how welfare is produced and distributed organized between the state, family, and market in OECD countries. There are a variety of factors that Esping-Andersen (1990, 2000) suggested influence why production and distribution of welfare are relegated the way they are. To summarize, in countries where the liberal welfare regime took hold, socialist movements were weak and now are characterized by market-based approaches to wel-
fare provision, and state-assistance tends to be limited to needs-based groups (Esping-Andersen 2000). The conservative regime dominates in countries where the Catholic Church has had a strong influence, which has resulted in welfare provision through solidarity and familial relationships are relied upon for supplying welfare. Finally, the social-democratic regime dominates in Nordic countries where the labour movement was particularly strong and consequently the welfare state in these countries is characterized by universalism of rights in that they are based on citizenship rather than need, as is the case in the liberal welfare regime (Esping-Andersen 2000). Because welfare provision is based on citizenship, it is not necessary for people to purchase it in the market place, and can be considered de-commodified (Esping-Andersen 2000).

The literature review already discussed how social-democratic welfare regimes de-commodify school meals and how education is de-commodified to some extent in OECD countries. Expanding de-commodification to the provision of school food as a component of welfare logically follows with how education is treated in the countries being included, which is as a universal welfare provision. While operationalizing school food environments, the role of the school was discussed in brief. That the school has a caregiving role in the lives of its students or anything other than its primary role of place of knowledge transmission raises the question of the role of the state in children’s lives. One of the advantages of applying welfare regimes to school food provision is the concept attempts to synthesize the activities between the state, market, and family in welfare production and provision (Esping-Andersen 1990). For children, activities from each of these spheres play crucial roles in their lives, as their dependence on their families is greater than it is for most adults due to their inability to participate in the labour market in OECD countries, which are the only ones being included in this research.

Sweden and Finland were described as having social-democratic welfare regimes because they de-commodify much of their welfare if not abolish market dependency for these services (Esping-Andersen 2000). De-commodification occurs when “a service is rendered as a matter of right, and when a person can maintain a livelihood without reliance on the market (Esping-Andersen 1990: 21-2). For OECD countries, including Canada, most expenses related to education have been de-commodified, even though not all of these countries would be considered social-democratic welfare regimes. The extent to which de-commodification has occurred, however, varies by country with some covering the costs of all levels of education to its citizens and others only covering the cost of kindergarten through to the end of high school, and often the expenses for supplies are the responsibility of the family. In the context of this research, identifying where school meals are as
de-commodified as education is useful because education is publically funded in most OECD
countries. This commonality is useful for comparison purposes.

In countries that have subscribed more completely to the hegemonic discourse of neoliberalism,
more services are commodified than are de-commodified or previously de-commodified services
have been commodified through funding cuts. If a service has been commodified, it is presumed
that a price can be put on it and can be traded, regardless of other processes or social relations
(Harvey 2005). Thus, because the food and beverages made available to students from the school
must be purchased, they are commodified.

Welfare regimes are ideal types and no country perfectly fits into any one type. Because it is a
typology, it can be reductionist and there are nuances in any of the applicable countries that devi-
ate from the type it otherwise falls into. The types and those instances where a country’s welfare
provision does not conform to its type are particularly useful for this research. Esping-Andersen
(1990) described the United States as being the exemplar of the liberal welfare regime, although
not all of its social services are market-based. In the US, education is mostly de-commodified and
school lunches are de-commodified to some extent, although the de-commodification is targeted
to those in need rather than universal as is the case in the social-democratic regime countries.
Canada, which like the United Kingdom, tends to de-commodify more welfare provisions than
the United States, such as health care, does not offer students anything for a school meal.

Applying welfare regimes to OECD countries emphasizes the shared value of education among
them. Even though not all OECD countries are social-democratic, all have de-commodified edu-
cation to some extent. Since industrialization and urbanization became wide spread in Europe and
eventually North America in the eighteenth and nineteenth centuries, public investment in educa-
tion has been viewed as an investment in making the next generation productive, providing a
mechanism to identify ability, teaching social norms, and providing a “consumption good that is
valued for its own sake” (Gradstein, Justman, Meier 2005: 3). While each country emphasizes
different components of these four educational outcomes to varying degrees, each still views edu-
cation as an investment worthy of public funds; there is a societal benefit to the spending. The
literature review showed that making education mandatory highlighted the class disparity among
students and resulted in charitable acts to feed hungry students so they could learn (Vernon 2005;
Nelson, Lowes, Hwang 2007). This disparity existed and exists in Canada, and yet school food is
not de-commodified as it is in even more liberal welfare regimes. Throughout the documents used
in the content analysis of this research, there is some recognition that healthy and well-educated citizens are more productive than those who are not (Esping-Andersen 2009) and that schools play an important role in both health and education. Using welfare regimes to understand the relationship between state, market, and family in school food environments situates Canada in the liberal welfare regime type. Applying the liberal welfare regime as a framework for Canadian school food environments highlights the primacy of the market for students, their families, and increasingly the schools to supply necessities of schooling or as a source of revenue for such necessities. The neoliberal policies characteristic of the liberal welfare regime have meant that underfunded schools have had to rely on the market to address funding gaps.

3.4. Agro-Food Complex

The larger political economy of Canada, either understood broadly as neoliberal or by applying the liberal welfare regime to it, shows that between state, market, and family in producing and distributing social services, Canada frequently relies on the market. Neoliberalism can also be found in food production and distribution policies in Canada, although welfare regimes do not apply as well in this capacity since there are fewer services contained within those policies. The previous chapter (Chapter 2) showed how the agricultural policies of the European Union (EU) and the United States governments contribute to not only regulating the sector as a whole, but impact what is sold and/or served in schools. The agro-food complex is a useful concept for understanding the relationship between state and agriculture. The agro-food complex refers to the:

large number of activities associated with the production, processing, and distribution of food and with the educational, technical and ideological apparatuses that provide support and guidance for the more production-oriented activities of the food economy (Winson 1993: 9).

The agro-food complex, which complements the food regime approach, offers a great deal of specificity to understand relationships between the activities that take place in the food production and distribution sector of the economy. In a liberal welfare regime, the agro-food complex would be market oriented, with the state facilitating the private sector in the production and distribution of food.

To unpack the breadth of activities that fall under the agro-food complex, and to adapt Malassis’ (1973) original concept to the Canadian context, Winson (1993) proposes seven sub-complexes to
the agro-food complex. These include: agriculture and fishing, the food-processing industries, the wholesale distribution and retail sector, the institutional food industry, the input and service industries, and the various state and quasi-state institutions, apparatuses, and regulatory structures (Winson 1993: 110). Because the agro-food complex includes a diverse range of sectors related to agro-food, it is well suited for application in the analysis of school food regulation. Using the agro-food complex for analysis allows for multiple products to be incorporated into the analysis along with a variety of components to the food production as well as a variety of consumers.

The sub-complexes are not silos; the relationship between them is dynamic. There are however, sub-complexes more relevant to this research than others, specifically, the institutional food industry and its relationship to the state and quasi-state institutions, apparatuses and regulatory structures. While all of the sub-complexes contribute to the explanation of food and beverage production, distribution and consumption, the institutional food sub-complex is most applicable to examining school food environments. This sector of the agro-food complex includes a “wide array of institutional environments including schools, universities, corporate cafeterias, hospitals, and government offices” (Winson 1993: 110). This area of the agro-food sector obviously applies to the study of regulating the school food environments.

The institutional food sub-complex provides two points relevant to understanding the school food environment, specifically meal provision. As Poppendieck (2010) noted, the limited infrastructure for food cooking and storage make it difficult to prepare meals on school property and secondly, when it can be done, the costs associated with food provision are high in part because of food procurement, and hiring staff. This latter part is crucial, as chefs and dietitians have education, training and experience necessary to procure and prepare food, where those in education do not necessarily have these skills. Both of these reasons make outsourcing an attractive option for many school administrators.

Approximately one-third of Canadian high schools use a private caterer like Chartwells, a subsidiary of Compass Group, or Aramark to provide cafeteria services (Barton 2010). Chartwells alone is in over 900 schools across the country (Barton 2010). Compass Group made approximately $34.5 billion dollars in 2014 (Compass Group 2014) and Aramark’s North American Food Service division generated approximately $13 billion dollars in 2014 (Aramark 2014). The sizes of these companies have an implication for understanding Canadian school food environments specifically, although it is true in other aspects of this sub-complex in Canada as well. With only two
companies of significance in this sector, there is a high degree of corporate concentration, which is typical of Canada’s agro-food complex (Winson 1993). Aramark and Chartwells constitute a duopoly in catering at the national level, although the number of options increases as the scale of catering needs decreases (Aramark 2014). The limited number of options decreases the number of enterprises bidding on contracts and often, businesses of this size can easily undercut smaller caterers because they diversified in other sectors of food catering as well as uniform and custodial services allowing them to take a loss on school food services if necessary by using the profit from other sectors, to enter into and maintain contracts with school boards, divisions, and districts. This is also referred to as cross-subsidization (Winson 1993). If an institution wants a different caterer, it must be done internally, even though this is not the primary function of these institutions. The corporate concentration extends to the wholesaling sector, as Aramark has expressed concern about their reliance on SYSCO for the majority (57%) of their food products (Aramark 2014). While the risks for Aramark may in turn be risks for those who contract with them, the more pressing concern for schools and the students is the lack of competition means there is less incentive to price food competitively or to offer quality food choices.

Nonetheless, there are advantages to outsourcing food services for school boards, divisions, and districts as they have an advantage over schools that internally supply and prepare food because they can do so on a larger scale than individual schools. Uniform menus and preparation for many schools mean lower overall costs compared to a similar operation in a single school since purchasing in large quantities means less labour is required for purchasing and delivery. Additionally, purchasing in large quantities from a wholesaler is typically less expensive than retail, however retailers may offer a discount for purchasing in large quantities. If food is prepared in a central kitchen, this reduces labour costs. Contracting with large catering companies appeal to schools that have changed or are anticipating changes to nutritional criteria for food or that are required to meet new nutrient criteria. Companies like Chartwells and Aramark provide budget-conscious schools with an opportunity to save money and meet the regulatory requirements.

As mentioned before, there is no requirement for schools to offer food or beverages for sale to students in Canada. Any schools that do sell food and/or beverages, do so electively. As the provinces and Yukon Territory move forward with regulating the school food environments, there is no need for vendors and caterers to comply with the regulations if it causes their expenses to rise or sales to fall below the level that makes them profitable. There is evidence to suggest that these contracts are sufficiently lucrative for the top two to continue to participate in this sector. Ara-
mark expressed concern about the extent regulation may hinder their ability to be efficient (Aramark 2014). Nevertheless, they still conform to such regulations. Compass Group noted that catering is only 24% of their revenue in North America, however they recognize that “less than 60% of the estimated $72 billion food service market [is] currently outsourced” so there is significant opportunity for growth (Compass Group 2014: 23). This includes North America and other institutional catering settings (such as hospitals and prisons) so it does not only apply to public schools in Canada. Although the report does not name any specific Canadian school board, district or division, as mentioned earlier in this section, Chartwells is present in approximately 900 schools across Canada (Barton 2010). With the increased interest from subnational jurisdictional bodies in nutrition, Chartwells is also anticipating the increased concerns and requests for local, organic, nutritious food and is moving forward to incorporate more of these practices in its catering to remain in the schools they are in as well as encourage more schools to outsource their catering (Compass Group 2014). That Compass Group is found in many European countries in the institutional agro-food sector, including school food environments, may contribute to this anticipation, as the industrial diet is less prevalent in Europe and desire for products from alternative food networks has been long standing (Morgan, Sonnino 2008; Winson 2013). The scale of the contracts with school boards, divisions, or districts typically makes it worthwhile for large caterers to conform to subnational government regulations and as such, some have worked with those governments to attempt to harmonize nutritional requirements, although this has not yet occurred (FPTGN 2013).

With that said, the goals of the schools and administrators are not necessarily compatible with those of the catering companies. While growth and profit are the top priorities for publically owned catering companies such as Aramark and Compass Group, if the nutrition and health requirements of the contract are too expensive, they are diverse enough to withdraw and put their focus in a less regulated sector. Even if they are able to afford to conform to the nutrition regulations, the students may not buy the food when competitive foods are available nearby in the external school food environment. Consequently, the catering taking place on school property cannot afford to remain open due to low sales.

The state and quasi-state institutions, apperatures, and regulatory structures sub-complex also apply to this research. This sub-complex expressly applies to the state as a regulator (Winson 1993), so in the case of education and health care in Canada, the state refers to the provincial and territorial levels of government as well as the federal. For this research it is these governments
that are responsible for the regulation of education and health and it is these governments that intersect with school nutrition regulation.

Quasi-state institutions, apparatuses, and regulatory structures are also important to understanding how the school food environment fits into the agro-food complex. Winson (1993) uses this sub-complex to refer to marketing boards, which are ultimately responsible to their respective governments, and are able to exercise a significant amount of influence in their respective sectors with regards to regulation and oversight of production and distribution of the commodity they market. School nutrition regulations do not have a quasi-state arm to do this, per se. The social economy, which includes non-governmental organizations (NGOs), does play a significant role in Canadian school food environments in the implementation of regulation and many can be considered quasi-state apparatuses because they receive government funds. The social economy refers to enterprise that is not-for-profit, independent of government management, and is meant to enhance the social conditions of society and not necessarily charitable because they may generate economic value (Mook, Quarter, Ryan 2010). This definition does include some NGOs, although some are primarily charitable. While Winson (1993) does not apply this sub-complex to NGOs, they can be included as a quasi-state apparatus. Through grants, many NGOs receive government money to facilitate their work in the agro-food complex, including school food provision. NGOs are relevant to the agro-food complex, in part because of increased neoliberal attitudes and actions from the Canadian and provincial governments towards welfare production and provision. NGOs fill in the funding and service provision gaps left by government cutbacks.

At the federal level, Mook, Quarter, and Ryan (2010) explored the relationship between state and social economy. Social enterprises often receive grant money from the federal government or from provincial governments. In 2004, the Government of Canada pledged $100 million over five years to support community development through social enterprise and in turn, supporting market-based strategies to social problems (Mook, Quarter, Ryan 2010). This program was discontinued by the Harper government in 2006, however at the time, the funding for community projects through grants meant the Canadian government was involved, but no longer responsible for long-term, sustained funding or the organization and distribution of the services. In receiving funds from the Federal Government but independently managed, social enterprise involved in the agro-food complex would fall under the quasi-state apparatus subcomplex. The results of this research in the forthcoming chapters will show the provincial governments have followed this trend, by making significant contributions to the social economy to school food environments.
across Canada without being directly involved in the management of them. The quasi-state apparatuses through food related NGOs play a key role in feeding children across the country.

School food in Canada, while not tied to agricultural policy, is a component of the political economy of the country and the agro-food complex is a useful concept to understand the relationship between government and the market. Understanding the size of the institutional food sub-complex in Canada as well as the degree of concentration is important to appreciate its relationship with regulatory structures.

3.5. Public Plate

The public plate is a concept used by Morgan and Sonnino (2008) to describe the way food and beverages are procured for public institutions, including hospitals, prisons, and, of course, public schools. These establishments belong to the institutional sector of the agro-food complex; however, in the agro-food complex context they can be procured with private funds. What makes procuring food and beverages for public-sector institutions different from private ones such as corporate cafeterias, is the foods and beverages procured for these particular institutions are subject to procurement rules that the private sector is not subject to. In this sense, they are de-commodified and would aptly describe the school food in social-democratic countries. One of the points Morgan and Sonnino (2008) emphasize is the additional consideration that must be taken when purchasing for the public plate because the purchase is being made from public coffers. Revenue generated from taxes is used to make purchases of food products or to caterers to supply public institutions with a food environment. When procuring for the public plate, states should ensure these funds are spent in a way that addresses the wants and needs of the population balanced with fiscal responsibility (Morgan, Sonnino 2008). In other words, contracts to suppliers should be subject to competition to limit opportunities for corruption or favouritism for an enterprise that may directly or indirectly financially benefit a public official (Morgan, Sonnino 2008). To prevent this, there are many rules and regulations for public procurement that private procurement is not subject to.

The additional scrutiny that accompanies public spending, specifically for institutional food and beverage provision, also provides the state with opportunities to move forward with political objectives. In this way, the state has the capacity to regulate the private sector that it does not otherwise (Eckersley 2004). As discussed in brief in the agro-food complex section, the contracts with government institutions are large and have the potential to be profitable, especially where there is
an obligation to provide food and beverages. Because of the scale of purchase, by asking for nutritious foods and beverages, and/or locally sourced, organic, environmentally sustainable, or additional criteria, there is incentive for the vendors and caterers to comply and the state can use the market to make changes to the agro-food complex (Eckersley 2004).

For school food environments, the state can have a strong influence on the market through its regulatory powers and the scale of the contracts. There are opportunities to make structural changes to the market through either of the aforementioned ways of regulating the public plate. The example used by Morgan and Sonnino (2008) is how the state can mandate greater environmental sustainability through regulation. States with democratically elected governments are somewhat beholden to the wants of the citizenry, therefore if the people desire changes to food procurement procedure, the state has an interest in making those changes. Markets on the other hand, as social institutions “are not amenable to the same degree of citizen control; at best they are responsive to consumer sovereignty rather than to a political sovereignty or a politically constituted public” (Eckersley 2004:12). In the case of nutrition regulation, in which the public’s habits are creating a public health concern, regulation of the public plate is a small-scale intervention from the state that the private sector would be unable, or unwilling to do.

What is also highlighted through this example are the challenges that arise from trying to make grassroots changes to procuring for the public plate when the state is not willing or able to make those changes. In the example given by Morgan and Sonnino (2008), for those looking to make the school food environment more environmentally sustainable in the European Union (EU), making changes to how foods and beverages are procured for schools within a state is complicated by agricultural regulations held by the EU as a whole (Morgan, Sonnino 2008). Consequently, the individual state is unable to make the desired changes institutionally, and local level efforts to become more environmentally sustainable may be in violation of the existing regulations and forced to stop.

The public plate is a useful concept for understanding the relationship between the state and the market, especially in terms of school food procurement as Morgan and Sonnino (2008) outline in great detail in their book. In Canadian schools however, there is no public plate, at least not on any large scale. Across the country there are a few examples of public funds being donated to NGOs for nutrition programs, some examples of which will be included later chapters. Food services in Canadian schools are generally sold, rather than given to students through a tax-
subsidized program. The decision to provide foods and beverages for sale is the schools’; the decision to partake in the food available in the internal school food environment is the students’. Where students have created a sufficient demand for schools to sell foods and beverages and where sufficient facilities exist, schools choose provide some manner of market place for those students to purchase food during the school day as long as the costs to do so can be covered through sales. There is no onus on tax payers. While it is a market place, due to concern for health and wellbeing, the school food environment selling food and beverages to students is subject to state regulation. Understanding the regulation of this private plate is useful for appreciating the limitations to regulating the school food environment in a liberal welfare regime.

Canadian schools purchase from the institutional sector of the agro-food complex for their school food environments, however it is done with public funds. Schools are under no obligation to provide food and beverages for sale to students, but if they choose to, they are now required to meet certain standards because of the regulations enacted at the subnational jurisdiction. Students who purchase food and beverages from these environments are relying on the market to provide the midday meal with funds obtained through their own labour performed at after-school jobs or the labour of their parents who in turn provide them with lunch money. If students do not purchase lunch at school, and eat during the school day (i.e. they do not skip lunch), they are reliant on their parents or guardians to ensure they have food for lunch. Because the state does not supply food and beverages for a meal during the school day, the private plate is more suitable concept than the public plate to describe food service in Canadian schools. This would refer to the food and beverages procured from the market for personal consumption. By this definition it would apply to the school food environment as was defined earlier in this chapter, including the food that is not regulated by the policies and guidelines used in this research.

A public plate is subject to more regulation than a private one, however in the Canadian school food environment, the private plate is still subject to regulation. There is a contradiction between the liberal welfare regime and a social responsibility to the health and wellbeing of students that make regulating the school food environment in Canada challenging and, as this research will show, ineffective.

3.6. The School Food Environment

Finally, this research examines the regulation of school food environments in Canada, which requires conceptualizing what that is. For this research, the school food environment refers to spac-
es where foods and beverages are purchased and/or consumed during the school day. This means the school food environment includes any spaces where students consume food and beverages brought from home as well as where they are sold during the school day, but not necessarily on school property. This definition includes staff as purchasers and/or consumers and though researching the regulation of eating spaces in workplaces is important in understanding overarching dietary habits as well as health (Lautenschalger 2006), the focus of this research is on students. This definition could also include the food environment in higher education, but the focus on public education is tied to the state’s provision of education and what is included with that. Further, this definition includes the home for students who return home for lunch during the school day. This space is important as dietary habits are learned in the home first, and for school aged children, their parents and guardians bear the responsibility of food shopping. It does, however, fall outside the purview of the regulatory levers this research examines, so it will not be included in this research, but should be included in research that is specifically oriented towards student eating habits. While higher education is provided by the state in some countries, the majority of the ones included in the literature review require the student to pay in part to attend.

In a different country, including the spaces surrounding school property in the definition of school food environment would not be necessary. As the literature review showed, there are countries that offer a midday meal because it is seen as a cost intrinsic to public education (Morgan, Sonnino 2008; National Food Agency Sweden 2013; Finnish National Board of Education). Further, the needs-based programs of the United Kingdom and United States emerged from the charitable contributions of concerned parents who recognized that if students were going to be attentive in school, they needed to be fed (Vernon 2005; Nelson, Lowes, Hwang 2007). The common thread through both of these approaches to school meal provision is that the school serves a custodial or caregiving role in society.

While feeding may not be the primary function of schools, they are frequently the sites of food retailing and dining. In Canada, without any sort of feeding program, the school food environment is different from many other countries with similar political and economic systems. Public education in Canada emerged as a way to establish an identity independent of Britain and the United States, a way to attract settlers, and was seen as a way to keep delinquent children off the streets (Wotherspoon 2004). The need to keep students fed was not a priority, even though public schools were a site for reform-oriented interventions (Wotherspoon 2004). Because of the varied background of students these schools were receiving, the provincial governments authorized
teachers to act “in loco parentis, effectively granting them parental responsibilities for the time that children were at school” (Wotherspoon 2004: 64). Even with these responsibilities, food was not an issue. The remainder of this chapter will discuss themes that contribute to an explanation for this. Without a feeding program, the attention of this research is on the food and beverages for sale because they are subject to the regulations issued by the provinces and Yukon Territory, the contents of which will be discussed in greater detail in the following chapters.

Food and beverages are sold in schools through vending machines, canteens, tuck shops, and cafeterias, as well as during sporting events, and parents’ evenings. Reiterating the review of the literature, the items that have been popular among students have not necessarily been nutritious. Nestle (2007), Poppendieck (2010), Winson (2008) have addressed the types of food and beverages that students prefer to purchase and consume, how those products are tied to the larger political economy of the school food environment. Morgan and Sonnino (2008) and Poppendieck (2010) addressed how limitations in existing infrastructure within the school food environment for storing and serving fresh foods. Consequently, schools are limited to providing packaged, heavily processed shelf-stable food and beverage products to sell to students. Winson (2008) provided a critical look at the extent the school food environment in one Ontario school board has been colonized by pseudo foods as well as the lucrative nature of pouring rights contracts for school boards. The on-property school food environment has not been conducive to promoting healthy eating habits, which is a key reason subnational governments have chosen to intervene.

Food service vendors surrounding the school are part of the school food environment as well. These spaces are receiving more academic attention of late (Austin et al. 2005; Winson 2008; Davis, Carpenter 2009; Vine, Elliot 2014) but it falls outside the purview of the subnational jurisdiction regulations. Vine and Elliott (2014) refer to these spaces as the external school food environment, which will be applied to discussion of these spaces throughout this thesis. These spaces are relevant to understanding the limitations of subnational school nutrition regulations because they are part of the school food environment. These spaces are somewhat less relevant for elementary school students because they have less disposable income and more restrictions on leaving school during the school day. For older students, food and beverage vendors off of school property are important part of the school food environment. As important as these spaces are to the school food environment and the students who eat in them, they are not regulated as the foods and beverages sold on school property are. Because of the import they have, for this research, the
school food environment will include the external school food environment because they are accessible to students during the school day.

3.7. Conclusion

The purpose of this chapter is to theorize school food regulation in Canada. Key concepts necessary for the forthcoming chapters have been operationalized so that they are applicable to school food environments and the results of the research. Beginning by defining the school food environment in a way that includes the area surrounding school property when it is accessible by students is necessary because, as the literature has shown, this space is important to students and consequently, to researchers to understand how students eat during the school day. It is also necessary to address the problems that emerge when school nutrition is regulated but cannot include the whole of the environment in their regulations.

School food environments are regulated, however, and understanding how Canada distributes regulatory powers is necessary for understanding that the subnational jurisdictional regulations are different and provides a lens to understand those differences. Each province and Yukon Territory, either through their departments of education, health care, or both, set school nutrition regulations which results in eleven unique regulatory approaches. With that considered, these subnational jurisdictions share an absence of a state funded school-day meal. The school food environments in Canada are dining areas only or are market places, subject to government nutrition regulations, competing with vendors off of school property for business. This commonality will be used to demonstrate the neoliberal tendency towards market reliance to supply welfare provisions for both students and schools in Canada.

The contradiction between implementing school nutrition regulations for the benefit of student health and the need for school food environments to compete with off property food and beverage venues for student money highlights how school food and its regulation is a small, but crucial part to understanding the larger political economy of the country regulating it. In Canada, the state limits the extent it regulates the private sector in an effort to encourage business. This is a product of a general trend towards neoliberalism that Canada and other countries have embraced since the 1980s.

For this component of the analysis, as well as to situate Canadian school food environments in a global context, welfare regimes are useful concepts, specifically the liberal welfare regime. By
using this concept, school food can be explained as a component of education provision, and Canada can be understood both in relation to how it is provided in other liberal welfare regime countries as well as those that have not embraced neoliberal policies as fully, as in Sweden and Finland. The schools provide a market place for students to spend their consumer dollars but in the interest of promoting the health of said students, regulate this market in a way that other parts of the school food environment are not regulated.

The school food environment is a component of the agro-food complex, which is regulated by the same manner of policies as the rest of the country’s political economic activities. As a state-owned institutional buyer of food and beverages, those responsible for procuring for school food environments have an interesting relationship with both government and the market. Because the school food environment in Canada is market-based, that is, it offers a market for students to purchase from and does so in a large-scale, vendors and caterers are willing to collaborate with schools to address their requests. This means young people are able to spend their money as they choose. At the same time, because departments of education and schools have a responsibility to the health and wellbeing of their students in their care, administrators responsible for regulation have begun to recognize that it is irresponsible to allow students to have access to the unhealthful food even if it is a source of revenue for the schools. The objective is to help students make healthful food and beverage choices while they are at school, reinforcing messages about nutrition and health they receive in the classroom. Those involved in regulating vending machines, canteens, tuck shops, and cafeterias recognize these spaces should support students in making healthy choices and include healthful foods and beverages, even if they do not sell as well as the pseudo foods that typically populate these spaces, including potato chips, chocolate bars, pop and sports drinks. Regulating the school food environment, requires reconciling the school food environment offerings with what is taught in the classroom about health and nutrition.

The research for this dissertation examines nutrition regulations for school food environments for those subnational jurisdictions that have them. In these documents, the various approaches to negotiating the promotion of healthy eating with the neoliberal ideals of personal responsibility and choice. The next chapter (Chapter 4) outlines how the research was done to address this, the methodological considerations, and the limitations of this research project.
Chapter 4
Methodology

Chapter 2 reviewed the existing literature on school food environments, including those in Canada, United States, United Kingdom, and other OECD countries. Presently in the international context, the literature centres on school meal programs rather than the policy levers that govern those programs. In the Canadian context, there is a growing body of literature that addresses the policy levers used to improve the nutritional quality of foods and beverages provided to students during the school day. Chapter 3 addressed the political and economic issues related to regulating food and children. This chapter provides the methodology and methods used to frame and conduct the research undertaken to address the research questions and objectives given in the Introduction.

In the first part of this chapter, the methodology is discussed, providing an explanation for why a comparative case study and content analysis were appropriate for addressing the research questions. The second part of this chapter outlines the methods used to obtain the data and the process used for analysis, the results of which are given in the following chapters.

4.1. Comparative Methods

Comparison is the crux of the primary research question driving this research, as given in the introduction. Esping-Andersen (1990) and Harper, Wood, Mitchell (2008), whose research shaped this dissertation, employed comparative methods in their respective works. Esping-Andersen (1990) compared approaches of welfare provision between several OECD countries, creating a typology. Harper, Wood, Mitchell (2008) compared approaches to school lunch provision in eighteen countries. Comparative methods frame this research and understanding the assumptions and considerations associated with this approach provide justification for the way this research was carried out.

There are many instances of comparison in social science research and many authors have made important contributions to the discussion of comparative methodology (Goldthorpe 1997; O’Connor, Orloff, Shaver 1999; Clement, Prus 2004; George, Bennett 2005). Charles Ragin’s
work on comparative methods (189; 1997; 2007) is best suited for outlining the methodological considerations for this research project because of his focus on qualitative, case-oriented comparisons. Studies employing comparative methods generally share the use of “macrosocial units in explanatory statements” (Ragin, 1988: 5) and are interested in identifying the “similarities and differences among macrosocial units” (Ragin 1989: 6). Generally, the comparative approach is used to “uncover patterns of invariance and constant association” (Ragin 1989: 51). This chapter will outline how the logic of comparative methodology as presented by Ragin (1989; 1997; 2007) shaped the research undertaken for this dissertation.

4.2. Trustworthiness

Achieving and demonstrating rigour, or trustworthiness as it is often called in reference to qualitative methods, is important for ensuring that the data and analysis are reliable and valid. This section addresses trustworthiness and approaches to achieve it in qualitative research. Later in this chapter, the methods used to meet the criteria will be discussed.

Lincoln and Guba (1986) outlined criteria and several approaches for each criterion so that qualitative methodologies are perceived with a level of rigour typically associated with quantitative methods. Those criteria include credibility, transferability, dependability and confirmability (Lincoln, Guba 1986: 76-77).

These criteria can be applied to a variety of qualitative methods, including content analysis, which was employed to collect and analyze data for this research. To achieve trustworthy data collection and analysis, several of the approaches Lincoln and Guba (1986) suggest were employed, including triangulation, member checks, and thick-description.

4.2.1. Triangulation

One of the ways to achieve credibility, and approach trustworthiness in data analysis is to employ triangulation (Lincoln, Guba 1986). Qualitative methodology often employs triangulation as a “means of enhancing reliability and validity” of the data collected (Vidovich 2003: 78). Triangulation is a “validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study (Creswell, Miller 2000: 126). This is done through a variety of ways, including mixed methods, multiple sources, and/or multiple researchers (Vidovich 2003; Lincoln, Guba 1986). While many types of triangulation
exist, multiple sources were used to triangulate the data and interpretation for this research. In other words, triangulation was used to cross-check or confirm the interpretation of data from one source by using an additional source as a reference. An additional source that provides similar results as the initial source acts as validation for the interpretation, while differences or discrepancies can provide a new point of inquiry.

The regulatory documents were the primary source of data for the content analysis. Triangulation was employed where the data gathered from the documents, the collection of which is discussed in greater detail later in this chapter, is verified with additional data from semi-structured interviews, and supplemental materials. The documents were used to identify the contents of the school nutrition regulations, and the semi-structured interviews and supplemental materials were used to assist in the verification of the interpretation of the results of the analysis of the documents. The supplemental materials were included when the interview participant suggested they would be useful to the researcher. The researcher did not seek out additional materials independently.

Further, the data collected from the regulatory documents, semi-structured interviews, and supplemental materials were analyzed against the background of the existing literature on school food programs by considering how they fit into the larger political economy of the welfare state, and where they are positioned in relation to key issues of health and nutrition in school food. Although the literature was not part of the content analysis, it informs the analysis and the research done by others in this area allows for a more detailed description of school food environments within Canada and elsewhere (Creswell, Miller 2000). This both strengthens the triangulation of the data sets, and helps confirm how the findings are applicable within the Canadian context, while also providing international comparison (Lincoln, Guba 1986).

In addition to triangulation, member checking the results and analysis with participants aided trustworthiness of data. Member checks occur when the researcher solicits responses from the participants (Lincoln, Guba 1986). Participants were given an opportunity to review the results and the analysis for accuracy and ask questions or provide the researcher with any additional feedback. Only one participant chose to respond to this however, but her feedback was appreciated. Without comment or correction, it is assumed the participants were satisfied with the accuracy of how the information they provided was used.
4.2.2. Reflexivity

Reflexivity is another strategy qualitative researchers use to strengthen the validity of their research. Researcher reflexivity is a validity procedure that acknowledges the role of the researcher in shaping the research including “whether the data are saturated to establish good themes or categories and how the analysis of the data evolves into a persuasive narrative” (Creswell, Miller 2000: 125). Charmaz (2007) discusses this process as “wrestling with preconceptions” about the research subject matter (67). Disclosing the beliefs or positions of the researcher, which shaped category definition and data analysis, is important so that the reader can “bracket or suspend those researcher biases as the study proceeds” (Creswell, Miller 2000: 127).

It was important to the researcher that all aspects of the school nutrition regulations were captured by the content analysis, for the data produced from this process to speak for itself and be minimally impacted by the positionality of the researcher. In the interest of research reflexivity, the researcher is an eater and a former student of Canadian public schools, having eaten in the internal and external school food environments during the school day, as well as having returned home for lunch during elementary school. These personal experiences could be further explained and analyzed in a more appropriate project, however they may have impacted the data collection, development of the codebook, interview schedules, and data analysis.

More pertinently, the researcher chose the theoretical concepts, focusing on neoliberalism and related ideas, that not only shaped the creation of the interview schedules, but may have also influence the development of the codebook used for the content analysis of the regulatory documents, as well as the analysis of the results. It should also be acknowledged that the development of nodes during initial coding was shaped by the existing literature on school food environments, which was covered in Chapter 2. As such, it is possible some of the nodes reflect the themes found in the literature review and themes that are present in the documents but not in the literature were not acknowledged.
4.3. **Content Analysis**

The purpose of this section is to review the utility of content analysis in social science research generally as well as to this investigation. Later sections of this chapter will provide the specific methods used to collect and analyze data.

Content analysis generally refers to the techniques used to analyze the content of a sample of text, where text can refer to words, but also to images, symbols, ideas, or other form of message (Krippendorff 1980; Neundorf 2002; Heck 2004; Neuman 2006; Denscombe 2010). Content analysis can be used as a quantitative method (Neuendorf 2002), and is frequently used in communications and media studies to look for messages contained in text (Neundorf 2002; Neuman 2006; Denscombe 2010). The messages may be manifest, in other words, they are “visible, surface content” (Neuman 2006: 325) of the text, or they may be latent, which refers to the hidden or implicit messages in the content (Neuman 2006).

Qualitative content analysis often seeks to find and understand the latent messages in content (Kondracki, Wellman, Amundson 2002), however Denscombe (2010) suggests manifest content may be analyzed qualitatively as well, even when this approach counts the frequency of words and/or phrases in the content. Each of the authors included in this brief review agree that manifest or latent, content may contain messages that the author did not intend (Krippendorff 1980; Kondracki, Wellman, Amundson 2002; Neundorf 2002; Heck 2004; Neuman 2006; Denscombe 2010).

The content analysis conducted for this research considered only manifest messages in the documents. As regulations, the intent is for the manifest content to act on school food environments as directed. Latent messages likely exist, however for the purposes of addressing the research questions, collecting and analyzing the manifest content of these documents was sufficient.

In the interest of trustworthiness and triangulation, a manifest content analysis was also conducted with the transcripts of semi-structured interviews. These interviews allowed the researcher to achieve confirmation of the interpretation of the content analysis of the regulatory documents. The interviews also provided insight into the implementation of the regulations, and aspects of the school food environment that are not addressed by the regulatory documents, but are important to the promotion of healthy eating in the school food environment or as an obstacle to healthy eating in the school food environment. Where the participants suggested the researcher
could benefit from seeing additional materials that pertain to the regulation of the school food environment without being part of the regulations themselves, those were included as well.

4.4. Units of Study

The research for this dissertation consisted of a case-oriented comparison of the school food and beverage regulations of the subnational jurisdictions of Canada that have regulations. In practice, subnational jurisdictions refer to provinces and territories of Canada. The units of study for the comparative case study are the Canadian subnational jurisdictional school nutrition regulations. The cases include the relevant regulatory documents, as well as information obtained from those involved with the development and/or implementation of the regulatory documents, creating a detailed account of the school nutrition regulations for each subnational jurisdiction.

4.5. Data Collection

Data was collected from a multitude of sources and organized by subnational jurisdiction before conducting the content analysis. The research relied on data from the regulatory documents themselves, the collection of which will be described in detail below. In an effort to support the interpretation of the content analysis of the regulatory documents, semi-structured interviews were conducted with stakeholders involved with the development and implementation of the regulations. During some of those interviews, participants gave the researcher additional information, often textual, about initiatives that support the regulations without necessarily being part of them. The process used for the content analysis of the documents and the semi-structured interviews will be described in a later section of this chapter.

4.5.1. Regulatory Documents

Referring to the research questions given in the introduction, the documents issued by each of the subnational jurisdictions were included in the data collection. The documents were selected beginning with a search of the provincial and territorial government websites pertaining to education and health searching for phrases including and related to “school nutrition policy”, “school nutrition regulation” “food and beverage policy for schools”. A complete list of the documents found and used for the content analysis can be found in Appendix A. Each of the ten provinces and Yukon Territory had some documentation pertaining to the regulation of the nutrition of foods and beverages permitted for sale on school property. New Brunswick, Nova Scotia, Prince
Edward Island (PEI), and Saskatchewan had more than one document that addressed school nutrition regulation. PEI, however, had a policy for each English-Language school board but the boards had amalgamated, and the new school board opted to employ the former Eastern School district’s regulation to all English-language schools in the province. The regulatory documents for PEI consist of the Policy Statement and the Administrative Regulation, as outlined in the table summarizing the comparative case study which includes the title of each relevant document to each subnational jurisdiction.

This method for finding relevant documents did not produce any results for Northwest Territories or Nunavut, so they were not included in this research.

4.5.2. Semi-structured Interviews

The semi-structured interviews allowed for confirmation of the interpretation of the results of the content analysis as well as greater contextual information about the development and implementation of the regulations that is not in the documents themselves.

Permission to conduct interviews was given by the Research Ethics Board of the University of Guelph (REB#15JA003). The application with amendments that was approved by the Research Ethics Board can be found in Appendix B. The two interview schedules have many similar questions but also have some role-specific questions for those involved in the development and/or writing of the regulations as well as some role-specific questions for those involved in implementation of the regulations.

During some interviews, participants made reference to additional materials that were later shared with the researcher via email. These materials provided additional evidence of initiatives taking place in schools to support the nutrition regulations that were not or are not part of the regulations themselves. The researcher did not actively seek this type of material independently of the suggestion of the interview participants.

4.5.2.1. Inclusion/Exclusion Criteria

The population from which to draw potential interview participants included adults, male and female, who were directly involved with the development and/or writing of school food and beverage regulations, indirectly involved with the development and/or writing of school food and beverage regulations, those directly involved with the implementation and/or oversight of the
school food and beverage regulations, and those indirectly involved with the implementation and/or oversight of school food and beverage regulations. This was further limited to each of the subnational jurisdictions of Canada that have regulations regarding the nutrition of foods and beverages allowable for sale in schools. Individuals who did not meet at least one of the inclusion criteria were excluded from recruitment.

4.5.2.2. Recruitment Strategy

To address the research question, only those who were involved with the development of the school nutrition regulations or their implementation were contact to participate in the interviews. Recruitment was guided initially by contacting the department within the subnational jurisdictional government from which the document was obtained. In some instances, the author, or authors of the documents were named in the document itself or on the website the document came from, providing the researcher with a contact to begin investigating potential interview participants. Where authors were not given, the department was contacted by telephone or email, depending on the contact information given in the document itself or the document website, asking to be directed to the person with knowledge of the development and/or implementation of school nutrition regulations for that subnational jurisdiction. The message used for this communication can be found in Appendix C. Some snowball sampling was also used when participants suggested people they were aware of who may be able to contribute to this research. Participants were not compensated for their participation.

When the researcher had contacted an appropriate person, the potential participant was provided with information about the research, and if interested in, and able to participate, they were provided with a consent form, and the researcher and participant proceeded with the interview or made arrangements to speak at a more convenient time. Prior to the interview, the consent form was reviewed with the participant, and the participant was granted an opportunity to ask questions prior to giving consent to participate. Further, participants were assured they could ask questions at any time during the interview and that they could withdraw from the research at any time.

Seventeen people agreed to participate in total: two from Yukon Territory, one from British Columbia, two from Alberta, two from Saskatchewan, three from Manitoba, three from Ontario, two from New Brunswick, and two from Newfoundland, who participated in the interview together. A complete list of participants and their roles within their subnational jurisdictions can be found in the next chapter.
Representation from each subnational jurisdiction with a school nutrition regulation was sought, however, the researcher was unable to get participation from Quebec, Nova Scotia, or Prince Edward Island. As per recruitment, and to ensure trustworthiness of the data provided, each participant was chosen because of his or her involvement in school nutrition regulation in a professional capacity, either at the subnational jurisdictional level, school district/division/board level, school level, or school-based nongovernmental organization. Through this, the researcher hoped to learn from expertise, although this is not to discount the value of contributions from those involved in the school food environment in a non-professional capacity, including parents and students.

4.6. **Data Storage and Security**

Data storage and security were important throughout this research process, particularly because participants were granted confidentiality in an effort to allow them to be forthcoming and be comfortable sharing without concern of social or economic risks. One of the ways confidentiality was achieved was by discussing with the participant how it would be possible to incorporate a quotation or information from them without being identified. For some participants, they belong to a small enough subpopulation that certain information may cause them to be identifiable. As such, in subsequent chapters when participants are referred to, this is done using vague descriptors. The researcher also shared the results and analysis with participants, so that they could confirm that they were not identifiable.

Although interview participants were granted confidentiality, direct identifiers were collected, and security measures were taken to ensure that confidentiality could be maintained. A master list containing direct and indirect identifiers, as well as a code comprised of the subnational jurisdiction the participant is from and the date the interview took place, for all participants has been compiled and stored on an encrypted external hard drive. Having a master list that included direct and indirect identifiers with the code each participant was assigned made removing participants who no longer wished to participate possible.

Telephone interviews were recorded using a digital recorder, done with knowledge and consent of the participants, as discussed above. Once the audio files were uploaded to the encrypted laptop, using FireVault for Mac, transcription of the file took place within twenty-four hours of the completion of the interview and then the audio files were deleted. Direct identifiers were removed from the transcriptions. Transcripts of the interview are stored on a password-protected laptop.
and backed up on an encrypted external hard drive. The transcriptions will be stored on the en-
crypted external hard drive for seven years.

Two interviews with participants were conducted through e-mail due to restrictions on the partic-
ipant and at his/her recommendation. The interviews were done with the participant’s recognition
that the textual data would be stored in the same manner as the transcripts from recorded inter-
views, and that while the researcher would delete the e-mails once the textual data was down-
loaded on to the secure devices for analysis and storage, the security of the servers of the Univer-
sity of Guelph could not be guaranteed.

4.7. Analytical Strategy

Content analysis was conducted on both the regulatory documents and the semi-structured inter-
views. Because the semi-structured interviews were conducted to support the findings of the doc-
ument analysis a different analytical strategy was used. This will be described in greater detail
later in this section.

4.7.1. Analytical Strategy for Documentary Data

As mentioned previously in this chapter, the documents formed the main source of data, however
the semi-structured interviews allowed for the results of the content analysis of the documents to
be verified. The documents also aided in the preparation of the semi-structured interviews and in
the triangulation of the interview data.

Each document associated with the regulation of the nutrition of foods and beverages allowable
for sale on school property was sorted by subnational jurisdiction and whether it was a policy or a
guideline upon being imported into NVivo 10 for Mac. Following this, each document was ini-
tially open-coded into nodes with the assistance of NVivo 10 for Mac. A node is a name given to
the idea each unit of data coded to it conveys.

Content analysis requires recording units (Weber 1990) or units of data (Charmaz 2007) to be
established for the coding process. In other words, coding requires the identification or definition
of what consists of data for analysis. It can be a word, a line, a sentence, or a paragraph of text
(Charmaz 2007). Having a well-defined unit of data increases the ability for the research to be
consistent, one of the criteria for trustworthiness according to Lincoln and Guba (1986)
of data used for the coding were sentences or bullet points, depending on the document in question.

This was a textual content analysis therefore images in the documents were excluded. Also excluded were tables of contents, glossaries, bibliographies and examples. Examples were excluded because they were used to illustrate points already in the textual content of the documents.

Each unit of data in each document was classified according to the idea contained within it. The initial coding process was grounded in the data to capture what the documents contain. The aim was for the coding to be open-ended, while acknowledging the prior ideas held, as were addressed in the reflexivity section of this chapter (Charmaz 2007). The nodes used to organize them were constructed to fit the data from the initial coding phase. In keeping with the open-ended coding strategy, if a unit of data contained more than one idea, it was placed into more than one node.

Following the initial coding process, the nodes were reviewed and refined for consistency and validity. In other words, the researcher made sure each unit of data contained within the node belonged to that node, and was the node representing the data it contained. This produced a codebook, which can be found in Appendix D. In the codebook, it can be seen that the nodes were divided into two categories: justification nodes, and regulatory nodes. The former are nodes that offer explanation or motivation for the regulations; the latter are nodes that act on the school food environment.

That the documents offered some explanation for why they were created provided the researcher with an initial answer to the research questions stated in the Introduction as well as guidance for the development of the interview schedules for the semi-structured interviews to ask questions to confirm or clarify these observations.

In the review and refinement stage of coding, data that was inconsistent with the node it was initially coded to was uncoded and, where appropriate, coded to a node better suited for that unit of data.

Only the researcher coded, due to financial restrictions preventing the hiring of additional coders. Additional coders can help with ensuring the external validity of the codebook (Weber 1990; Neuendorf 2002), however, having only one coder helped ensure the codebook had internal validity, as multiple coders could interpret the meanings of the codes differently (Neuendorf 2002).
The results of the content analysis were initially analyzed using frequency counts and percent coverage in document with the assistance of NVivo 10 for Mac. These descriptive data were helpful for providing the researcher a broad perspective of what ideas were addressed in all of the documents in each subnational jurisdiction, which were then used to guide the analysis that addresses the research questions. They are limited in their utility for analysis due to differing lengths of and number of documents used by each subnational jurisdiction. As such, presence and absence of the nodes in the subnational jurisdictional documents was the principal finding used for analysis.

To address the research questions, performing a content analysis on the regulatory documents revealed that some messages appeared in the documents of a school nutrition regulation of a subnational jurisdiction more frequently than other messages, and as messages appear in the regulations of one subnational jurisdiction, they may not appear in each subnational jurisdictional regulation. The results will be presented and explained in greater detail in the next chapter (Chapter 5).

Node matrices, another function of NVivo 10 for Mac, provided the researcher with the opportunity to cross-tabulate the descriptive data according to type of regulation and subnational jurisdiction. Most pertinent to addressing the research questions was a cross-tabulation of the regulatory nodes with subnational jurisdictions and the justification nodes with subnational jurisdictions. These tables are found in the next chapter (Table 5.35 and Table 5.36) and their relevance to addressing the research questions discussed in Chapter 6. By cross-tabulating the regulatory and justification nodes according to subnational jurisdiction, identifying the differences in content was possible.

4.7.2. Analytical Strategy for Semi-structured Interviews

Sixteen interviews were conducted with seventeen participants between April and September 2015. Of the eleven subnational jurisdictions with school nutrition regulations, there were participants from each except Quebec, Nova Scotia, and Prince Edward Island, although potential participants were contacted. Fourteen of the interviews were conducted over the telephone, including one interview that included two participants at the same time, per their request. The telephone interviews lasted between twenty minutes and an hour and a half. Two other participants, due to time constraints, participated by e-mail.
Two interview schedules were developed, with some questions specifically tailored to those who developed the regulations in one, and some questions tailored to those who implement the regulations in the other. Otherwise, in the interest of triangulation, each schedule asks the same questions. The extant literature, as well as the initial content analysis of the documentary data, helped guide the development of the interview schedules (Galletta 2013), both of which can be found in Appendix E.

The transcripts from the interviews were imported into NVivo 10 for Mac for analysis. The intent of the interviews was to confirm the findings and interpretation of the content analysis of the documents. As such, the transcripts were not analyzed with the same initial coding process as with the regulatory documents. The codebook developed from the analysis of the regulatory documents was also applied to the interview transcripts. It is important to note, however, the interview schedules shaped the topics mentioned during the interviews, thus the presence of those topics cannot be taken as data in and of themselves as was the case with the analysis of the regulatory documents, but the context in which they are mentioned by the participant can provide confirmation of or refute what was found in the regulatory documents.

Although the transcripts were not subject to the same initial coding process, over the course of the interviews, and during the analysis, it was clear that there were themes being brought up by the participants that were not addressed in the manifest content of the documents. Where an idea or theme emerged from the interview data and was present in more than one interview, it was made coded as a node and included in the analysis. These themes were added to the codebook as ones derived from the interviews. The interview schedules were not designed with the intent of producing new nodes for analysis, and the interview participants are not subnational jurisdictionally representative. As a consequence, the results from the interviews could be dismissed as anecdotal. The qualitative paradigm, however assumes reality is “what participants perceive it to be” (Creswell, Miller 2000: 125). It can be suggested the information held by the participants is privileged because of their roles in the school food environment, and can be treated as such in the analysis. Opportunities for future research to more systematically consider and ask about such themes exist from this first examination.
Supplemental materials, as suggested by the interview participants, were not included in the content analysis per se. They were consulted to aid in the analysis of the semi-structured interviews, as the participants referred to these materials as examples of what was occurring in their schools, school districts/divisions/boards, or subnational jurisdictions.

4.8. Summary

The research conducted for this dissertation is a comparative case study of the school nutrition regulations of the subnational jurisdictions of Canada. Documents used in the regulation of school food environments in subnational jurisdictions of Canada were compiled and a manifest textual content analysis was conducted to identify the themes covered, to then compare with those of other subnational jurisdictions. Semi-structured interviews were conducted with those who developed and those who implement the regulations in their subnational jurisdiction to confirm or find discrepancies with the analysis conducted on the documents. The transcripts of the interview were analyzed using the nodes from the content analysis done on the documents, however the interviews did produce relevant information that was beyond the scope of the intent of the interview schedules used, which was also included in the analysis. Additionally in some instances, interview participants made reference to supplemental materials, which were provided to the researcher. These materials were not analyzed systematically, but instead used to illustrate the point the participant was making in the context he or she was making it.

The data collected was organized according to subnational jurisdiction producing detailed cases of the school nutrition regulations in each. This is because the units of study for the comparative case study are the Canadian subnational jurisdictional school nutrition regulations. The results of this process are presented in the next chapter (Chapter 5).
Chapter 5

Results

The first part of this chapter presents the detailed accounts of the case studies, providing the results of the qualitative study of the school food and beverage regulations of each of the ten provinces and Yukon Territory. The presentation of the cases allows for the information from the multiple sources to be presented in a cohesive manner.

The second part of this chapter presents the results of the content analysis of the documents regulating food and beverages sales in schools in the ten provinces and Yukon Territory, and the results of the content analysis of the semi-structured interviews. In some instances, the interviews introduced supplemental materials, which were not included in the content analysis, but were, however, used to provide additional information where relevant. The codebook, developed for this analysis, is in Appendix D.

The chapter concludes by stating key findings from the results that will be elaborated on in the next chapter.
5.1. Case Studies

5.1.1. Stakeholders

The following information in this chapter will show many of the unique circumstances in each of the subnational jurisdictions in Canada that are regulating school food and beverage sales. The stakeholders, however, are consistent throughout. As the literature review showed, there are many stakeholders involved in the regulation of nutrition of foods and beverages sold in schools. These include, but are not limited to students, their families, teachers, as well as school administrators, and staff involved in food service, food producers, food service providers external to schools, and the larger community. Further, government, especially at the subnational jurisdictional level in Canada, is included as an extension of the larger community, which benefits from children and their families developing and maintaining healthy lifestyles, but also as the providers of social services directly related to the education and health for children and their families.

As the information for each subnational jurisdictional regulation is presented, where known, the stakeholders who were included in the discussion during the development of the regulations will be given. In the case tables, they are referred to as Who Is Involved, referring to either previous involvement in the development or implementation of school nutrition regulations, or those who continue to be involved with revision and/or implementation of school nutrition regulations. Nonetheless, this does not necessarily mean all stakeholders were represented in the development of the regulations.

5.1.2. Interview Participants

The list of interview participants provided in Table 5.1 is a reference for the information taken from the interviews and used throughout the next two chapters. The participants were assigned codes according to the subnational jurisdiction they represent and the date the interview took place, or was received. The role is provided with the understanding that the individual cannot be directly identified by it.
<table>
<thead>
<tr>
<th>Code / Role</th>
<th>Code / Role</th>
<th>Code / Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>AB_20150625</td>
<td>AB_20150703</td>
</tr>
<tr>
<td></td>
<td>Provincial Official</td>
<td>School District Official</td>
</tr>
<tr>
<td>BC</td>
<td>BC_20150911</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>School District Official</td>
<td>--</td>
</tr>
<tr>
<td>MB</td>
<td>MB_20150525</td>
<td>MB_20150617</td>
</tr>
<tr>
<td></td>
<td>Dietitian</td>
<td>Provincial Official</td>
</tr>
<tr>
<td>NB</td>
<td>NB_20150619</td>
<td>NB_20150629</td>
</tr>
<tr>
<td></td>
<td>Provincial Official</td>
<td>School District Official</td>
</tr>
<tr>
<td>NFLD</td>
<td>NFLD_20150706</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>2 Provincial Officials</td>
<td>--</td>
</tr>
<tr>
<td>NS</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>ON</td>
<td>ON_20150413</td>
<td>ON_20150420</td>
</tr>
<tr>
<td></td>
<td>School Board Official</td>
<td>School Board Official</td>
</tr>
<tr>
<td>PE</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>QC</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SK</td>
<td>SK_20150604</td>
<td>SK_20150625</td>
</tr>
<tr>
<td></td>
<td>Dietitian</td>
<td>Cafeteria Manager/Educator</td>
</tr>
<tr>
<td>YT</td>
<td>YT_20150409</td>
<td>YT_20150417</td>
</tr>
<tr>
<td></td>
<td>Territorial Official</td>
<td>Territorial Official</td>
</tr>
</tbody>
</table>
5.1.3. Alberta

**Table 5.2: Summary of Materials used for the Case - Alberta**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Guideline</td>
</tr>
<tr>
<td>Department</td>
<td>Ministry of Health</td>
</tr>
</tbody>
</table>
| Intended Audience      | - Albertans  
                          - School/School District Administrators  
                          - Childcare Facilitators  
                          - Community Recreation Centre Facilitators                                                                        |
| Interviews             | - 1 Provincial Official (AB_20150625)  
                          - 1 School District Official (AB_20150703)                                                                         |
| Suppl. Materials       | News Media                                                                                                           |
Table 5.3: Summary of Content Analysis – Alberta

<table>
<thead>
<tr>
<th>Who is involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>- University of Alberta – Nutrition and Food Science</td>
</tr>
<tr>
<td>- Ministry of Health</td>
</tr>
<tr>
<td>- Ministry of Agriculture and Food Science</td>
</tr>
<tr>
<td>- Child and Youth Services</td>
</tr>
<tr>
<td>- Tourism, Parks, Recreation (Now Culture and Tourism)</td>
</tr>
<tr>
<td>- Ministry of Education</td>
</tr>
<tr>
<td>- First Nations, Inuit Health Branch</td>
</tr>
<tr>
<td>- Public Health Agency of Canada</td>
</tr>
<tr>
<td>- Alberta Health Services (AB_20150625)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;In 2005 the Pan-Canadian Public Health Network Council agreed that jurisdictions would implement school nutrition guidelines. Nova Scotia was the first to implement in 2006, followed by New Brunswick, Ontario, etc., with Alberta the last province to release nutrition guidelines in 2008&quot; (AB_20150625).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;The Alberta Nutrition Guidelines for Children and Youth (ANGCY) are guidelines to encourage/facilitate the creation of healthy eating environments wherever children gather to be cared for, taught and to be active&quot; (AB_20150625).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Justification given in document (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Childhood Overweight and Obesity</td>
</tr>
<tr>
<td>- Health Necessary for Learning</td>
</tr>
<tr>
<td>- Nutrition as a Component Of Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- School districts and/or schools encouraged to create their own policy using the guidelines (AB_20150625)</td>
</tr>
<tr>
<td>- School districts and/or schools encouraged to create their own policy using the guidelines (AB_20150625)</td>
</tr>
<tr>
<td>- Nutrient Criteria (ANGCY 2012: 57)</td>
</tr>
</tbody>
</table>
Table 5.4: Summary of aspects of the SFE addressed - Alberta

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Dining</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• External School Food Environment</td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td>(SFE)</td>
</tr>
<tr>
<td>• Nutrition Minimum Values</td>
<td>• Food from Home</td>
</tr>
<tr>
<td>• Nutrition – Moderation</td>
<td>• Food Programs</td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td>• Nutrition Criteria</td>
</tr>
<tr>
<td>• Physical Activity</td>
<td>• Nutrition Education</td>
</tr>
<tr>
<td>• Physical Environment</td>
<td>• Personal Responsibility</td>
</tr>
<tr>
<td>• Promotion – Healthy Choices</td>
<td>• Physical Activity</td>
</tr>
<tr>
<td>• Promotion – Limiting Unhealthy</td>
<td>• Problems to be Addressed in the SFE</td>
</tr>
<tr>
<td>Choices</td>
<td>• Restrict Food as Reward</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Revenue Generation</td>
</tr>
<tr>
<td>• Restricting Food as Reward</td>
<td></td>
</tr>
<tr>
<td>• Socialization</td>
<td></td>
</tr>
<tr>
<td>• Water</td>
<td></td>
</tr>
</tbody>
</table>

First published in 2008 and revised in 2012, the Government of Alberta uses *Alberta Nutrition Guidelines for Children and Youth: A Childcare, School and Recreation/Community Centre Resource Manual*. The document is attributed to the Government of Alberta, however the document is hosted on the Ministry of Health website, which along with the inclusion of spaces other than schools indicates that while the provincial government as a whole supports it, it is principally a health initiative. A committee to oversee this work included representation from the ministries of: Health, Agriculture and Food Science, Child and Youth Services, Tourism, Parks and Recreation, Municipal Affairs, Education, First Nations Inuit Health Branch, the Public Health Agency of Canada, and Alberta Health Services (AB_20150625). The *Nutrition Guidelines* provide age-appropriate nutrition recommendations for children in settings where they are most likely to be other than the home (Alberta 2012). Because this research is focused on the school food environment, only the portion of the document addressing school food and beverage nutrition was reviewed and analyzed.
These guidelines are meant to encourage and support schools or school districts to create their own policies. This document was a product of a meeting held in 2005 when “the Pan-Canadian Public Health Network Council agreed that jurisdictions would implement school nutrition guidelines” (AB_20150625). The overarching goal of the Alberta Nutrition Guidelines was to promote healthy weights in children. This supports what was found in the content analysis of the document (see Justifications Given in Document in the Summary of Content Analysis – Alberta and Table 5.35). The response from the interview participant does not refute the evidence from the content analysis of the document that nutrition as a component of health and being healthy is necessary to learn as also being objectives.

Schools and/or districts are not required to have a healthy eating and active living policy in Alberta. However, there has been significant growth in the number of schools that have one, with 86% of principals saying they have one in 2014 compared with only 24% in 2008 when the document was first published (AB_20150625). While it is not required for schools to have a policy to address healthy eating and living, those that do can receive additional support from the province. Since 2006, the Alberta School Community Wellness Fund has supported 274 projects that support the Nutrition Guidelines as well as across daily physical activity and safe and caring schools in 92% of Alberta’s public, separate, Francophone school districts (AB_20150625). Since issuing the guidelines and creating the Wellness Fund, the proportion of Grade 5 students who are overweight has decreased to 13.8% in 2012 from 17.6% in 2008 (AB_20150625). The project reports from the Community Wellness Fund indicate improvements in areas of “healthy eating, physical activity, healthy relationships and environments including positive mental health” (AB_20150625). Alberta Health Services also created School Nutrition Implementation Manual and Handbook as well as developed a Health School Nutrition Kit to help those schools that do develop policies more effectively implement them.

In order to address concerns about healthy weights among the student population, unhealthy fats, added sugars and sodium, as well as serving sizes were a priority. The guidelines for schools contain Choose Most Often, Choose Sometimes, and Choose Least Often criteria for each elementary and high school students based on the suggestions given in Eating Well with Canada’s Food Guide (Health Canada 2007a). For elementary schools, the guidelines recommend that schools make 100% of available foods must be from the Choose Most category; 60% of foods available to junior high school students must be from the Choose Most Category and the remaining 40% must
be from the Choose Sometimes category; and for high schools, the ratio becomes 50/50 Choose Most and Choose Sometimes (Alberta 2012: 56).

The Alberta guidelines recognize that some children, especially school-aged children, spend significant amounts of time outside of the home, so the guidelines are meant to support those who work with children to help them make healthier choices in those spaces children spend time outside of the home, including but not limited to the schools. Creating nutrition advise based on *Eating Well with Canada’s Food Guide* (Health Canada 2007a) and having a perspective of assisting those who work with children create healthier menus, or at least provide healthier food and beverage options for sale, means that this resource is applicable to parents/guardians. The *Alberta Nutrition Guidelines for Children and Youth* (2012) can also assist parents and guardians pack healthier lunches for their children and thus support achieving and maintaining healthy weights for everyone, not just those who purchase their lunch from school (AB_20150625).

These guidelines are specifically oriented towards the nutrition content of foods and beverages available to children in daycare centres, recreation centres, and of course, schools. There is however, an educational component to nutrition and health contained within the guideline. The public health orientation to this document recognizes that healthy habits learned in childhood are more likely to be maintained by adults than if taught in adulthood (Alberta 2012: 2). Thus, the guidelines encourage educators to talk to students about healthy eating as well as shopping, cooking, and menu planning in addition to providing nutrition requirements for foods and beverages available in spaces children spend their time (Alberta 2012: 11). Currently, Alberta’s curriculum is “under revision and upon completion there will be inclusion of [a] ‘wellness curriculum’” (AB_20150625) which will increase the amount of exposure to health and nutrition education students in Alberta receive.

While several Barriers to Success have been identified (see Table 5.40), one of the more substantial challenges for implementing healthier food and beverage standards in Alberta schools has been the procurement of foods that meet the nutrient criteria given in the guidelines (AB_20150625). This is especially challenging for those schools and school districts that use national producers and manufacturers to procure their foods. With each jurisdiction having its own nutrition regulations, some manufacturers are not interested in re-formulating their foods to meet each of the requirements. An attempt to harmonize nutrition standards across the country was made in 2013, however no substantial changes have emerged from this (FPTGN 2013). General-
ly, however, the largest obstacle to achieving and maintaining healthy weights for children is procurement of healthy foods, both within the school food environments but in the home as well.

5.1.4. British Columbia

Table 5.5: Summary of Materials Used for the Case – British Columbia

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>Guidelines for Food and Beverage Sales in BC Schools.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Policy</td>
</tr>
<tr>
<td>Department</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>- Parents</td>
</tr>
<tr>
<td></td>
<td>- Teachers</td>
</tr>
<tr>
<td></td>
<td>- School Administrators</td>
</tr>
<tr>
<td></td>
<td>- Students</td>
</tr>
<tr>
<td></td>
<td>- Food Service Staff</td>
</tr>
<tr>
<td>Interviews</td>
<td>- 1 School District Official (BC_20150911)</td>
</tr>
<tr>
<td>Suppl. Materials</td>
<td>- Healthy Families BC (healthyfamiliesbc.ca)</td>
</tr>
<tr>
<td></td>
<td>- HealthLink BC (healthlinkbc.ca)</td>
</tr>
<tr>
<td></td>
<td>- CommunityLink BC (communitylinkbc.ca)</td>
</tr>
</tbody>
</table>
Table 5.6: Summary of Content Analysis – British Columbia

| Who is involved          | - Ministry of Education  
|                         | - Ministry of Health  
|                         | - Healthy Families BC  
| Origin                  | The Guidelines are part of Healthy Families BC “the most comprehensive health-promotion program in Canada - is aimed at improving the health and well being of British Columbians at every stage of life” (healthyfamiliesbc.ca)  
| Goal                    | “The Guidelines were developed to support healthy eating at school by increasing  
|                         | access to healthy food while limiting access to unhealthy food” (British Columbia 2013: 5)  
| Justification given in document(s) | - Health necessary for Learning  
|                         | - Nutrition as a Component of Health  
| Implementation          | The Guidelines were mandated for all public schools in 2008  
|                         | (British Columbia 2013)  
|                         | Nutrition Criteria (British Columbia 2013: 12)  
|                         | “I did things like contests in schools and we did prizes, you know, those people who kept food journals and could show us what they were eating and how they were trying to make changes and so we did a lot of different things in the first two years when I was changing the menu drastically” (BC_20150911)  

Table 5.7: Summary of aspects of the SFE addressed – British Columbia

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Environment</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Exceptions</td>
<td>• Childhood Overweight and Obesity</td>
</tr>
<tr>
<td>• Nutrition – Banned Foods</td>
<td>• Culture</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• De-Centralized Solutions</td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td>• External SFE</td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td>• Food from Home</td>
</tr>
<tr>
<td>• Nutrition – Moderation</td>
<td>• Food Programs</td>
</tr>
<tr>
<td>• Physical Environment</td>
<td>• Hunger</td>
</tr>
<tr>
<td>• Pricing – Health Promotion</td>
<td>• Impact</td>
</tr>
<tr>
<td>• Restricting Food as Reward</td>
<td>• Nutrition Criteria</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Nutrition – Education</td>
</tr>
<tr>
<td>• Socialization</td>
<td>• Nutrition – Health</td>
</tr>
<tr>
<td>• Water</td>
<td>• Pricing – Health Promotion</td>
</tr>
<tr>
<td></td>
<td>• Private Sector Partnerships</td>
</tr>
<tr>
<td></td>
<td>• Problems to be Address in the SFE</td>
</tr>
<tr>
<td></td>
<td>• Revenue Generation</td>
</tr>
<tr>
<td></td>
<td>• Social Determinants of Health</td>
</tr>
<tr>
<td></td>
<td>• Social Responsibility</td>
</tr>
</tbody>
</table>

The nutrition requirements in *Guidelines for Food and Beverage Sales in BC Schools* are policy, not guidelines as the title of the document may suggest. The policy is mandated, but not legislated, which means that there is no mechanism overseeing the implementation of the nutrition requirements (British Columbia 2013: 10). First published in 2005, and mandated in 2008, the current policy was issued in 2013. An interview was conducted with two employees within one of the Ministries, however they later withdrew their participation so that interview is not included in this case. Instead, the policy itself as well as additional information from HealthyFamilies BC was used to help build the case.

It is mandatory for schools to comply with the *Guidelines*, however the policy is not legislated. This is because the Ministries of Health and Education jointly developed the *Guidelines*; they are overseen by the Ministry of Health, and the Ministry of Education can only legislate curriculum, which does not include a school nutrition policy. Oversight falls to the school districts, although
the guidelines states “parents, teachers, school administrators, students and food service staff all have a role in implementing the Guidelines in their school” (British Columbia 2013: 5). In addition to being a joint effort by the Ministries of Education and Health, Guidelines for Food and Beverage Sales in BC Schools is part HealthyFamilies BC, a province-wide initiative to improve the health and wellbeing of all British Columbians and is, “the most comprehensive health promotion program in Canada”, (HealthyFamilies BC). HealthyFamilies BC is an initiative begun by British Columbia in 2011 “to help families make healthy choices and introduce innovative approaches to challenges facing the health care system” (Office of the Premier 2011). As such, the program addresses far more than nutritional content of foods and beverages available for purchase by students. Seventeen of the twenty-four regulatory nodes are present in this document, including those that give the nutrition requirements of food and beverages allowed for sale in schools. It should be noted that this document, like many of the policies from the other provinces, contains both regulations that are mandated and those that are suggestions for school districts or individual schools to include in their school food environments as additional support for students to make healthier choices. The guidelines pre-date the creation of HealthyFamilies BC, however, the school food environment fell under the program’s purview upon its creation and was involved in the revision in 2013.

The goal of the guidelines is to “support healthy eating at school by increasing access to healthy food while limiting access to unhealthy food” (British Columbia 2013: 5). This falls under the categories of Nutrition as a Component of Health and Health Necessary for Learning, the codes that emerged from the content analysis of the documents. The Guidelines outline the nutrition requirements for three categories of foods and beverages, those that are Sell Most, which should be at least 50% of choices, Sell Sometimes, which should be no more than 50% of choices and Do Not Sell (British Columbia 2013). Freshly made foods and beverages fall into one of two categories: either Sell Most or Do Not Sell, based on the sugar, sodium, and fat content of the item. Pre-packaged foods and beverages, of which there are fourteen categories, are Sell Most, Sell Sometimes, or Do Not Sell, which is also determined by the sugar, sodium, and fat content of the product (British Columbia 2013). To assist vendors and administrators in assessing products, the 2013 edition of the policy makes reference to the Brand Name Food List, an online resource for HealthLink BC members to look up branded foods to see if they are suitable for sale in BC schools, as well as public buildings. Based on the type of building entered into the tool, be it a

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³ This source is linked from the healthyfamiliesbc.ca website. From the “About Us” page, it directs the reader who wants to learn more to “click here” which links to the Office of the Premiers webpage)
British Columbia Service building, hospital, elementary school, middle school, or secondary school, members can create and assess a list of products to ensure the appropriate number of Sell Most and Sell Moderately items and that none belong to Do Not Sell.

In addition to the nutrition requirements of foods and beverages, the Guidelines (British Columbia 2013) provide recommendations for four other aspects of the school food environment that are not mandated but encouraged. These areas include: restricting the marketing of unhealthy food and beverages, limiting the sale of sugar substitutes, supporting healthy eating in the classroom by using healthy foods or not using unhealthy foods as rewards and celebrations, and limiting the sale of bottled water in schools. Discouraging schools from selling bottled water is motivated from concerns about the environmental impact of the product (British Columbia 2013: 17). The section addressing bottled water also suggests schools may be interested in enhancing their recycling programs, which indicates in addition to health, the government of British Columbia is interested in the environment as well.

5.1.5. Manitoba

Table 5.8: Summary of Materials Used for the Case - Manitoba

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>Moving Forward with School Nutrition Guidelines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Guideline</td>
</tr>
<tr>
<td>Department</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>School District Administrators</td>
</tr>
<tr>
<td>Interviews</td>
<td>- 1 Dietitian (MB_20150525)</td>
</tr>
<tr>
<td></td>
<td>- 1 Provincial Official (MB_20150617)</td>
</tr>
<tr>
<td></td>
<td>- 1 NGO Coordinator (MB_20150707)</td>
</tr>
<tr>
<td>Suppl. Materials</td>
<td>- Healthy Kids, Healthy Futures Task Force Report</td>
</tr>
<tr>
<td></td>
<td>- Measuring Success Series Report 2: Communication</td>
</tr>
<tr>
<td></td>
<td>- Measuring Success Series Report 3: Content Analysis</td>
</tr>
<tr>
<td></td>
<td>- Measuring Success Series Report 4: Stakeholders Perceptions</td>
</tr>
</tbody>
</table>
Table 5.9: Summary of Content Analysis - Manitoba

<table>
<thead>
<tr>
<th>Who is involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Dept. of Education (MB_20150617)</td>
</tr>
<tr>
<td>- Dept. of Health and Healthy Living (MB_20150617)</td>
</tr>
<tr>
<td>- Healthy Child Manitoba (Manitoba 2014)</td>
</tr>
<tr>
<td>- Healthy Food in Schools Team (MB_20150617)</td>
</tr>
<tr>
<td>- Child Nutrition Council of Manitoba (MB_20150525)</td>
</tr>
<tr>
<td>- Dietitians of Canada, Manitoba Region (MB_20150525)</td>
</tr>
<tr>
<td>- Dairy Farmers of Manitoba (MB_20150525)</td>
</tr>
<tr>
<td>- Healthy Kids, Healthy Futures Task Force (MB_20150525)</td>
</tr>
<tr>
<td>- School Nutrition Support team (MB_20150707)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2005, the Healthy Kids, Healthy Futures task force report &quot;recommended that the government increase access to nutritious food in schools&quot; and the task force had several recommendations, one of those was that the provincial government require all schools to have a written school food and nutrition policy as part of their plan&quot; (MB_20150525)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
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<tbody>
<tr>
<td>- &quot;The mission of the, at the out-set, back in 2006 ...was to increase access to nutritious foods in school&quot; (MB_20150617).</td>
</tr>
<tr>
<td>- &quot;The overall, the general goal is to ...increase access to nutritious foods in school&quot; (MB_20150617).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Justification given in document(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Nutrition Necessary for Learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- “every school would have a school nutrition policy and then they attached to that some, some, some type of, as part of the school plan, so that’s an important piece. They had to have a school nutrition policy as part of their school plan and then they pro-vided some timelines” (MB_20150617)</td>
</tr>
</tbody>
</table>
Table 5.10: Summary of aspects of the SFE addressed – Manitoba

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td>• Alternative Food Networks</td>
</tr>
<tr>
<td>• Dining</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Environment</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Food Program</td>
<td>• Culture</td>
</tr>
<tr>
<td>• Nutrition – Banned Foods</td>
<td>• De-Centralized Solutions</td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td>• Environment</td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td>• Exceptions</td>
</tr>
<tr>
<td>• Nutrition – Moderation</td>
<td>• Food from Home</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• Food Programs</td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td>• Food Waste</td>
</tr>
<tr>
<td>• Pricing – Health Promotion</td>
<td>• Health Necessary for Learning</td>
</tr>
<tr>
<td>• Promotion – Healthy Choices</td>
<td>• Impact</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Nutrition Criteria</td>
</tr>
<tr>
<td>• Waste</td>
<td>• Learn by Example</td>
</tr>
<tr>
<td></td>
<td>• Lessons Learned</td>
</tr>
<tr>
<td></td>
<td>• Nutrition – Education</td>
</tr>
<tr>
<td></td>
<td>• Nutrition – Health</td>
</tr>
<tr>
<td></td>
<td>• Physical Environment</td>
</tr>
<tr>
<td></td>
<td>• Problems to be Addressed in SFE</td>
</tr>
<tr>
<td></td>
<td>• Promotion – Healthy Choices</td>
</tr>
<tr>
<td></td>
<td>• Promotion – Limiting Unhealthy Choices</td>
</tr>
<tr>
<td></td>
<td>• Restricting Food as Reward</td>
</tr>
</tbody>
</table>

The current document being used to regulate school food environments in Manitoba is Moving Forward with School Nutrition Guidelines, published in 2014. This guideline replaces the 2006 Manitoba School Nutrition Handbook: Getting Started with Guidelines and Policies. Sixteen of the twenty-four regulatory nodes are present in the current regulatory document. While these are guidelines, schools in Manitoba are required to have a school nutrition policy, which can be at either the division level or at the individual school level.

In 2001, the Child Nutrition Council of Manitoba was formed to facilitate breakfast, lunch and snack programs in Manitoba schools (MB_20150707). To learn what the need for such programs was at the time, the Council issued a survey to schools. The survey revealed, in addition to a need
for such nutrition programs, a gap in the policies addressing food and beverages in schools across the province (MB_20150707). At the time, only a few schools had a policy addressing nutrition; most of the schools that had a food policy only addressed allergies. Recognizing this gap, the Council began advocacy work, both within schools to create school-level nutrition policies and assist with nutrition education for students, and also for support from the province (MB_20150707).

The Healthy Kids, Healthy Futures All-Party Task Force was established in 2004 as a response to the survey results from the Council (Healthy Kids, Healthy Futures 2004). Its goal was to how to generally “promote healthy eating and active living for young people” in Manitoba ( Manitoba School Nutrition Survey “Content Analysis”: 1). The task force had five recommendations for the province to improve the overall health and wellbeing of the children of Manitoba (MB_20150525; MB_20150617; MB_20150707). Increasing access to healthy food was the first, which is the primary goal of the guideline, as was including samples of school nutrition policies with it. This is consistent with the results of the content analysis of the regulatory document, which identified nutrition as a component of health as the justification for the regulatory document. The task force also recommended requiring the schools to have a nutrition policy as part of the school plan, which was to be submitted by each school to the provincial government every year, for schools to report annually to their parent advisory council and to phase in the nutrition policy “over a period of a couple of years” (MB_20150525). For the first three years, schools were required to submit their nutrition policy, or the policy of their school division to the province as part of their yearly school plan. After these three years, this no longer considered a necessary practice, although the requirement to have one still exists.

Addressing one of the recommendations from Healthy Kids, Healthy Futures required the development of a handbook for school nutrition. For the first edition of the guideline, the Child Nutrition Council of Manitoba, the provincial government, Dietitians of Canada, and Dairy Farmers of Manitoba were involved in consultation and development of the guidelines (Manitoba 2006). Directed by the advocacy from the Council of Child Nutrition and its partners, the provincial government facilitated the development of the guideline, which provided nutrition guidance as well as samples of school nutrition policies that already existed and suggestions of practices to facilitate access to nutritious food and address the recommendations of the task force (MB_20150707). Schools and school divisions wrote nutrition policies with the assistance of nutrition forums, a
website and a toll-free number for consultation and several print resources created to facilitate these policies.

The first guideline was issued in 2006. The shift from *Getting Started in 2006* to *Moving Forward With School Nutrition Guidelines* in 2014 was done intentionally to provide school administrators with the opportunity to revise and improve school nutrition policies with the expectation that addressing nutritional quality of foods and beverages in schools was something that administrators are more comfortable with currently than they were when the process began in 2006. The second edition provides checklists for each potential school food environment, including cafeterias, canteens, and tuck shops, as well as events where foods and beverages may be sold, such as sporting events in an effort to make creating nutrition policies as simple as possible (Manitoba 2014).

The decision to have a provincial guideline instead of a policy was to allow school divisions to address their own unique circumstances. Two participants suggested the wide variety of school food opportunities across the province required each division to create a policy that would best fit its unique circumstance; a singular policy would not apply to all schools (MB_20150525; MB_20150707). Those that have cafeterias would require a different policy from those that do not and should create their own policy to reflect the food service available to students. The third participant suggested that the consensus or “community development” approach to political initiatives is inline with the political culture of Manitoba (MB_20150617).

While the divisions and schools no longer have to report to the province, the provincial government has monitored stakeholder perceptions of school nutrition policies and how the policies and implementation strategies had been communicated. The communication study was meant to learn how different schools and school divisions were communicating with students and parents about their nutrition policies and found that, even though effective implementation requires good communication, the level of communication was described as “weak” (Manitoba School Nutrition Survey “Communication”: 4). The research on stakeholder perceptions, which consisted primarily of teachers showed conflict between the acknowledgement of the improvements to the overall nutritional quality of foods and beverages available to students and the frustrations between increased responsibilities, inadequate resources for implementation and inconsistencies between policies in the same regions make it difficult for stakeholders to support the policy. The interview done for this research revealed that while there are pockets of resistance or non-action, the overall
response has been positive, and the small portion that resists is consistent with the Diffusions of Innovations Theory. This theory from Rogers and Shoemaker (1971) posits that with any innovation, there will be a small portion of early adopters; most will be later adopters, and some will never adopt the innovation. The Manitoba Government applied this principle to school nutrition policies in that those divisions and schools with less comprehensive policies will not have their policies reviewed by the province or make recommendations to add or alter their policies.

A content analysis was conducted on the policies for each of the school divisions in Manitoba. The content analysis of Manitoba School Division Policies revealed that there are significant differences in the length, depth and breadth of each (Manitoba School Nutrition Survey “Content Analysis”). The analysis found most policies contained, in addition to a mission statement, “specific procedures and protocols to be followed and some policies contained guidelines for accountability, communication, evaluation and monitoring” (Manitoba School Nutrition Survey “Content Analysis”: 2). Of the thirty-six division level policies, thirty-three addressed healthy in-school eating practices (Manitoba School Nutrition Survey “Content Analysis”). Some key points of interest from that content analysis include eighty-one percent of the policies addressed fundraising; seventy-nine defined nutritious and non-nutritious foods; seventeen percent addressed food security, three percent mentioned local food producers and suppliers and no policies addressed food packaging and waste (Manitoba School Nutrition Survey “Content Analysis”). Additionally, some school division policies indicated that schools should create individualized policies, further de-centralizing the regulation procedure (Manitoba School Nutrition Survey “Content Analysis”). In the first edition, according to one participant, there were fifteen potential areas for the divisions to include in their policies.

The content analysis of Manitoba division level school food policies provides evidence of how differently provincial level guidelines may be used by school division administrators. A content analysis of Manitoba school food regulations has not been conducted since the second edition of the guidelines was issued, so it is not possible to use the results from the Manitoba Nutrition Survey content analysis outlined in the previous paragraph to affirm or contradict the results of the content analysis done for this dissertation. The highlights from the content analysis conducted on the Manitoba school division or individual school policies show what the nutrition and health priorities of school divisions are as well as provide insight into how the first edition of the Handbook (2006) was used. It also shows the level of involvement of the provincial government in oversight, as it does not appear as the other subnational jurisdictions with guidelines to assist in
the creation of board/district/division level policies have carried out a similar project. The evaluation and subsequent revision is indicative of a significant involvement from the province and the people involved in the regulations. It is the only province that indicated that there was oversight from the province at any point through the school reports that were submitted to the province for the first three years the guidelines were issued. Though the practice has been discontinued, it was done so once the province had evidence that the school divisions and schools were progressing with the policy development process and not due to lack of resources or interest (MB_20150617).

5.1.6. New Brunswick

Table 5.11: Summary of Materials Use for the Case – New Brunswick

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>Policy 711 “Healthier Foods and Nutrition in Public Schools”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Handbook for Policy 711</td>
</tr>
<tr>
<td>Type</td>
<td>Policy</td>
</tr>
<tr>
<td>Department</td>
<td>Dept. Education and Early Childhood Development</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>School District Administrators</td>
</tr>
<tr>
<td>Interviews</td>
<td>1 Provincial Official (NB_20150619)</td>
</tr>
<tr>
<td></td>
<td>1 School District Official (NB_20150629)</td>
</tr>
<tr>
<td></td>
<td>News Media</td>
</tr>
<tr>
<td></td>
<td>Education Outline, June 2013</td>
</tr>
</tbody>
</table>
Table 5.12: Summary of Content Analysis – New Brunswick

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who is involved</strong></td>
<td>Dept. of Education and Early Childhood Development (NB_20150619)</td>
</tr>
<tr>
<td></td>
<td>District Education Councils (NB_20150619)</td>
</tr>
<tr>
<td></td>
<td>&quot;Dietitian Associations&quot; (AB_20150619)</td>
</tr>
<tr>
<td></td>
<td>&quot;Parent Groups&quot; (AB_20150619)</td>
</tr>
<tr>
<td></td>
<td>&quot;Nutrition Experts&quot; (AB_20150619)</td>
</tr>
<tr>
<td><strong>Origin</strong></td>
<td>Former Minister of Education wanted to remove fast food from cafeterias (NB_20150619)</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>A provincial policy (711) was created to remove fast food from all New Brunswick public schools (AB_20150619)</td>
</tr>
<tr>
<td><strong>Justification given in document(s)</strong></td>
<td>Health Necessary for Learning</td>
</tr>
<tr>
<td></td>
<td>Nutrition as a Component of Health</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>Following consultation with different stakeholders, the policy was drafted and it was up to the school district superintendents to ensure their districts are compliant with the policy (NB_20150619)</td>
</tr>
</tbody>
</table>
Table 5.13: Summary of aspects of the SFE addressed – New Brunswick

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dining</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• Exceptions</td>
<td>• Alternative Food Networks</td>
</tr>
<tr>
<td>• Food Program</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td>• Culture</td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td>• Environment</td>
</tr>
<tr>
<td>• Nutrition – Moderation</td>
<td>• Exception</td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td>• External SFE</td>
</tr>
<tr>
<td>• Physical Activity</td>
<td>• Food From Home</td>
</tr>
<tr>
<td>• Physical Environment</td>
<td>• Food Programs</td>
</tr>
<tr>
<td>• Pricing – Health Promotion</td>
<td>• Hunger</td>
</tr>
<tr>
<td>• Restricting Food as Reward</td>
<td>• Impact</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Learn by Example</td>
</tr>
<tr>
<td>• Social Responsibility</td>
<td>• Lessons Learned</td>
</tr>
<tr>
<td>• Socialization</td>
<td>• Nutrition Criteria</td>
</tr>
<tr>
<td></td>
<td>• Nutrition – Education</td>
</tr>
<tr>
<td></td>
<td>• Nutrition - Health</td>
</tr>
<tr>
<td></td>
<td>• Personal Responsibility</td>
</tr>
<tr>
<td></td>
<td>• Physical Environment</td>
</tr>
<tr>
<td></td>
<td>• Pricing – Health Promotion</td>
</tr>
<tr>
<td></td>
<td>• Private Sector Partnerships</td>
</tr>
<tr>
<td></td>
<td>• Problems to be Addressed in SFE</td>
</tr>
<tr>
<td></td>
<td>• Promotion – Healthy Choices</td>
</tr>
<tr>
<td></td>
<td>• Promotion – Limiting Unhealthy Choices</td>
</tr>
<tr>
<td></td>
<td>• Revenue Generation</td>
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<td></td>
<td>• Social Responsibility</td>
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</tbody>
</table>

First passed in 2005 and revised in 2008, Policy 711 *Healthier Foods and Nutrition in Public Schools*, establishes the nutrition requirements that all foods and beverages must meet to be sold in New Brunswick schools.

In 2004, the Minister of Education at the time learned that fast food was being served for hot lunches in New Brunswick schools and requested the issue be investigated, which resulted in a request for a policy (NB_20150619). Policy 711 replaced the 1991 policy Food and Nutrition Policy for New Brunswick Schools by embracing the Comprehensive School Health Approach,
which includes, as other regional approaches do, supporting students in making healthy choices including nutrition, but also physical activity (New Brunswick 2008). This meant primarily removing fast food items from school food environments. This is consistent with the results of the content analysis, which found nutrition as a component of health as one of the reasons for the regulatory document, as well as health being necessary for learning. The policy focuses on nutrition, the documents that support Policy 711 contain references to other aspects of the school food environment.

Originally passed in 2005, Policy 711 was revised in 2008 to add more detail to help administrators to implement it. This included adding examples of foods and beverages that fit each category (NB_20150619). Part of the reason for not including more detail in the first edition of the policy was to minimize resistance from school administrators and make the implementation of the policy easier. Shortly after the first version was implemented however, the Department of Education and Early Childhood Development received criticism for not addressing the needs of the students’ health and wellbeing, so the revised version with more information about appropriate serving sizes and suggestions for kinds of foods and beverages that are appropriate to sell was issued in 2008 (NB_20150619).

Because the issue of fast food in schools was province-wide and the directive came from the Minister of Education at the time, a policy was issued, which provides the minimum nutrition requirements for foods and beverages sold in New Brunswick public schools (NB_20150619). Foods and beverages are put into one of three groups according to their sugar, sodium, and fat content. The categories are Maximum Nutritional Value, which can be offered every day, Moderate Nutritional Value, which can be offered no more than two days a week, and Minimum Nutritional Value, which should not be offered at school at all (Government of New Brunswick, “Healthier Eating” 2008). In addition to the policy and the handbook, the Government of New Brunswick has several funding opportunities to support health and wellness in schools including the School Wellness Grant, the Wellness-Community Food Action Program, the After-School Hours Initiatives or Activities Grant, and the Active Communities Grant (NB_20150619).

Drafts of the policy involved consultation between those in the Department and dietitians, parents, students and teachers. Once passed, it is the responsibility of the superintendents of the school districts to oversee the implementation, although it is known in the Department of Education and Early Childhood Development that there are school districts that are not fully compliant.
with Policy 711 and are currently working on a way to address this. On the other hand, there are schools and school districts that are going beyond the requirements of Policy 711 and the Department, as part of the effort to address non-compliance elsewhere in the province, would like to find a way to share best-practices and pool resources from those districts that have been more successful with implementation (NB_20150619).

Related to the aforementioned issue and unique to this case is New Brunswick’s status as the only officially bilingual province in Canada. This is particularly relevant to this research because the two official languages resulted in two parallel branches within the Department of Education and Early Childhood Development. Policy 711 applies to all schools, Francophone and Anglophone, in New Brunswick, but two different branches of the Department, beginning at the Deputy Minister level carry out the implementation of it, and all education policies simultaneously in different ways (NB_20150619). While the focus of this research is on English-Speaking Canada, this information about the organization of the Department is important for understanding differences in information sharing, which have resulted in initiatives occurring in some schools in the same city but not necessarily in others (NB_20150619; NB_20150629). While this is not significantly different from what happens in other provinces with separate school boards, it is unique to New Brunswick’s case as far as having the division in the Department, which does not happen in other subnational jurisdictions.

Policy 711 applies to all foods and beverages sold in schools in New Brunswick (New Brunswick 2008). The facilities to offer foods and beverages vary across the province, as they do in schools across the country. Some schools have a cafeteria or an industrial kitchen for some food preparation, and others have vending machines, canteens, and/or have occasional hot lunch days, where students may order food in advance and the school has it delivered from a restaurant or caterer at lunchtime. Generally, this meant that foods prepared on site, like pizza, required a new recipe to be allowable for sale. Because the policy applies to all foods and beverages sold in schools, however, the facilities in the individual schools are not relevant as long as the facilities present abide by the requirements to sell foods of moderate nutritional value no more than twice a week (New Brunswick 2008).

Breakfast, snack, and lunch programs take place in schools across the province. These operate based on charitable donations from non-governmental organizations and can receive assistance from the Department of Social Development (NB_20150619). Even though these operate inde-
pendently of the foods and beverages sold to students, they are still expected to meet the same nutrient criteria as put forth by Policy 711 (New Brunswick 2008; NB_20150619). Schools are not required to make foods and beverages available to students through charitable programs or available for sale. Aside from breakfast, snack, and lunch programs, any food or beverage vending in the internal school food environment must be able to at least make up the costs associated with it.

5.1.7. Newfoundland and Labrador

Table 5.14: Summary of Materials Used for the Case – Newfoundland and Labrador

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>- School Food Guidelines for Food Service Providers, Second Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>- Guideline</td>
</tr>
<tr>
<td>Department</td>
<td>- Dept. of Health and Community Services</td>
</tr>
<tr>
<td></td>
<td>- Dept. of Seniors, Wellness and Social Development</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>- School Division Administrators</td>
</tr>
<tr>
<td></td>
<td>- Food Service Providers</td>
</tr>
<tr>
<td>Interviews</td>
<td>- 2 Provincial Officials (NFLD_20150706)</td>
</tr>
<tr>
<td></td>
<td>- “Survey of Food and Nutrition Policies and Services in Newfound-land and Labrador”</td>
</tr>
</tbody>
</table>
Table 5.15: Summary of Content Analysis – Newfoundland and Labrador

| Who is involved | - Dept. Of Health and Community Services  
|                | - Dept. Of Seniors, Wellness, and Social Development  
|                | - Dept. of Education and Early Childhood Development  
|                | - Coalition for School Nutrition  
|                | - School Milk Foundation  
|                | - Kids Eat Smart  
|                | - Dietitians of Newfoundland and Labrador  
|                | - School Boards associations  
|                | - Teachers’ Association (NFLD_20150706) |

| Origin         | - Coalition for School Nutrition lobbied the provincial government for a nutrition policy (NFLD_20150706). |

| Goal           | - Following a study that revealed “Only 46% of the food offerings in school cafeterias were considered nutritious” the provincial government created guidelines to help the school districts and vendors increase access to healthful foods (NFLD_20150706) |

| Justification given in document(s) | - Nutrition as a Component of Health |

| Implementation | - School districts used the guideline to create policy.  
|                | - “it was a soft release from, it wasn’t a big splash that came down “okay now we have school food guidelines” it was kind of a soft release. The districts knew these were there and they were using them to, you know, develop their policy. I guess I would say, some districts were further ahead than others” (NFLD_20150706) |
Table 5.16: Summary of aspects of the SFE addressed – Newfoundland and Labrador

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition – Maximum Values</td>
<td>Access to Healthful Foods</td>
</tr>
<tr>
<td>Nutrition – Minimum Values</td>
<td>Barriers to Success</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>Champions</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>Childhood Overweight and Obesity</td>
</tr>
<tr>
<td>Revenue Generation</td>
<td>Exceptions</td>
</tr>
<tr>
<td>Water</td>
<td>External SFE</td>
</tr>
<tr>
<td></td>
<td>Food from Home</td>
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<td></td>
<td>Impact</td>
</tr>
<tr>
<td></td>
<td>Learn by Example</td>
</tr>
<tr>
<td></td>
<td>Lessons Learned</td>
</tr>
<tr>
<td></td>
<td>Nutrition Criteria</td>
</tr>
<tr>
<td></td>
<td>Nutrition – Education</td>
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<td></td>
<td>Personal Responsibility</td>
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<td></td>
<td>Physical Activity</td>
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<td></td>
<td>Physical Environment</td>
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<td></td>
<td>Pricing – Health Promotion</td>
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<td></td>
<td>Private Sector Partnerships</td>
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<tr>
<td></td>
<td>Restrict Food as Reward</td>
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<td></td>
<td>Revenue Generation</td>
</tr>
</tbody>
</table>

The second edition of *School Food Guidelines for School Food Providers* was published in 2008, replacing the first one published in 2006. The changes made between editions reflect the changes made Canada’s food guide which had been revised from the 1992 version to *Eating Well with Canada’s Food Guide* that was released in 2007 (Health Canada 2007a).

These guidelines are intended to assist in the creation of policy at the district level. At the time the guidelines were issued, Newfoundland and Labrador had four English-language school districts with policies. Recently, however, the English-language school districts amalgamated into one. Since then, it was learned through e-mail correspondence with the assistant to an official in the newly amalgamated district that all of the English-language schools in the province have been using the nutrition policy from the Eastern School District, which is based in St. John’s. The policy states, “it adheres to the Provincial School Food Guidelines”, therefore it can be assumed that
the intent is for schools to follow the nutrition criteria outlined in the document (Eastern School District 2006: 2).

The guidelines were a product of the advocacy of the Coalition for School Nutrition, which began initially as an organization to bring breakfast, snack and milk programs to students. Those who were involved in the schools themselves were concerned about the nutritional quality of the foods and beverages made available to students for purchase. The Coalition conducted a survey in October 2000, which found the three primary sources of food and beverages to students: cafeterias, canteens, and vending machines, contained more unhealthy products than healthy products (Coalition for School Nutrition 2001). The survey also found that, at the time, nearly 60% of schools did not have a nutrition policy.

The survey results revealed a need for nutrition advocacy, which the Coalition took on. This is consistent with the results of the content analysis, which showed the purpose of the guideline was to address health through nutrition. The Coalition first lobbied the Federation of School Councils, who resolved that they wanted school nutrition guidelines and then they lobbied the provincial government, who were receptive because they saw, through the Coalition, there was significant support from the public for such a measure (NFLD_20150706). Using Eating Well with Canada’s Food Guide (Health Canada 2007a) as a basis for the number of servings and types of food, the second edition was updated to include recommendations for calcium, fibre and iron.

The guidelines provide information on how to read nutrition labels, how to judge appropriate serving sizes and encourages incorporating all four food groups into meals. It also outlines the Serve Most, Serve Moderately system. Like British Columbia, at least fifty percent of options in the school food environment must be from the Serve Most category and no more than fifty percent can be from the Serve Moderately category (Newfoundland and Labrador 2008). In addition to categorizing foods and beverages based on their sugar, sodium, and fat content, foods are also categorized by their content of calcium, fibre, or iron, depending on the food group (Newfoundland and Labrador 2008).

At the release of the first edition, there was variation in the rate of development of school district nutrition policies. The Eastern School District had already been moving in this direction, which decreased the resistance from them (NFLD_20150706). For others that had not been as involved with health and wellness activities experienced resistance, especially from students, and had a more challenging time adapting the menus to the new nutrition guidelines. To help schools make
the adjustments, the province provided financial support to improve the infrastructure of cafeterias and kitchens, as well as provide workshops for caterers and health liaisons for consultations (NFLD_20150706).

Infrastructure has been an important aspect to addressing the internal school food environment in Newfoundland and Labrador, and elsewhere, although not all subnational jurisdictions have had the same investment in this area. Many schools were built without large areas for food preparation or dining. If schools had such areas, they were “basically a room with a plug-in for a stove, a domestic stove” (NFLD_20150706). There had been a trend toward removing these spaces in favour of other spaces; computer labs were given as an example. When schools are being built now in Newfoundland and Labrador, food preparation and dining space are being considered an important part of the design, including spaces for adequate and safe food storage and industrial kitchen equipment. As mentioned above, the province provided funding to help existing schools replace equipment no longer suited for food preparation under the new guidelines, like deep fryers with other equipment that is more suitable.

The guidelines have had some positive impacts on the school food environment. Schools are no longer allowed to sell pop, chips and French fries to students. The guidelines had an unintended consequence. Food and beverage companies have been able to bypass maximum allowances of sugar, sodium, and fat by adding minimum amounts of fibre, calcium, and iron to their products (NFLD_20150706). This problem will likely be addressed when the guidelines are next reviewed, however the province wants to incorporate the recommendations from the Federal, Provincial, and Territorial attempt to harmonize school nutrition standards and to see the results of Nova Scotia’s review of their policy, which will be discussed in more detail in the next case (NFLD_20150706; FPTGN 2013). It is worth noting now that the participants identified Nova Scotia as the leader on health initiatives in the Atlantic Provinces, and waiting would allow Newfoundland and Labrador to consider incorporating any changes that Nova Scotia makes (NFLD_20150706). Further, 2015 was an election year for Newfoundland and Labrador, and a Liberal government was formed, replacing the former Conservative government. This may mean there will be a change in priorities regarding public health and how school nutrition fits in it (NFLD_20150706).
**Table 5.17: Summary of Materials Used for the Case – Nova Scotia**

| Regulatory Document(s) | - Executive Summary, Food and Nutrition Policy for Nova Scotia Public Schools (Nova Scotia 2006)  
| Type                  | - Policy |
| Department            | - Dept. of Education  
|                        | - Dept. of Health and Protection |
| Intended Audience     | - School Board Administrators |
| Interviews            | - None |
| Suppl. Materials      | - News Media  
|                        | - *Food and Nutrition in Nova Scotia Schools: An Environmental Scan of Key School Informants* (Murton 2004).  
|                        | - *Food and Beverage Standards for Nova Scotia Public Schools* (Nova Scotia 2006)  
|                        | - Existing academic literature on the SFE in Nova Scotia |
**Table 5.18: Summary of Content Analysis – Nova Scotia**

| **Who is involved**          | - Dept. of Health and Health Promotion  
                                  - Dept. of Education  
                                  - Dept. of Agriculture  
                                  - Nova Scotia School Boards Association  
                                  - Nova Scotia Federation of Home and School Associations  
                                  - Nova Scotia Teachers Union  
                                  - Cumberland County School Food Project  
                                  - Annapolis Valley Health Promoting Schools Program  
                                  - La Fédération des parents acadiens de la Nouvelle-Écosse  
                                  - Each of the Nova Scotia School Boards  
                                  - (Nova Scotia Executive Summary 2006: 8) |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Origin</strong></td>
<td>- In June 2004, the Healthy Foods in Nova Scotia Schools Steering Committee published a report examining the school food environment in Nova Scotia, among the recommendations to come from that report was Nutrition Guidelines (HFNSSSC 2004: 30)</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>- “The Food and Nutrition Policy for Nova Scotia Public Schools is intended to increase access to and enjoyment of health promoting, safe, and affordable food and beverages, served and sold in Nova Scotia public schools. The objective is to make the healthy food and beverage choice the easy choice in the school setting” (Nova Scotia Executive Summary 2006: 1)</td>
</tr>
</tbody>
</table>
| **Justification given in document(s)** | - Childhood Overweight and Obesity  
                                  - Health Necessary for Learning  
                                  - Hunger  
                                  - Nutrition as a Component of Health |
| **Implementation**            | - Mandatory implementation of nutrition criteria |
Table 5.19: Summary of aspects of the SFE addressed – Nova Scotia

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
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</thead>
<tbody>
<tr>
<td>• Culture</td>
<td></td>
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<tr>
<td>• De-Centralized Solutions</td>
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<tr>
<td>• Dining</td>
<td></td>
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<tr>
<td>• Environment</td>
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<tr>
<td>• Exception</td>
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<tr>
<td>• Food Program</td>
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<tr>
<td>• Nutrition – Education</td>
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<tr>
<td>• Nutrition – Maximum Values</td>
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<tr>
<td>• Nutrition – Minimum Values</td>
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<tr>
<td>• Nutrition – Moderation</td>
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<td>• Personal Responsibility</td>
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<td>• Physical Activity</td>
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<tr>
<td>• Physical Environment</td>
<td></td>
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<tr>
<td>• Pricing – Health Promotion</td>
<td></td>
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<tr>
<td>• Private Sector Partnerships</td>
<td></td>
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<tr>
<td>• Promotion – Health Choices</td>
<td></td>
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<tr>
<td>• Promotion – Limiting Unhealthy Choices</td>
<td></td>
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<tr>
<td>• Revenue Generation</td>
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<tr>
<td>• Social Determinants of Health</td>
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<tr>
<td>• Social Responsibility</td>
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<tr>
<td>• Socialization</td>
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<tr>
<td>• Water</td>
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</table>

Two documents were used for the content analysis of regulations for school food environments in Nova Scotia. Within those two documents are twenty-three of the twenty-four regulatory nodes. A comprehensive approach to regulating school food environments is consistent with the presence of the four justifications given for regulating the environments: the link between nutrition and health as well as health and learning, childhood overweight and obesity and food insecurity as addressing each of these requires more than nutrition requirements for foods and beverages.

At the time the interviews were conducted, an e-mail dated June 11, 2015 from the Coordinator of Nutrition for School-aged Children and Youth stated that the School Food and Nutrition Policy was under review and so they were unable to answer questions about the regulations at the time.
The existing materials do, however provide a substantial amount of background information about the origins and objectives of the policy.

In 2004, the Department of Education “established a Food and Nutrition in Nova Scotia Schools Policy Work Group” with the intention of developing policy and guidelines for school food and nutrition (Nova Scotia Executive Summary 2006: 2). The Work Group was made up of key stakeholders from “Nova Scotia Health Promotion and Protection, Department of Agriculture, the eight school boards, administrators, teachers, dietitians and nutritionists, the Nova Scotia Teachers Union, the Nova Scotia Federation of Home and School Associations, La Fédération des parents acadiens de la Nouvelle-Écosse, the Annapolis Valley Health Promoting Schools Program, and the Cumberland County School Food Project” (Nova Scotia Executive Summary 2006: 2). The inclusion of a variety of stakeholders in the development of the policy is further reflected in the repeated message of how students should be encouraged to make healthy choices in all aspects of their lives, not just when purchasing foods and beverages at school, and that community support is an important component of the larger, public health goals of raising healthy children.

Originally issued in 2006, the Policy Directives and Guidelines were given a three-year phase in period with the expectation that all schools would have fully implemented the nutrition requirements by the end of the 2008-2009 school year (Nova Scotia Policy Directives and Guidelines 2006). The objective of the policy is to “make the healthy food and beverage choice the easy choice in the school setting” (Nova Scotia Executive Summary 2006: 1). The content analysis shows, however, that the province also supports addressing hunger, childhood overweight and obesity, as well as recognizing the link between health and ability to learn. To achieve these objectives, the policy outlines a comprehensive approach to health and wellness, including twelve directives related to nutrition, drinking water, food and nutrition programming, pricing, fundraising, special functions, promotion and advertising, use of food as reward, vulnerable students, portion size, food safety and nutrition education (Nova Scotia, Executive Summary 2006). The comprehensive approach taken by Nova Scotia through the number of directives and suggestions for schools to incorporate in their school food environments addresses many aspects of the school food environment. While the policy does not explicitly ban any foods, it does limit the availability of foods and beverages of minimum nutritional value.

In the Executive Report, the need to support children in making healthy eating choices through directives of the school nutrition policy is accompanied by statistics pertaining to the health and
wellbeing of children in Nova Scotia. In 2004, the combined rate of overweight and obese children in Nova Scotia was 32%; fewer than 10% of high school aged students were getting the recommended sixty minutes a day of physical activity; and fewer than half of grade five students were getting the recommended daily servings of fruits, vegetables, and grain products (Nova Scotia Executive Report 2006). This data was sufficient to cause concern and a need to intervene in order to address the short term health problems associated with an unhealthy diet and inactivity but also to prevent the long term health problems that will emerge in the adults who have these habits as children (Nova Scotia Executive Report 2006).

Food and beverages are divided into three categories based on Health Canada’s Nutrition Claims and Canada’s Food Guide to Healthy Eating (Nova Scotia Food and Beverage Standards for Nova Scotia Public Schools 2006). The categories are: Maximum, Moderate, and Minimum Nutrition and are meant to help students, parents, parent volunteers, principals, and food service workers decide what should be served and what should be consumed as part of a healthy diet with those items belonging to the Maximum Nutrition category being served most often, and those of Minimum Nutrition only served once or twice a month as part of special occasions (Nova Scotia Food and Beverage Standards for Nova Scotia Public Schools 2006).

5.1.9. Ontario

Table 5.20: Summary of Materials Used for the Case – Ontario

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>School Food and Beverage Policy Resource Guide 2010 (PPM 150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Policy</td>
</tr>
<tr>
<td>Department</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>School Board Administrators</td>
</tr>
<tr>
<td>Interviews</td>
<td>1 School Board Official (ON_20150413)</td>
</tr>
<tr>
<td></td>
<td>1 School Board Official (ON_20150420)</td>
</tr>
<tr>
<td></td>
<td>1 NGO Coordinator (ON_20150526)</td>
</tr>
<tr>
<td>Suppl. Materials</td>
<td>None</td>
</tr>
</tbody>
</table>
Table 5.21: Summary of Content Analysis – Ontario

| Who is involved | - Ministry of Education  
|                 | - "Healthy Schools", School Board Committee (ON_20150420)  
|                 | - "Parental Involvement" Committee (ON_20150420)  
|                 | - Regional Health Unit (ON_20150413) |

| Origin | - “When nutritionally inadequate food and beverages are available and promoted at school every day, even alongside healthier food and beverages, it becomes difficult for students to choose a healthy diet” (Ontario 2010: 1) |

| Goal | - “The Ontario Ministry of Education is committed to making schools healthier places for students” (Ontario 2010: 1) |

| Justification given in document(s) | - Health Necessary for Learning  
|                                  | - Nutrition as a Component of Health |

| Implementation | - Mandatory implementation of nutrition criteria  
|                | - One school board established a committee to “make sure that we had consistent guidelines across the system” (ON_20150420)  
|                | - One school board standardized all of the school cafeterias to make implementation easier (ON_20150413) |

First passed in 2008, substantially revised in 2010 with full implementation in September 2011, Ontario’s School Food and Beverage Policy: Resource Guide from the Ministry of Education contains both Policy/Program Memorandum (PPM) 150 and information for implementation. Twelve of the twenty-four regulatory nodes are present in the document. It should be noted that the document outlines maximum values of sugar, sodium, and fat allowable in foods and beverages sold in school, however these mandates are contained within images and fell outside of the analyzable content of the documents performed for the content analysis of the documents.
### Table 5.22: Summary of aspects of the SFE addressed – Ontario

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td>• Alternative Food Networks</td>
</tr>
<tr>
<td>• Environment</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Exceptions</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• Childhood Overweight and Obesity</td>
</tr>
<tr>
<td>• Physical Environment</td>
<td>• Culture</td>
</tr>
<tr>
<td>• Restrict Food as reward</td>
<td>• De-Centralized Solutions</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Environment</td>
</tr>
<tr>
<td>• Social Responsibility</td>
<td>• Exceptions</td>
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<tr>
<td>• Socialization</td>
<td>• External SFE</td>
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<tr>
<td>• Water</td>
<td>• Food From Home</td>
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<td></td>
<td>• Food Programs</td>
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<td></td>
<td>• Health Necessary for Learning</td>
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<td>• Hunger</td>
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<td>• Impact</td>
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<td>• Nutrition Criteria</td>
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<td>• Nutrition Education</td>
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<td>• Nutrition – Health</td>
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<td>• Physical Activity</td>
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<td>• Physical Environment</td>
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<td></td>
<td>• Private Sector Partnerships</td>
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<td></td>
<td>• Problems to be Addressed in SFE</td>
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<td></td>
<td>• Promotion – Limiting Unhealthy Choices</td>
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<td>• Revenue Generation</td>
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<td>• Social Determinants of health</td>
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<td>• Social Responsibility</td>
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<td></td>
<td>• Socialization</td>
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</tbody>
</table>

PPM 150 and its accompanying resource guide are aimed at school board administrators, cafeteria managers and principals. The implementation and oversight of the policy occur at the school board level and the Resource Guide is meant to assist those at that level with the process. The introduction of the Resource Guide emphasizes the link between nutrition, health, and learning as being the justification for the policy (Ontario 2010). As such, the emphasis throughout the document is on food and nutrition standards. As it is a policy, it applies to all food and beverages made available to students for sale on school property in the province. Foods and beverages are categorized into three groups: Sell Most, Sell Moderately and Do Not Sell. Sell Most foods and beverages must make up at least 80% of options to students, Sell Moderately choices can make
up no more than 20% of foods and beverages and Do Not Sell foods should not be sold to students (Ontario 2010: 9).

Significant portions of the document provide examples of how to calculate the nutritional information in order to categorize foods and beverages into the three groups (Ontario 2010). Examples of foods and beverages that are appropriate for sale and those that are not are also given in an effort to aid school administrators, food service providers and vendors in assessing their offerings (Ontario 2010: 84). The nutrition standards are based on the food groups given in *Eating Well with Canada’s Food Guide* (Health Canada 2007a) and the values for sugar, sodium, and fat contained in foods and beverages determine which group they belong in. In addition to Sell Most, Sell Moderately, and Do Not Sell, standards are also based on age where servings and allowable amounts are set for elementary and secondary school students.

5.1.10. *Prince Edward Island*

Table 5.23: Summary of Materials Used for the Case – Prince Edward Island

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>- PEI Eastern School District “Policy Statement”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Administrative Regulation</td>
</tr>
<tr>
<td>Type</td>
<td>- Policy</td>
</tr>
<tr>
<td>Department</td>
<td>- Eastern School District</td>
</tr>
<tr>
<td></td>
<td>- Dept. of Education</td>
</tr>
<tr>
<td>Intended Audience</td>
<td>- School and School Board Administrators</td>
</tr>
<tr>
<td>Interviews</td>
<td>- None</td>
</tr>
<tr>
<td>Suppl. Materials</td>
<td>- Healthy Eating Alliance PEI (healthyeatingpei.ca)</td>
</tr>
<tr>
<td>Table 5.24: Summary of Content Analysis – Prince Edward Island</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Who is involved**                                           | - PEI Healthy Eating Alliance  
|                                                               | - Dept. of Education  
|                                                               | - Eastern School District  
|                                                               | - “lead schools in the Eastern School District” (Administrative Regulation 2011: 1 of 10) |
| **Origin**                                                    | - “Once children go to school, establishing healthy eating habits requires a cooperative effort between the home and the school. Since students spend more time in school than in almost any other environment and may consume 40% of their daily food intake at school, the school setting can have a tremendous and positive impact on the foods children eat, student health and learning” (healthyeatingpei.ca) |
| **Goal**                                                      | - “The Eastern School District will improve student access to food by improving access by all students to healthy, safe, reasonably priced, attractively presented food choices; and will attempt to reduce hunger among children living with food insecurity, through enhanced access to healthy foods within the school setting, provided in a non-stigmatizing manner” (Administrative Regulation 2011: 1 of 2). |
| **Justification given in document(s)**                       | - Health Necessary for Learning  
|                                                               | - Hunger  
|                                                               | - Nutrition as a Component of Health |
| **Implementation**                                           | - Mandatory implementation of nutrition criteria |
Table 5.25: Summary of aspects of the SFE addressed – Prince Edward Island

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td></td>
</tr>
<tr>
<td>• Dining</td>
<td></td>
</tr>
<tr>
<td>• Exceptions</td>
<td></td>
</tr>
<tr>
<td>• Food Programs</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Banned Food</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td></td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td></td>
</tr>
<tr>
<td>• Physical Activity</td>
<td></td>
</tr>
<tr>
<td>• Physical Environment</td>
<td></td>
</tr>
<tr>
<td>• Pricing – Healthy Choices</td>
<td></td>
</tr>
<tr>
<td>• Promotion – Healthy Choices</td>
<td></td>
</tr>
<tr>
<td>• Restrict Food as Reward</td>
<td></td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td></td>
</tr>
<tr>
<td>• Social Responsibility</td>
<td></td>
</tr>
<tr>
<td>• Socialization</td>
<td></td>
</tr>
<tr>
<td>• Water</td>
<td></td>
</tr>
</tbody>
</table>

The policy issued by the amalgamated English-Language School Board is the only subnational jurisdiction regulation that is not issued by the provincial or territorial government but applies to all English-language schools in it. When the school nutrition policy was first implemented, there were two English-language school boards, each with its own policy. Since amalgamating, the new school board chose to use the policy statement and policy from the Eastern School District, although it should be noted that there were few differences between it and the policy issued from the Western District (Healthy Eating PEI “School Nutrition Policies”). Becoming effective in 2011, the “Policy Statement” and Administrative Regulation is meant to support healthy food choices among students because of the role nutrition plays in one’s health and performance in school (PEI Eastern District School Board 2011). Nineteen of the twenty-four regulatory nodes are present in the two documents. The rationale within the two documents suggests that nutrition, health, learning and food security are the issues that the policy is trying to address (PEI Eastern District School Board 2011).
The policy, while issued by the school board, is a joint effort between it, the provincial government and the Prince Edward Island Healthy Eating Alliance. The Healthy Eating Alliance is an organization of stakeholders in the health and wellbeing of Prince Edward Island, including the Departments of Health and Education, the Heart and Stroke Foundation in the province as well as academics and dietitians (PEI Healthy Eating Alliance). This group is aimed at improving overall public health through healthful eating and nutrition, and school nutrition is a component of this. Invitations to participate in this research were extended to people in each group, however ultimately no one participated. The case is built on the Eastern School District Nutrition Policy Statement and Administrative Regulation, unless otherwise cited.

The *Administrative Regulation* is divided into three sections: Student Access to Food, Quality of Food Available at School, and Nutrition Education (PEI Eastern District School Board 2011). The second section pertains to the nutritional requirements for foods and beverages sold at school. Foods and beverages are categorized broadly into Foods to Sell Most Often and Foods to Sell Sometimes. Lists of foods and beverages for each category are provided in a separate document called “Guide to Food Choices” and are based on *Eating Well with Canada’s Food Guide* (Health Canada 2007a). Energy drinks are banned from school property (PEI Eastern District School Board 2011: 2).

The other two sections address aspects of the school food environment other than nutrition requirements. Such a comprehensive approach is consistent with the justification nodes present. The section addressing access is geared to students who are food insecure. According to the policy, schools must participate in the provincial school milk program, have a food cupboard available for “students in need” and provide “a breakfast or snack program where need is identified” (PEI Eastern District School Board *Administrative Regulation* 2011: 1). For those who do purchase food at school, pricing is meant to support healthy choices and healthier choices should receive promotion and placement to make them more appealing. Schools are also required to give students at least twenty minutes to eat in a calm environment. The last section addresses how to incorporate nutrition education into the curriculum and encourages teachers and other adults in the school to role model healthy choices to further support students in making such choices.
5.1.11. Quebec

Table 5.26: Summary of Materials Used for the Case – Quebec

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>- Going the Health Route at School: Framework Policy on Healthy Eating and Active Living.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>- Guideline</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>- Ministère de L’Éducation, Du Loisir et du Sport</td>
</tr>
<tr>
<td><strong>Intended Audience</strong></td>
<td>- School Board Administrators</td>
</tr>
<tr>
<td><strong>Interviews</strong></td>
<td>- None</td>
</tr>
<tr>
<td><strong>Suppl. Materials</strong></td>
<td>- None</td>
</tr>
</tbody>
</table>

Table 5.27: Summary of Content Analysis – Quebec

<table>
<thead>
<tr>
<th><strong>Who is involved</strong></th>
<th>- Institut National de Santé</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Publique du Québec</td>
</tr>
<tr>
<td></td>
<td>- Ministère de L’Éducation, Du Loisir et du Sport</td>
</tr>
<tr>
<td></td>
<td>- The Ministère de la Santé et des Services Sociaux</td>
</tr>
<tr>
<td></td>
<td>- Association Québécoise d’Etablissements de Santé et de Services Sociaux</td>
</tr>
<tr>
<td><strong>Origin</strong></td>
<td>“Québec schools have long shown concern for the health and well-being of the young people for whom they are responsible” (Quebec 2005: 1)</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>“facilitate the acquisition of competencies and develop behaviours that promote educational success, health and well-being</td>
</tr>
<tr>
<td></td>
<td>- promote a school and community environment that is stimulating, healthy and safe</td>
</tr>
<tr>
<td></td>
<td>- create harmonious relations between the school, families and the com-munity” (Quebec 2005: 1)</td>
</tr>
<tr>
<td><strong>Justification given in document(s)</strong></td>
<td>- Childhood Overweight and Obesity</td>
</tr>
<tr>
<td></td>
<td>- Health Necessary for Learning</td>
</tr>
<tr>
<td></td>
<td>- Nutrition as a Component of Health</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>- School boards encouraged to use guideline to develop policies</td>
</tr>
</tbody>
</table>
Table 5.28: Summary of aspects of the SFE addressed – Quebec

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td></td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td></td>
</tr>
<tr>
<td>• Dining</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Banned Foods</td>
<td></td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td></td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td></td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td></td>
</tr>
<tr>
<td>• Physical Activity</td>
<td></td>
</tr>
<tr>
<td>• Physical Environment</td>
<td></td>
</tr>
<tr>
<td>• Private Sector Partnerships</td>
<td></td>
</tr>
<tr>
<td>• Promotion – Healthy Choices</td>
<td></td>
</tr>
<tr>
<td>• Promotion – Limiting Unhealthy Choices</td>
<td></td>
</tr>
<tr>
<td>• Social Determinants of Health</td>
<td></td>
</tr>
<tr>
<td>• Social Responsibility</td>
<td></td>
</tr>
<tr>
<td>• Socialization</td>
<td></td>
</tr>
<tr>
<td>• Water</td>
<td></td>
</tr>
</tbody>
</table>

*Going the Healthy Route At School: Framework Policy on Healthy Eating and Active Living* was published in 2007. It was written for school boards, and all educational institutions below the post-secondary level, including adult education centres for nutrition guidance. Although the researcher was unable to obtain an interview from Quebec, the document contains information that otherwise would have been asked of the developers, including background information about the origins, information about the state of health of the children of Quebec, as well as Ministry supports for implementation and evaluation.

The *Framework Policy* is a guideline, though the title may suggest otherwise. Similarly to the other guidelines, it is meant to serve as “a tool to facilitate initiatives in the field” in which school boards and schools can use the contents of the *Framework Policy* to support healthy eating, physical activity, and health education in the school environment (Quebec 2007:5). The decision to provide a guideline instead of a policy was made, like in other regions with guidelines, so school boards or individual schools can address the circumstances of their environment through the policy, as well as to acknowledge that there are some school boards that have been working towards
creating an environment that is conducive to promoting healthy lifestyle habits in students prior to a province-level initiative (Quebec 2007: 5).

The aim of the document is to “support schools in providing an environment conducive to the adoption and maintenance of healthy eating and active living habits and the development of students’ competencies in this regard” (Quebec 2007: 17). The guideline is divided into three parts, broken into chapters: Chapter 1 presents the current situation of the state of health and wellbeing of children in Quebec including dietary intake and physical activity; Chapter 2 provides the approaches to healthy eating and active living to address the situation presented in the previous chapter; and Chapter 3 provides guidance for implementation and evaluation of the board and school level policies.

The Framework Policy (Quebec 2007) is notably different than the other regulatory documents in several ways. The differences can be attributed in part to Quebec having a Ministère de L’Éducation, Du Loisir et du Sport (MELS), which is the Ministry responsible for non-post-secondary education and thus regulates the school food environments. It does this by providing orientations for the school environment, active living, and education, promotion and communication. These orientations are made up of suggestions to be implemented in environments children spend time, including schools but also daycare and community centres.

In addition to the MELS, the Ministère de la Santé et des Services sociaux (MSSS) and the Ministère de l’Agriculture, des Pêcheries et de l’Alimentation du Québec (MAPAQ) collaborated on the development of this document. The implementation chapter includes Ministry commitments to facilitating the goals of the Framework Policy (Quebec 2007). They include visiting schools to help them “embrace the policy”, provide the school community with eight million dollars, more than six million of which dedicated to providing infrastructure for food preparation and storage like ovens, stoves, and refrigerators, and aim public health campaigns at young people to support the efforts taking place in the schools (Quebec 2007: 35).

The Framework Policy (Quebec 2007) provides nutrition criteria as many of the other documents do, but does so in a different way than many of the others. Instead of nutrition criteria that determine whether or not an item may be made available to students and how often, the Quebec guideline suggests promoting fruit, vegetable, and whole grain consumption, meals that include all four food groups, while prohibiting the selling or serving of food or beverages where sugar or a sugar
substitute is the first ingredient, as well as certain preparation methods that require larger amounts of fat (Quebec 2007).

Another notable difference between the school nutrition regulatory document of Quebec and those of other subnational jurisdictions is the attention given to overweight and obesity in children and related to this, encouraging physical activity in young people. In this way, the *Framework Policy* (Quebec 2007) is aimed at addressing health more comprehensively than the others, which are primarily focused on the nutrition of food and beverages.

5.1.12. **Saskatchewan**

**Table 5.29**: Summary of Materials Used for the Case – Saskatchewan

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>Nourishing Minds: Towards Comprehensive School Community Health: Nutrition Policy Development in Saskatchewan Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food for Thought: School Nutrition Policy</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Guideline</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>Ministry of Education</td>
</tr>
<tr>
<td><strong>Intended Audience</strong></td>
<td>School Division Administrators</td>
</tr>
<tr>
<td><strong>Interviews</strong></td>
<td>1 Dietician (SK_20150604)</td>
</tr>
<tr>
<td></td>
<td>1 Cafeteria Manager/Teacher (SK_20150625)</td>
</tr>
<tr>
<td><strong>Suppl. Materials</strong></td>
<td>CHEP (chep.org)</td>
</tr>
<tr>
<td><strong>Table 5.30: Summary of Content Analysis – Saskatchewan</strong></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Who is involved</strong></td>
<td></td>
</tr>
<tr>
<td>- Ministry of Education (Saskatchewan 2009)</td>
<td></td>
</tr>
<tr>
<td>- Nutrition Positive (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- Health Promoting Schools (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- In Motion School Action Committee (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- School Boards and Superintendents (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- Sask Milk (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- Breakfast for Learning (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- CHEP (SK_20150604)</td>
<td></td>
</tr>
<tr>
<td>- Educators (SK_20150625)</td>
<td></td>
</tr>
<tr>
<td><strong>Origin</strong></td>
<td></td>
</tr>
<tr>
<td>- &quot;The Government of Saskatchewan believes that the</td>
<td></td>
</tr>
<tr>
<td>learning success, well-being and achievement of our</td>
<td></td>
</tr>
<tr>
<td>young people are vital for securing the future of our</td>
<td></td>
</tr>
<tr>
<td>province&quot;&quot; (Saskatchewan 2009: 1)&quot;</td>
<td></td>
</tr>
<tr>
<td>- &quot;Providing healthy food at an early age supports a life-</td>
<td></td>
</tr>
<tr>
<td>long approach to healthy living. Our schools serve as</td>
<td></td>
</tr>
<tr>
<td>an important access point for nutrition education and</td>
<td></td>
</tr>
<tr>
<td>healthy eating practices, healthy food policy and</td>
<td></td>
</tr>
<tr>
<td>modeling of healthy lifestyles.&quot; (Saskatchewan 2009: 1)</td>
<td></td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td></td>
</tr>
<tr>
<td>- “Adopting and fully implementing policies based on</td>
<td></td>
</tr>
<tr>
<td>these guidelines and aligned with the health education</td>
<td></td>
</tr>
<tr>
<td>curricula will en-sure a consistent nutrition standard</td>
<td></td>
</tr>
<tr>
<td>for all Saskatchewan schools.” (Saskatchewan 2009: 7)</td>
<td></td>
</tr>
<tr>
<td><strong>Justification given in document (s)</strong></td>
<td></td>
</tr>
<tr>
<td>- Childhood Overweight and Obesity</td>
<td></td>
</tr>
<tr>
<td>- Health Necessary for Learning</td>
<td></td>
</tr>
<tr>
<td>- Hunger</td>
<td></td>
</tr>
<tr>
<td>- Nutrition Necessary for Health</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td></td>
</tr>
<tr>
<td>- School divisions are encouraged to use the guidelines</td>
<td></td>
</tr>
<tr>
<td>to create policy</td>
<td></td>
</tr>
<tr>
<td>- “we thought that, you know, if we could work with a</td>
<td></td>
</tr>
<tr>
<td>couple of schools in the division to come up with a</td>
<td></td>
</tr>
<tr>
<td>school-level policy, that, the division might be more</td>
<td></td>
</tr>
<tr>
<td>willing to entertain a division level policy” (SK_20150604)</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.31: Summary of aspects of the SFE addressed – Saskatchewan

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Access to Healthful Foods</td>
</tr>
<tr>
<td>• De-Centralized Solutions</td>
<td>• Alternative Food Networks</td>
</tr>
<tr>
<td>• Food Program</td>
<td>• Barriers to Success</td>
</tr>
<tr>
<td>• Nutrition Education</td>
<td>• Champions</td>
</tr>
<tr>
<td>• Nutrition – Maximum Values</td>
<td>• Culture</td>
</tr>
<tr>
<td>• Nutrition – Minimum Values</td>
<td>• De-Centralized Solutions</td>
</tr>
<tr>
<td>• Personal Responsibility</td>
<td>• Environment</td>
</tr>
<tr>
<td>• Physical Activity</td>
<td>• Exceptions</td>
</tr>
<tr>
<td>• Physical Environment</td>
<td>• External SFE</td>
</tr>
<tr>
<td>• Private Sector Partnerships</td>
<td>• Food from Home</td>
</tr>
<tr>
<td>• Promotion – Healthy Choices</td>
<td>• Food Programs</td>
</tr>
<tr>
<td>• Promotion – Limiting Unhealthy Choices</td>
<td>• Health Necessary for Learning</td>
</tr>
<tr>
<td>• Restricting Food as Reward</td>
<td>• Hunger</td>
</tr>
<tr>
<td>• Revenue Generation</td>
<td>• Impact</td>
</tr>
<tr>
<td>• Social Determinants of Health</td>
<td>• Implementation</td>
</tr>
<tr>
<td>• Social Responsibility</td>
<td>• Nutrition – Banned Foods</td>
</tr>
<tr>
<td>• Socialization</td>
<td>• Nutrition Criteria</td>
</tr>
<tr>
<td></td>
<td>• Nutrition Education</td>
</tr>
<tr>
<td></td>
<td>• Nutrition – Health</td>
</tr>
<tr>
<td></td>
<td>• Personal Responsibility</td>
</tr>
<tr>
<td></td>
<td>• Physical Environment</td>
</tr>
<tr>
<td></td>
<td>• Pricing – Health Promotion</td>
</tr>
<tr>
<td></td>
<td>• Private Sector Partnerships</td>
</tr>
<tr>
<td></td>
<td>• Problems to be Addressed in SFE</td>
</tr>
</tbody>
</table>

*Nourishing Minds: Towards Comprehensive School Community Health: Nutrition Policy Development in Saskatchewan Schools* was published in October 2009 as a guideline for school divisions in the province to create nutrition policies from. Accompanying this is *Food for Thought: School Nutrition Policy*, which was commissioned by the Saskatchewan School Boards Association to assist boards of education and school community councils in developing and reviewing nutrition practices and policies and best-practices, authored by Kelly Berlinic, the Director of Community & Organizational Development for Breakfast for Learning. At the time interviews were being conducted, it was learned in an e-mail dated May 11, 2015 that the Saskatchewan Comprehensive Community School Consultant was reviewing their guideline and no one in the
Ministry of Education would be able to participate in an interview. Breakfast for Learning also declined to participate in this research.

*Nourishing Minds* (Saskatchewan 2009) was issued by the Ministry of Education to recognize the link between nutrition, health and academic performance and have schools engage with that link by creating nutrition policies at the school or school division level. The guidelines present a comprehensive approach to health by encouraging school administrators to engage with students and with the community as a whole to help students make healthier decisions. While *Nourishing Minds* is a guideline, the Ministry of Education requires schools or school divisions to have a nutrition policy (Saskatchewan 2009). While the province does not set the policy itself, the contents of the guideline suggest there is a strong sense of responsibility for its part in the health and well-being of young people in the province.

The nutrition guidelines in *Nourishing Minds* are given in an appendix at the end of the document (Saskatchewan 2009). The nutrition guidelines are based on *Eating Well with Canada’s Food Guide* (Health Canada 2007a) where foods are categorized into one of the four food groups and then grouped into Choose Most Often and Choose Sometimes, followed by information about how to categorize mixed dishes into the two categories (Saskatchewan 2009). The remainder of the document covers the Comprehensive School Health approach, emphasizing equality, accessibility, and community engagement to support the health and well-being of young people outside of the school as well as in it (Saskatchewan Ministry of Education 2009). The comprehensive approach explicitly mentioned in the document would support the four justifications for the guidelines and requirement for division level nutrition policies.

While *Nourishing Minds* (Saskatchewan 2009) includes rubrics and checklists to assist in the creation of school or division level policies, as mentioned above, the School Boards Association for Boards of Education in Saskatchewan commissioned another report *Food for Thought* (Berlinic n.d.) for further assistance in developing nutrition policies. In addition to emphasizing the need for policy intervention through the use of statistics addressing eating habits and weight, *Food For Thought* (Berlinic n.d.) also provides strategies for how to deal with resistance to nutrition policies from parents, teachers or vendors. The third and fourth sections provide examples of success stories for divisions that have already implemented policies followed by the steps to take to create a policy where one does not exist, including forming a committee and identifying goals to be achieved through the policy (Berlinic n.d.). By including additional information about the need to
encourage healthy eating, and best-practices from those that have implemented successful policies, *Food for Thought* can be an additional resource for school divisions and schools that are struggling to do so with only *Nourishing Minds* (Berlinic n.d.).

5.1.13.  **Yukon Territory**

**Table 5.32: Summary of Materials Used for the Case – Yukon Territory**

<table>
<thead>
<tr>
<th>Regulatory Document(s)</th>
<th>- School Nutrition Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>- Policy</td>
</tr>
<tr>
<td><strong>Department</strong></td>
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<td><strong>Intended Audience</strong></td>
<td>- School Administrators</td>
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<tr>
<td><strong>Interviews</strong></td>
<td>- 1 Territorial Official (YK_20150409)</td>
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<td>- 1 Territorial Official (YK_20150417)</td>
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<td><strong>Suppl. Materials</strong></td>
<td>- <em>Good Nutrition=Good Learning: Nutritious Choices for Breakfast Lunch and Snacks</em></td>
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<td>- <em>Yukon Nutrition Framework</em></td>
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**Table 5.33: Summary of Content Analysis – Yukon Territory**

| **Who is involved** | - Dept. of Education |
| **Origin**          | - Unknown |
| **Goal**            | - "Good nutrition is vital to the mental and physical health of all students and increases the learning potential of each student" (Yukon 2011: 1) |
| **Justification given in document(s)** | - Health Necessary for Learning |
|                       | - Nutrition as a Component of Health |
| **Implementation**   | - Mandatory compliance by each public school |
Table 5.34: Summary of aspects of the SFE addressed – Yukon Territory

<table>
<thead>
<tr>
<th>Aspects of SFE Addressed in Document</th>
<th>Aspects of SFE Addressed in Interviews</th>
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</thead>
<tbody>
<tr>
<td>• Culture</td>
<td>• Food Programs</td>
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<td>• Dining</td>
<td>• Hunger</td>
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<td>• Nutrition – Banned Foods</td>
<td>• Nutrition – Health</td>
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<tr>
<td>• Nutrition Education</td>
<td>• Problems to be addressed in SFE</td>
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<td>• Restrict Food as Reward</td>
<td>• Rural/Remote/North</td>
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<td>• Revenue Generation</td>
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<td>• Social Responsibility</td>
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<td>• Socialization</td>
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In 2008, Yukon Education passed *School Nutrition Policy*. The three-page document is divided into four sections: Prohibited Foods, Nutrition, First Nations Culture, and Components of Food Safety (Yukon 2008). The first section consists of one directive, which is to prohibit selling or serving canned and home preserved foods to students. The nutrition section primarily defaults to the nutrition standards set by *Eating Well with Canada’s Food Guide* as well as *Eating Well with Canada’s Food Guide – First Nations, Inuit and Métis* (Health Canada 2007a; Health Canada 2007b) and schools are encouraged to develop their own nutrition policies. The last section, which is present in all of the subnational jurisdictional documents to some degree, acknowledges the need for schools to prepare food safely according to public health standards, prepare food hygienically, and have a policy for allergies.

It is the third section that makes the Yukon Education School Nutrition Policy unique. Four points encourage schools to provide opportunities for students to learn about First Nations culture through nutrition, “welcome First Nations involvement in lessons during harvest time; make use of Council Yukon First Nations “Food From the Land”; make use of Health Canada’s (2007b) *Eating Well with Canada’s Food Guide – First Nations, Inuit and Métis* the last one having already been mentioned at an earlier point in the policy. It is the only regional regulatory document with a section dedicated to First Nations food culture.
5.2. Case Comparison

5.2.1. Summary of Documentary Content Analysis

As per the procedure described in the Chapter 4, a content analysis was conducted on the documents regulating the nutrition of the foods and beverages allowed for sale in schools for each of the eleven subnational jurisdictions of Canada that have such regulations. The list of documents included in this analysis is found in Appendix A. The codebook outlining the nodes that emerged from the analysis is found in Appendix D.

Two types of nodes emerged from this stage of analysis: nodes that provide justification for regulating the foods and beverages available for sale in schools, and those that regulate the school food environment. Table 5.35 summarizes the justification given according to each subnational jurisdiction’s regulatory documents, and Table 5.36 summarizes the regulations given in each subnational jurisdiction’s regulatory documents. The information in these two tables, as well as those throughout this chapter is presented to show the presence and absence of nodes in documents and interview transcripts. Black indicates the presence of the node, white indicates the absence of the node.

Table 5.35: Summary of Documentary Content Analysis: Justification Nodes

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Table 5.35 shows the link between nutrition and health is the reason given for creating a school nutrition regulation in each of the eleven (11) subnational jurisdictions. The link between student health and their capacity to learn was mentioned by nine (9) of the subnational jurisdictions. This table also shows that Nova Scotia and Saskatchewan mention all four of the justifications that were contained in the regulatory documents.

Table 5.36 provides a summary of the aspects of the school food environments each subnational jurisdiction is regulating. In addition to the overview of the topics covered by each subnational jurisdiction, it also provided a visual comparison of what is addressed in each subnational jurisdictional regulation. For instance, Revenue Generation, which includes references to both pricing as well as fundraising as it pertains to food and beverages (Appendix D) is the only node that appears in each of the eleven subnational jurisdictional school nutrition regulations.

These two tables provide a summary of what is contained in the documents belonging to each of the subnational jurisdictions that pertain to the regulation of foods and beverages allowable for sale in schools in Canada. The next section presents the results of the content analysis of the semi-structured interviews.
Table 5.36: Summary of Documentary Content Analysis: Regulatory Nodes

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5.2.2. **Summary of the Semi-Structured Interview Content Analysis**

A similar procedure to the one used for the content analysis of the regulatory documents was used for analyzing the transcripts of semi-structured interviews conducted with those directly or indirectly involved with the development of the school nutrition regulation in their subnational jurisdiction, and those directly or indirectly involved with the implementation of the school nutrition regulation in their subnational jurisdiction. The interview schedules used in the semi-structured interviews are in Appendix E.

Table 5.37 provides a summary of the nodes that appear in the semi-structured interviews that emerged first from the regulatory documents. **Table 5.38** provides a summary of the unique nodes that emerged from the semi-structured interviews. In other words, these are themes that did not appear in the regulatory documents per se. These nodes also appear in the codebook found in Appendix D.

While eligible participants were contacted in Nova Scotia, Prince Edward Island, and Quebec, unfortunately no one in those regions were able to participate. Due to the absence of interview participants from Nova Scotia, Prince Edward Island, and Quebec, there are no nodes coding in **Table 5.38**. There is no significance to the absence of any of the nodes being present in this table.

**Table 5.38** provides a summary for what was addressed in the interviews, but the context for how the topics were mentioned is important, and will be discussed in this section. It is worth noting, for example, that the interview schedules include questions about the presence of food programs in the interview participant's internal school food environment (Appendix E). The presence of this topic in each set of interviews is not relevant per se, but requires context for what was discussed in relation to the food programs, their relevance to the internal school food environment, and what impact, if any, the school nutrition regulations have on these programs. The following chapter (Chapter 6) discusses these themes in context as they pertain to answering the research questions.

Additionally, as will become clear in the next table, the interview participants discussed themes covered in the regulatory documents but in a manner differently than how they were written. Specifically, Nutrition – Maximum Values and Nutrition – Minimum Values are not referenced by any of the participants, however interview participants do discuss the nutrition criteria. In this
case, the node Nutrition Criteria appears in Table 5.38 along with other themes that are unique to the interviews.

**Table 5.37: Summary of the Appearance of Content Analysis Nodes in Interviews**

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Restrict Food as Reward
Revenue Generation
Social Determinants of Health
Social Responsibility
Socialization
Water

Table 5.38: Summary of Nodes Unique to Interviews (Not in Documents)

Access to Healthful Foods
Alternative Food Networks
Barriers to Success*
Champions
External School Food Environment (SFE)
Food from Home
Food Waste
Impact*
Learn by Example
Lessons Learned
Nutrition Criteria
Problems to be Addressed in SFE

5.2.3. Unpacking Impact

The interview schedules contained opportunities for the participants to speak to changes they noticed in the school food environment following the implementation of the nutrition regulations, namely “noticeable results” but also about specific areas of the school food environment (Appendix E). Table 5.39 shows the types of changes that took place in the school food environment attributed to the nutrition regulations.
**Table 5.39**: The Types of Impact School Nutrition Regulations Have Had on the SFE, according to Interview Participants

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Whether these impacts are measured or anecdotal varies from category to category and depends on the efforts of those within the subnational jurisdictions, school boards/districts/divisions, or individual schools to measure this. Alberta and Manitoba partnered with local universities to measure outcomes prior to developing and implementing nutrition regulations, providing them with opportunities to measure, and evaluate changes to the school food environment by acquiring base-line data prior to implementation, allowing for comparison.

Participants identified categories such as Change in Attitude toward Health Initiatives, Change in Educational Outcomes, and Positive Impact as impacts of the regulatory documents in the school food environment, however these impacts were discussed anecdotally. In other words, the school boards/districts/divisions or individual schools are not measuring these changes, but administra-
tion, teachers, staff, and/or students have shared changes they have noticed since the regulations have been implemented. It would be irresponsible to generalize from these anecdotes, however it would also be irresponsible to dismiss these anecdotes entirely, as the experiences of these participants are valid within their own school food environments.

Change in Food and Beverage Options was mentioned by participants in each of the subnational jurisdictions that participated in interviews. Given the emphasis placed on nutrition and health in the regulatory documents (Table 5.35), this is not surprising. One participant noted:

I think the food retailers, like the pizza companies, the you know, the sub shops, … they all found other or created versions of their products that would be compliant so uh I think the school’s food connection through that industry was important enough that they were prepared to do that [comply with the nutrient requirements] (ON_20150420).

Other participants echoed the sentiment, naming food processors and caterers including McCain’s (NB_201506019) and Sysco (NB_20150629) as companies that recognized the need to add offerings that complied with the subnational jurisdictional criteria. Other participants did not name specific vendors, but did note that the offerings that came into the school food environment from them were compliant with the nutrition criteria (BC_20150911; MB_20150707; ON_20150413; NFLD_20150706; SK_20150604).

The other component of the change in food and beverage offerings in the internal school food environment is the removal of foods and beverages that do not meet the nutrient criteria in the regulations. One participant noted:

there’s no more pop and all those kinds of things there that’s, so that was a big change right? So the, the, historically, you know, prior to the original 2005 policy, you would have maybe seen pop products and chocolate bars, you would have seen things in the vending machines (NB_20150619).

In some cases, the removal of certain products included changing the physical environment of the internal school food environment. For example, one participant mentioned her district does not “have chocolate bars or chips in our vending machines, they’re gone. We don’t have any sugared pop. We don’t have vending machines at the elementary level” (AB_20150703).

In addition to the removal of items like pop, chips, and chocolate bars, other participants spoke generally about items higher in sugar, salt, and fat no longer being available in the internal school
food environment (BC_20150911; MB_20150617; ON_20150413; ON_20150420;) or a reduction in the sale of these items that are allowed to be sold occasionally (NB_20150619; SK_20150625).

These efforts appear to be inline with the reasons for implementing school nutrition regulations according to the documents by addressing the link between nutrition and health. Decreasing less healthful food and beverage options while increasing healthful options would make it easier for students to choose more nutritious options from the internal school food environment.

For some subnational jurisdictions, the Change in Food and Beverage Options also required a Change in Food Service Provision. While some participants named food service providers that changed their offerings so that they were compliant, other changed providers entirely in order to get the options needed, or to get the options at the price point necessary. For example:

Many schools went from having private individuals who were trying to make a profit um, as the managers of their canteens to where it was run by the school it was simply in place to provide a service for the kids and it wasn’t about making a profit any more (MB_20150707).

One participant from New Brunswick observed a francophone district opt to take a similar approach of the Manitoba schools. The “Francophone district, the district that shares our boundary had moved away from Chartwells and they set up their own company, a non-profit and there was starting to be great buzz about what they were doing” (NB_20150629). There was also an example of this in Saskatchewan, however they are able to incorporate a commercial cooking class into the food provision for the school (SK_20150625).

There were also two examples given of schools using the opportunity to embrace local suppliers. One participant noted: “I do know that there are some schools that are uh looking towards uh, local foods and vendors. Like uh, local suppliers” (ON_20150420)

A participant from New Brunswick mentioned schools in districts combining their purchasing power to create a Réseau des Cafétérias to purchase from local suppliers at a cost that keeps food at a price point affordable to students (NB_20150619).

In an effort to make the implementation of the nutrition regulations easier, some participants noted the Increase in Wellness Resources, specifically to help with improving the internal school
food environment. As was the case where vending machines were removed from elementary schools once pop was no longer allowed for sale, (NB_20150703), other aspects of the internal school food environment required investments to be compliant. “Deep fat fryers are gone because we invested money into providing them with other equipment that would allow them to prepare, store, or serve healthier options in support of the school food guidelines, right?” (NFLD_20150706)

Another spoke more generally about the resources put into changing the physical aspects of the internal school food environment:

It’s a lever that enables you or pushes you towards action and so then the focus in Manitoba right at the beginning, has been on providing hands on practical support, consultation and support to schools and school division and to help them achieve changes in their nutrition environments and practices. (MB_20150617).

The increase in financial and human resources were also mentioned as a change to the school food environment as a product of the nutrition regulations:

There was just that acknowledgement that that was especially challenging and so that’s sort of how we interact with the School Nutrition Support Team because we, one of the things that we can do is get into schools very easily because we provide funding they’re always very happy to see us [laughs] and so it gives us a chance, and I travel with a, you know, there’s a dietician now, the same one who did the consulting initially, she’s taken on the role of program dietician for us but she also works as the dietician for the School Nutrition Support Team so her role really is now to look at the broader environment and when we do site visits together, she is also received into the school without any difficulty because she’s associated with the Child Nutrition Council and they’re always very happy to see us so, it works very well that way (MB_20150707).

Alberta provided funding to the Health Regions to support the hiring of 18 FTE School Health Coordinators as well as funding for the Alberta School Community Wellness Fund (AB_20150625).

Funds have been awarded at the district level to 56 of Alberta’s 61 (92%) public, separate and francophone school jurisdictions (AB_20150625).
Finally, the subnational jurisdictions provided tools to help those working in the internal school food environment implement the regulations.

There’s a wonderful calculation tool um, that we almost certainly send our programs to, um to determine whether the food is applicable to the program. It’s a wonderful tool that has, actually told us in some cases that what you’re serving in your program is not really good (ON_20150526)

The Ministry has provided a Healthy Schools Cookbook that could be used at a secondary school in the um, uh, hospitality so department so they could be making foods that are compliant that could be sold so that was, so for example there have been supports from the Ministry (ON_20150420).

The assistance received by those working the internal school food environments from the subnational jurisdictions makes the transition easier for the staff as well as the students. This would help with Improved Attitudes towards Health and Wellness Activities, as well as the Type or Number of Health and Wellness Activities. These, along with Positive Impacts generally benefit when the subnational jurisdiction has included resources to help school boards/districts/divisions and individual schools with implementation. For instance:

Since 2006, there have been 274 projects funded that encompass almost 1,100 Albertan schools and over 365,000 students in support of the advancement of comprehensive school health across the province (AB_20150625).

The other one, that is a grant, is a high school and their intent is very similar but also when I spoke to the principal about it, he was wanting the school to be able to take the produce from the garden and sell it in the cafeteria (ON_20150420).

Not all of the Health and Wellness initiatives are a product of increased resources. One is a product of needing new revenue streams:

Dance-a-thons, so physical activity, you know skate-a-thons and those kids of things are a healthier alternative to selling um, uh, chocolate bars and junk foods and things like that. So schools have very much moved away from those in a lot of cases. They are looking for alternatives” (ON_20150420)
Others are contributing to increasing access to nutritious food for its own sake:

At our high school level we were seeing um, more students who are participating in school wellness teams and creating healthy snacks, working with cafeteria providers to provide suggestions for healthy choices, providing snack samplers for the kids to try (AB_20150703)

One of the things that got going was a vegetable snack program which is now become like a major, popular thing to do in our schools, and it supports the goals of the policy in that it, it’s, it gives children more access to fruit and veg” (MB_20150617).

Some of the resources allowed for certain changes to be measured. Change in Health/Wellness of the Student Population were measured in Alberta because of the partnership with a university to take metrics on this (AB_20150625); in addition one school district participating in a project done in partnership with the Mayo Clinic (AB_20150703). The other instances are more anecdotal with the participants observing that fruit and/or vegetable intake is higher (BC_20150911), or parents and teachers sharing what they are seeing done differently with the lunches students are bringing to school (MB_20150707).

For those subnational jurisdictions with guidelines, Creating Policy was a significant impact. The school boards/districts/divisions or individual schools that were able to use the guidelines issued by the subnational jurisdictions to create a binding document with the needs or the circumstances of their situation considered. Alberta, which does not require school districts to create guidelines, has still found significant uptake in policy creation.

The guidelines have initiated school districts to implement nutrition policies. In 2014 86% of principals report implementing healthy eating and active living school policies compared to 24% in 2008 (AB_20150625)

Saskatchewan also does not require divisions to create their own policies from the guidelines. Individual schools that were interested in creating a health and wellness policy could use the provincial guidelines to do so (SK_20150604). There is hope that this activity might make the school division “more willing to entertain a division-level policy” (SK_20150604).

In Manitoba, where schools were required to create a policy from the guidelines, many districts still opted to elaborate from the basic guidelines provided by the province (MB_20150617).
Having a document to reference as something that a school board/district/division or individual school has agreed to helps Legitimize the Regulatory Levers. They allow for those working in the school food environment to appeal to a higher authority to justify their actions against resistance. One participant found that once district level policy was in place she “no longer had to do that kind of advocacy work” on nutrition education (MB_20150707). Anecdotally, another participant shared the story of one teacher “who, has given away candy very, very regularly [who] was thankful for the policy that said “No” because he doesn’t want to it anymore, but he feels this big expectation from students and parents to keep doing it” (SK_20150604).

Even in British Columbia (BC_20150911) and New Brunswick (NB_20150619), where compliance to the school nutrition regulations is mandatory, the participants shared that they appreciated having the additional support from a higher level of government when they face resistance.

With regards to the impact of the school nutrition regulations, the participants identified many positive effects in their respective school food environments. As the regulations and the measurements of their impacts vary, there are a few that appear to be unique to their subnational jurisdiction (Attendance, Educational Outcomes, External SFE Use) and it is difficult to know to what extent these changes are observable elsewhere in the subnational jurisdiction, or elsewhere across Canada. This does not mean these changes are unique, but the limitations of the interviews conducted done make it difficult to know more about these types of changes.

### 5.2.4. Unpacking Barriers to Success

Over the course of the interviews, there were many opportunities for participants to share challenges in implementation, including specifically about challenges in implementation process, and if there was resistance from those in the school communities (Appendix E). Beyond the questions that included prompts about challenges to successfully implementing the school nutrition regulations, participants shared barriers in other parts of the interviews as well. Table 5.40 outlines those barriers and this section provides some of the context in which the barriers were discussed.
Table 5.40: The Barriers to Successful Implementation of School Nutrition Regulations according to Interview Participants

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There is less consistency among the barriers to success than among the impacts. Six of the eight subnational jurisdictions that had interview participants made reference to Culture of Industrial Diet, Enforcement, Food Service Providers, Role of Administration in the Internal School Food Environment, and Rural/Remote/North as being barriers to successfully implementing the school nutrition regulations.

Beginning with Culture of the Industrial Diet, this node is named for the book *The Industrial Diet* (Winson 2013). The concept of the industrial diet was addressed in Chapter 3, but for this node, the industrial diet was used to capture the preference for the foods and beverages that are associated with it. Some examples of participants discussing this as a barrier to successful implementation of the school nutrition regulations include:

\(^a\) Board is used in this table to refer to a School Board, as well as School Districts and School Divisions
because before it used to be a coming of age almost like, “oh boy, when we get to junior high, we get to have pop!” (NFLD_20150706)

we’re still getting complaints about no poutine uh, no deep fryers um, that sort of stuff. Until that cycle of student goes through and they stop talking about what was but start talking about what is um, it will be difficult for our staff um, to satisfy those, those students (ON_20150413).

I know that they say to serve milk most, sell it the most, but I gotta tell you, it’s not popular with Aboriginal people and a lot of them have a lactose intolerance piece and also have a piece about wanting something a little bit sweeter. We did talk with our nutritionist and she made it very clear that there’s very little difference between chocolate and white milk, so we don’t offer white because it was just being dumped. So we offered chocolate milk three times a week. (BC_20150911).

We’ve still worked for several years to change a culture (AB_20150703).

Changing the culture, especially the student attitudes towards healthier foods and beverages, has been a source of resistance to initiatives to make the internal school food environment healthier. Food service providers have also been identified as being challenging to improving the internal school food environment. The problems related to the food service providers vary among subnational jurisdictions, although many are related to the size of the provider relative to the size of the jurisdiction being covered. Larger companies are unwilling to create products for each school district according to their policy (AB_20150625). This was experienced in a subnational jurisdiction with a province-wide policy as well: “the changeover was a difficult period but you know, the company that we had was, it was a very large company so they have a very, you know, streamlined processes” (NB_20150629).

The financial viability of the food service in the internal school food environment is a concern for providers. Newfoundland and Labrador saw food providers embrace the guidelines, but moved forward with them faster than the student population was ready:

Some food companies, food provider companies, jumped in feet first and it was such a shock to the system that they ran into a lot of resistance at the school level so some did change as a result of that in terms of, they didn’t make it because, I guess they got into trouble (NFLD_20150706).
The provincial guidelines in Newfoundland and Labrador allowed schools to adopt the guidelines gradually. In Ontario, however all schools had to be compliant with PPM 150 by September 2011. As a consequence, one participant shared that a food service provider left a high school because it was no longer financially viable for them to remain (ON_20150526).

If a school district is in a community not large enough to support food service providers it will face challenges getting access to them at all. One school district in British Columbia found it difficult to get access to food service providers at all (BC_20150911). A participant from a smaller city in Alberta echoed this concern (AB_20150703).

In the case of the British Columbia district, the location of the district relative to major centres can be an issue. For this district, being in the provincial North and remote has been a barrier to successfully obtaining fresh, nutritious foods:

The problem is that in a Northern district where you don’t have local gardens, you don’t have the big companies, you are paying more for food and you are paying more for delivery so there’s no doubt about it, the costs are higher and to deliver uh, nutritious lunch that involves having fruits and vegetables everyday and ensuring that there’s, you know, different types of food that reach the nutritional values (BC_20150911).

It is not only communities in the North that experience challenges to procuring healthful food.

The procurement can be a, I mean that’s a huge issue for remote, northern communities but it can also be a challenge in, for instance, some inner city schools where there are deserts, food deserts and the people who are supposed to be doing the shopping don’t have cars so this is sometimes a thing there too (MB_20150707).

Manitoba and British Columbia were not the only subnational jurisdiction to express there are food procurement issues:

90% of our produce is brought in so you know, it is a challenge and we live on island so we’re very dependent on the transportation system and you know if you have a, the ferry’s shut down because of the high winds or you have a hurricane, pretty soon you go to the grocery store and all the shelves are empty. So we live in a different environment here, you know? (NFLD_20150706)
Whether they’re up north where they can’t access food quite as easily as in the city” (ON_20150526)

It is not always access to nutritious foods that rural or remote communities struggle to procure. One district in Saskatchewan found the rural schools in the district struggled to procure culturally appropriate foods due to the diversity and fewer options in the local food providers (SK_20150604).

Even if location is not a barrier to procuring appropriate foods, the lack of nutritional knowledge held by food service providers may be. A dietician noted: “vendors that they have, and I’ve been to a few of them and some of them really didn’t have the nutrition knowledge to be able to really effectively provide healthy options” (SK_20150604).

This may be why the one Alberta district “had trouble finding some of the vendors who would provide healthy choices” (AB_20150703).

Nutritional knowledge, or lack thereof, is not a problem exclusive to food service providers in the internal school food environment. For those who are responsible for implementation of the regulations, school administrators and educators, many do not have a background in nutrition to evaluate whether the options in the internal school food environment are compliant:

Teachers and, and others don’t, they’re not nutritionist. They don’t understand all this technical jargon and nutrient criteria and, even uh guide, food guidelines (MB_20150617).

I think that’s why we’re trying to do some training with the administration, that it is important. Um, the problem with that is that um, people don’t know how to do it because they’re not trained in it or the, they haven’t looked into it enough (SK_20150625).

Even when administration and educators do have the knowledge, the compartmentalized roles may mean ensuring compliance falls to someone else. Events being run in the school may have foods and beverages available for sale, but the staff member in charge not normally involved with matters associated with the internal school food environment, does not check, nor is there sufficient oversight from the principal when the foods and beverages are decided upon (NFLD_20150706).
Those who have more than one school to monitor may not always be able to accurately evaluate based on the information they have access to:

It’s difficult to, to look at a menu and say is it entirely compliant with the policy or not because you don’t always know, like it could be a food, or it could be on the menu and there could be something on the menu that you would say, well depending on the preparation, so it could be compliant or it could not be compliant (NB_20150619).

Additionally, turnover can be a problem in implementing the school nutrition regulations:

People are changing, new administrators are always coming in, new teachers, teachers are retiring, administrators are retiring, I think that with the new guidelines coming in, we have a whole new batch of teachers and administrators from what we had in 2006 (MB_20150525)

Part of the momentum piece is that the administrator is, will stay the same. If the administrator changed, we would be in danger of losing that momentum. (SK_20150604)

The role of administrators in school food environments is closely linked to other barriers that emerged from the interviews, namely Competing Priorities, and Enforcement.

Beginning with Competing Priorities, it has already been addressed in the examination of Role of Administrators in the School Food Environment that most have a background in education, and not nutrition. Within those roles as educators come responsibilities other than ensuring the school nutrition regulations are being followed:

Our principals … are very busy people and their priority is education as it should be, right? (NB_20150629).

It’s difficult when you’re trying to advance something like healthy eating in another department because education’s primary concern is curriculum and in health, ours is health (NFLD_20150706).

Administrators and educators are also responsible for other aspects of the school:

Let’s say you’re in a school let’s say is dealing with gang violence or bullying or whatever, you might find doing the nutrition policy might be pretty low on the list of things to do. (MB_20150617)
I understand that sometimes there’s things like, they don’t have enough textbooks and they don’t have enough desks and they can’t get substitute teachers and whatever, so there’s just different things. There’s competing priorities in the school (NFLD_20150706).

In the Yukon Territory, bringing nutrition to the Department of Education has been a recent initiative. It was typically the Health Promotion Unit that addressed matters of nutrition (YT_20150409).

The absence of a formal enforcement mechanism in the internal school food environment was brought up by interview participants as an issue of the role of administration in the school food environment as in most cases, administration are required to uphold the goals of the school nutrition regulations without the support of institutionalization.

The absence of a “compliance mechanism” (MB_20150617) makes enforcing the regulations challenging for those that are attempting to implement them:

I think that’s the biggest hurdle that we face is, you know, those items that are only supposed to be on the menu twice a week are on there five days a week or whatever and again that comes down to, you know, in some areas some local decisions being made right at the school level, so and then I don’t know that unless somebody reports it (NB_20150629).

You can make all the rules you want, but someone has to implement them and someone has to make sure that they are following the law (NFLD_20150706).

There’s not a lot of checks and balances and I can speak for myself, but when food comes in other places in the school, I don’t have control over that. I don’t, I’m not the monitor of food (SK_20150625).

Even where compliance is mandatory, it often requires an authority figure to be in the internal school food environment to ensure the regulations are being followed:

Some cases it can be very evident, that French fries are served too often, or even if they’re baked, they shouldn’t, maybe they shouldn’t be served everyday, so that could be, so there can be things that are identified very easily, but, but it’s hard to just look at that, so it’s probably going to become an exercise of working really with the schools and going in the cafeterias and helping with the education of 711 to really have that full picture of how can we say it’s compliant and how can we it’s not compliant, which more, it’s more about who
isn’t compliant, that’s what we need, that’s what we need to perfect. That’s the direction that we need to get to” (NB_20150619).

I think that the translation and implementation run, runs into barriers because I don’t think people necessarily always see it outside of providing food, where it is an all the time thing, right? It’s at dances, it’s at celebrations, it’s in the classroom, it’s in the school, it’s the parent council, so I don’t think always it gets translated into a, anything the school is doing and offering, falls under this necessarily. (SK_20150604).

Without having someone to make sure the regulations are being followed throughout the internal school food environment, lapses happen.

Those who are enforcing the regulations still face challenges with availability and appeal of compliant foods. These themes were discussed in conjunction with rural/remote/North and Culture of Industrial Diet respectively, however interview participants did bring up these ideas in ways that did not necessarily fit the aforementioned nodes.

Availability can be tied to the remoteness of the community the school district is in but is not necessarily so. Several participants discussed access to compliant foods generally as a problem to successfully implementing school nutrition regulations:

“We had trouble finding some of the vendors who would provide healthy choices” (AB_20150703).

Just being able to have access to access some of the different food products during the school year can be a challenge (MB_20150525).

There are schools that have a large food programs, and sort of in that vocational sense and they used to produce a lot of food which could be sold to students and that would fund the actual programs in the school, however in those schools have also reported a significant struggle because things that they normally would produce wouldn’t be food compliant and so they can’t sell them to students and they can’t sustain those programs nearly as effectively as they could in the past (ON_20150420).
One of the hardest things for schools was to give up those special lunch days, you know, where they were serving hot dogs, you know, that was more the reality of it when they had to you know get rid of the junk food and their vending machines, they have to provide healthy things and they were losing some money then, so it was a bump in the road (MB_20150707)

Part of the problem identified in the last quotation is closely tied to the next barrier, the appeal of compliant foods. The appeal, or lack thereof, of compliant foods was discussed in part in the presentation of Culture of the Industrial Diet quotes earlier in this section. Because so many students have a taste for pop, chips, and chocolate bars, among other treats, replacing those with healthier options did not mean that students were inclined to consume them:

They were one of the ones who went down the road of no more white bread, when they made pizza it was on whole wheat dough, they, and they just totally went, a 100% in the serve most category for all their things and they got into a little bit of trouble because the kids resisted because they weren’t used to it (NFLD_20150706).

It was all whole wheat bread and everyone’s like “Ugh, I hate whole wheat bread” and I’m like “Well, that’s all we serve” (SK_20150625).

In other cases, the lack of appeal comes from the food service providers themselves, or from parents:

From a recipe point of view and I think that what, you know, what the feedback that I’ve gotten over the last year or so is that wanted to move towards a more of a grab and go, healthy, like wraps, a salad, you know, fresh sandwiches, you know just, rather than the meal, and I’ve seen sort of a reluctance on the part of the food service providers to move away from the meal (NB_20150629).

The perception is that the pizza’s unhealthy even though it does meet … the requirements under the policy (NB_20150629).

Even if the availability or the appeal of the compliant foods and beverages are not a barrier to successfully implementing the school nutrition regulations, the school boards/districts/divisions or individual schools may not have the resources to support the necessary changes to the internal school food environment:
We’re just, like everywhere else, under you know tremendous financial pressure and uh looking for areas to cutback on and that sort of thing so adding is, you know, not really on the horizon (NB_20150629)

That’s where I think lots of cafeterias have problems because it is, nutrition, it’s not necessarily more expensive, it’s cheaper, but it’s much more labour intensive, so to peel carrots, shred carrots, cut carrots, peel potatoes, do all that kind of stuff, I mean it’s a lot easier to get powdered potatoes from a bag, add [laughs] water, boiling water and have, oh I don’t even know what they are, like then to peel, like, cook them, mash them and to have the equipment, right? Like it’s expensive to buy all that large equipment so. It’s just little changes and then it developed into, it probably took, I would say four years, to get where we felt comfortable. (SK_20150625)

I think we’re asking schools to do something that weren’t, you know, it’s after the fact, after the fact of the schools were being built, being designed, you know the original concept for schools was not that they would be feeding kids and … ensuring that they have a nutrient intake, daily nutrient intake that really is a huge contributor to their whole intake of food and so now we’re at the point where we’re saying well that is actually what’s happening and we want schools to be doing a good job of it but that wasn’t part of the original design and plan and so I think that makes it pretty challenging for them. So I guess, the whole facilities and um, staffing requirements, you know didn’t really support that, and then, so that would be a big, big thing of course (MB_20150707)

Fiscal, physical, and human resources are important aspects to supporting school nutrition regulations, but these are not available in each school within the scope of those who participated in the interviews.

Costs and affordability are two barriers that came out of the interviews that are related to resources, though were not discussed as such. Costs were mentioned along with other themes that have been addressed in this section as barriers to successfully implementing the nutrition regulations:

You are paying more for food and you are paying more for delivery so there’s no doubt about it, the costs are higher and to deliver a nutritious lunch that involves having fruits and vegetables everyday and ensuring that there’s different types of food that reach the nutritional values (BC_20150911)
We’re a declining board, our enrolment is down, we don’t have the ability any longer to have an unlimited menu um in order to try and secure the food supplies. We standardized our menus all the four schools make the exact same menu all the time so that the quantities that we order are a little bit larger so we get a better price and in ordering for smaller components at each of the four sites (ON_20150413)

But one of the facilities manager’s concerns is that they need to remain profitable or else they’ll leave and then there will be no food service and then the schools complain because they want to offer food to their kids, right? (SK_20150604).

Affordability was unique to one participant in which the school food environment in her district consists of a lunch program that most of the students participate in. While the program, subsidized from the government, requires a monthly payment from the families of students to participate, not all are able to do so, but participate anyways (BC_20150911). With the yearly contributions from the government remaining the same, and the costs of food increasing, purchasing compliant food becomes challenging without increasing the cost of subscription, something that the school district is unwilling to do as there are already many families unable to afford it (BC_20150911).

Affordability is a unique barrier for a school district with a unique circumstance. There are three barriers identified by participants from three or fewer subnational jurisdictions: Misconceptions about the School Nutrition Regulations, Size of the Jurisdiction, and the Logistics of the Organization of the School Board/District/Division, the last two are similar, but not the same.

For misconceptions about the regulations, there were participants from three subnational jurisdictions that found that those who were asked to implement the regulations thought the expected outcomes or related tasks were unreasonable:

So some of the myths in this project that I’m saying that we want to work on going forward, is um, we might hear things like if we change the menu too drastically, the kids won’t eat at the cafeteria (NB_20150619)

Some also got the wrong message that they could only serve whole grain bread and they weren’t allowed to serve white, which, that was incorrect (NFLD_20150706)
So they’re like “well we need the sports drinks for our athletes” but then they feed them hot dogs and French fries and things that everybody knows are not good for athletes, so I feel like, there’s, there’s, there’s a little bit of contradiction there (SK_20150604).

Managing expectations and roles across a school board/district/division is challenging. The size and the organization of the board/district/division can compound existing problems as well. For size, large and small boards/districts/divisions experienced challenges because of their size:

They [Food Service Providers] were resistant at the beginning and there was some competition because we had different food providers in different schools and, like we’re a small jurisdiction (AB_20150703)

Because it’s not set in stone and a rule, and someone monitoring it and making sure it’s happening, it doesn’t happen all the time, I guess and because we’re a big school, it, food is coming in all the time (SK_20150625)

Producers that grow fresh vegetables that we offered opportunity for them to tender, that hasn’t been successful yet. They just don’t have the capacity to satisfy the local market completely (ON_20150413).

The organization of the school board/district/division can also prove to be challenging. In one case, where school nutrition regulations are being tried in a school without a district-wide policy, the absence of support is problematic:

That’s why the division is important where they don’t have the capacity necessarily to implement it at a school level, they have the capacity to be like “this is important and you have to do it”, whereas a school-level, if there’s only school-level policy, a new administrator could come in and be like “yep, that’s not super important to me” (SK_20150604).

When schools within the same district are responsible for arranging their food service provision, implementing a district-wide nutrition regulation can be challenging when there is a different provider in each school (AB_20150703).
5.2.5. Other Results from the Interviews

Having covered Impacts and Barriers to Success from the semi-structured interviews, there are several other themes that emerged from the interviews that can be unpacked further, without needing a sub-analysis as Impact and Barriers required. This section will look at the results of Access to Healthful Foods, Champions, The External School Food Environment, and Problems to be Addressed in the Internal School Food Environment.

Beginning with Access to Healthful Foods, it mentioned by participants in all eight of the subnational jurisdictions that participated in the interviews. References to this included how the regulations could help students and their families pack healthier lunches, increasing the number of healthful options in the internal school food environment, and the role of food programs operating in schools contributing to the consumption of nutritious foods and beverages:

Encouraging kids to pack healthier lunches (AB_20150625).

The overall, the general goal is to... increase, access to nutritious foods in school (MB_20150617)

Full-course meals, like soups, salad, entrees, starch, vegetable, everyday, everything different, everything made from scratch and then that full course meal, they get, so it’s a salad bar, so they get a choice of soup or salad and then a choice of entrée and the starch and the vegetable for $4.00 (SK_20150625)

The breakfast program is visited by anywhere between 80 and 90 kids a day. And the person who’s running that is a teacher and she’s very aware of the nutritional requirements, she’s very careful, but the kids need food in the morning so they come (BC_20150911).

Increasing access to healthful foods is an important component to making schools health promoting spaces. Of course, as discussed in Chapter 3 of this dissertation, the internal school food environment is only one component of the school food environment and the school food environment is one component of the food environments students eat in. The External School Food Environment and Food from Home were both brought up by participants during the interviews.

One of the quotations used as an example for Access to Healthful Food referenced lunches students bring from home. More references to the foods students bring from home include:
That was one of the objectives in our vegetable and fruit program actually was to have some influence on the home environment. You know, we just have anecdotal evidence actually but what parents would tell us and what we’d hear from the teachers that you know, different things were coming to school in lunches from before (MB_20150707)

Some of the limitations have to do with what the kids bring from home and their food from home uh and changing the culture of the home (AB_20150703)

I would like them to be meeting on a quarterly basis with their cafeteria supervisor, by … getting a… group of students and staff so that they also can talk about healthy eating and not only at the cafeteria but also, you know, when bringing lunches from home and um, fundraising ideas and those kinds of things, everything, the vending, all has to line up, right? You can’t just expect it to happen in the cafeteria (NB_20150629)

Kids have the capacity, like they’re expected to bring their lunches. It’s not like we feed kids, generally speaking, um you know (SK_20150604).

Improvements to the internal school food environment may help change what students who eat from those spaces consume and in some more positive cases, may change what they bring from home as well. The External School Food Environment may pose more of a challenge for those hoping to have a positive impact on eating habits of students through nutrition regulations because these spaces are not subject to them.

The second school, they had, there was more difficulty with them because they were finding the need to provide unhealthy choices more because they were in close proximity to some of the convenience stores and so the kids would go to the convenience store and then come back and sit in the cafeteria with the unhealthy food (AB_20150703)

For high school, there’s a mini mart right up at the top, well, sorry, next to the school. And again, kids were buying things like taters and you know, deep-fried chicken and that sort of thing (BC_20150911)

The students will go off-site and get their, those types of foods, let’s say burgers and fries just for an example, they’ll go off site and they’ll go get those elsewhere and then our cafeteria will suffer (NB_20150619)

The vendors complain because they’re like “well they can just go across the street and McDonalds” (SK_20150604)
The external school food environment, in the context it was spoken about during the interviews, compromise the efforts to improve student access to nutritious foods, but was not included as a Barrier to Success in the analysis. The external school food environment does not actively disrupt the efforts of the regulations and those who implement them, whatever they may be, which is why it was not included in that component of the analysis. These areas exist, however they are beyond the scope of the regulatory levers. As one respondent said: Our studies have shown that kids want to get away from the school to be with their friends. So even having the food that they want in the cafeteria’s not necessarily going to entice them to stay (ON_20150413).

The external school food environment matters, however it is not necessarily a barrier to successful school nutrition regulation when these spaces were accessible prior to any changes to the internal school food environments.

Given that many schools do face competition from the external food environment, however, it makes the roles of those implementing the regulations, especially in those areas that do not require school boards/districts/divisions to have one, that much more important. Many respondents mentioned the efforts of those in their school food environments who go beyond expectations to champion nutrition and health:

Implementation of nutrition guidelines/polices requires a champion, and it has been the experience that when a school district/school has a champion on board (typically a principal), implementation occurs (AB_20150625).

We also have champions in every school. We have a designated health champion in every school (AB_20150703).

We definitely had champions, we had champions you know, from the community, you know, like nutritionists we had lots of champions. We had champions as far as parents were concerned (NB_20150619)

The challenge with that, I think really… is that you know, that the policies are there but often what happens is it comes to the champion at the school level (NFLD_20150706).

I kind of pushed our own division to kind of develop a nutrition policy and we started a nutrition committee (SK_20150625).
Explored in part during the unpacking of Barriers to Success, in the absence of a champion, initiatives can be forgotten or not given the attention they need to become successful:

It has not been the experience that resistance was the issue – it typically was the lack of assistance in implementing, i.e. schools that had a champion &/or a school health promotion resource were better equipped to implement (AB_20150625).

Part of the momentum piece is that the administrator is, will stay the same. If the administrator changed, we would be in danger of losing that momentum. (SK_20150604)

I mean in terms of creating a policy you could, you can make a very extensive policy or you can make a very simple policy so I think that made it easier for schools that weren’t quite as enthusiastic, uh you know they just created very broad, simple policies (MB_20150707).

There’s always going to be schools that haven’t got on to this yet, or you know, there’s somebody, they’ve done stuff with their canteen or cafeteria but they haven’t really thought about classroom rewards yet. There’s always going to be more I think that could be done, and the question of whether, all the time, it drops off the agenda, you know, “Oh okay, it’s something we did so now we don’t have to pay attention (MB_20150617).

Even when schools have champions, they can burn-out when the resistance is too high or the support is not in the school food environment:

We’re not cafeteria police or anything like that but we want to work on sharing that, you know, everything I mentioned about sharing best practices and all that type of thing. We want to work towards that (NB_20150619)

That was like, the first two months and then after two months I kind of got the grease, and I was feeling like the punching bag, but I just knew it was important and so I just kind of kept going (SK_20150625).

You need someone to be, you always need someone to be reminding you like “okay this is what we should be doing”, because we’re not, like I don’t think we’re at point where it is second nature (NFLD_20150706).

Finally, Problems to be Addressed in the School Food Environment was a question included in the interview schedules (Appendix E). That it was asked in each of the interviews is not signifi-
cant per se. The problems to be addressed are still worth unpacking. Some subnational jurisdictions are still struggling with having healthier nutrient criteria in their regulations:

Unhealthy fats, and in amounts/ per serving, that are considered unhealthy for consumption, as well as added sugars and sodium (AB_20150625).

I still think there are problems with our menu. We use a lot of, not, well I guess it is processed meat but it’s not like bologna or anything like that. We have high quality, very expensive lunchmeat that we use and, but it’s still got that high salt content (BC_20150911).

Some expressed concern about having insufficient resources or organization within the school board/district/division to address concerns about food and nutrition

Ideally that’s what we would have, in my opinion would be a one person who’d be responsible for, you know, the whole process and that they’re out and they’re at the schools and they’re liaising with the food service providers (NB_20150629)

There’s not a lot of checks and balances and, I can speak for myself, but when food comes in other places in the school, I don’t have control over that. I don’t, I’m not the monitor of food (SK_20150625).

One thought the cultural aspects that supported the unhealthy diets persist in the internal school food environment:

I think, how do you get people to purposefully think about what you’re going to offer as food? Whether you’re the one organizing an event or you’re the one who’s, you know, sending something in to your child’s class celebration, like how do you get people to purposely think about, “well, what will we have for food?” (NFLD_20150706)

What we’re teaching in the curriculum should be reinforced by everything that we do (SK_20150604).

Some participants did not directly discuss problems that persist in their school food environments, but instead offered ideas of what could make the school food environment healthier:

With each new school that’s designed, hopefully feeding kids will be taken into consideration and making sure that that the facilities are in place for that to be able to happen in a safe way, you know, I think public health inspectors are more evident in the schools and so
they are requiring schools to have certain things in place now in their, with their facilities and um, so that’s making schools move in that direction. I mean it boils down to just, I think, thinking about this from the very beginning, for the design stages to supporting, having the funding that would support schools in making those changes in their facilities (MB_20150707).

We want to work on sharing that, you know, everything I mentioned about sharing best practices and all that type of thing, we want to work towards that so that we can, we can go towards compliance across the province of Policy 711 (NB_20150619).

I think I’d go back to um, ideally we, again, as a society if we’re really committed to this idea of healthy eating in schools dedicating a resource and perhaps even, you know, dare I say it, subsidized school lunches to a degree (NB_20150629).

Part of my goal is to, to try to get a Federal program, where, because we are the only G8 country that doesn’t have a national student nutrition or feeding program (ON_20150526).

I would prefer to see sort of a universal school lunch program, generally speaking (SK_20150604)

The final three quotes include references to some sort of institutionalized government-funded program that occurred independently of the question regarding support of such a program asked of each of the participants that was asked after the question about problems that need to be addressed in the school food environment.

5.3. **Summary**

Having reviewed the results of the content analysis of the regulatory documents for the school food environments for eleven subnational jurisdictions of Canada, as well as the interviews from participants from eight of the eleven subnational jurisdictions that have school nutrition regulations, it is possible to begin to answer the research questions.

With regards to the first research question, the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property are outlined in Table 5.36. The Community School Health approach, as discussed in Chapter 2, was influential in the areas beyond nutrition that were covered in these documents.
Generally, the objective of the school nutrition regulations is to make the school an environment that supports students in making healthy choices. Some regulations, however, have additional objectives, which may account for some of these differences.

The differences in the regulations can be attributed to, in part, the subnational jurisdictional department responsible for their development, the objectives of the regulations, the intended audience of the documents, and the different approaches to implementation. For the latter, those subnational jurisdictions that provided school boards/districts/divisions with guidelines allowed for the circumstances of each to be reflected in the resulting policy, where one was created.

The interviews presented a variety of outcomes and challenges to achieving desired outcomes of the regulatory documents. The school nutrition regulations have contributed to changes in foods and beverages available in the internal school food environment, increased health and wellness activities, and, in some cases resulting in improved educational and health outcomes among the student populations, to name a few that interview participants discussed.

There are barriers to successfully implementing the regulations. Insufficient resources, competing priorities, difficulty accessing healthy foods and beverages, and persistent Culture of the Industrial Diet mean nutrition is not always a priority in schools, and when it is, obstacles external to the internal school food environment prevent the regulations from being fully implemented or being implemented successfully. These barriers also highlight some of the limitations to achieving the objectives of the regulations. Insufficient resources dedicated to enforcing the regulations or providing schools with sufficient infrastructure to support healthful options, or getting access to healthful foods make achieving the objectives of the regulatory documents challenging. The external school food environment is beyond the scope of regulation, but still competes with the internal school food environment for student dollars.

The next chapter (Chapter 6) provides discussion about the implications of these results.
Chapter 6
Discussion

The research questions this dissertation is attempting to answer are: Why are the subnational jurisdictional regulations for food and beverage sales in schools different? What are the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property? What are the objectives of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property? What are the limitations to achieving the objectives within the scope of the relevant documents?

From the previous chapter (Chapter 5), key results from the content analysis of the regulatory documents provide preliminary answers to the research questions. In sum, the subnational jurisdictional regulations for food and beverage sales in schools are different because there are different departments responsible for the regulations within the subnational jurisdictional governments, different origins, different objectives, and different intended audiences for the documents, as well as the decision to make the regulations policies or guidelines.

The differences in content between the regulatory documents are numerous. There are different nutrient criteria and different areas of the internal school food environment are addressed. Many of the themes that emerged from the content analysis of the regulatory documents go beyond the nutrient criteria for acceptable and unacceptable foods and beverages in the school food environment. These can be attributed to the Comprehensive School Health approach, which was discussed in Chapter 2. The four principles of the Comprehensive School Health approach - teaching and learning, social and physical environment, partnerships and services, and policy - frequently appear in the regulations in various capacities (Veugelers, Schwartz 2010). For instance, Nutrition Education and Physical Education are examples of the teaching and learning component of the approach and De-Centralized Solutions and Social Responsibility would be examples of Partnerships and Services. The approach was influential for many of the regulations, as Manitoba, Newfoundland and Labrador, and Yukon Territories were the only subnational jurisdictions to not mention the approach explicitly in their school nutrition regulations, although this does not mean
that the approach was not considered. It does mean that, in at least eight of the eleven subnational jurisdictions, having a comprehensive school nutrition regulation was an intended outcome.

Generally, the objective of the school nutrition regulations is to make the school an environment that supports students in making healthy choices. Some regulations, however, have additional objectives, including the increasing access to healthful foods.

The semi-structured interviews often provided insight into the origin and development of the regulations and why they took the form they did. The interview participants also discussed implementation and aspects of the school food environment that are not addressed in the regulations.

This chapter provides discussion of the results presented in the previous chapter (Chapter 5). Six key findings get discussed in greater detail: the different approaches to school nutrition regulation implementation and the implications of these differences; community action and government response; social and cultural aspects of healthy eating; the role of food programs in achieving the objectives of the school nutrition regulations; food insecurity in rural, remote, and northern communities; and the incompatibility between nutrition regulation and revenue generation.


Table 5.35 showed the justifications for the school nutrition regulations given in the documents. Data presented in this table shows that all eleven of the school nutrition regulations aim to regulate the foods and beverages available for sale in schools because the regulators recognize nutrition is linked to health, and nine of the eleven regulations acknowledge that healthy students have a greater capacity to learn than those who are not.

Most of the documents encouraged school food environments to eliminate, or at least limit, the availability of pseudo foods and beverages to students. Some items like potato chips, chocolate bars, pop, sports and energy drinks are named as items no longer allowed or are permitted less frequently than prior to the regulations. In other documents, these items are restricted by requiring school food environments to ensure that items for sale contain two or more food groups if it is a snack, have fewer than a specific number of grams of fat, or are foods that have been prepared in a healthy way. All of the subnational jurisdictions include Eating Well with Canada’s Food Guide (Health Canada 2007a) in at least one of their regulatory documents if more than one was
produced. Within the content of the documents, it is reasonable to suggest there is some agreement between subnational jurisdictions that there are foods and beverages that do not contribute to the health and wellbeing of students.

While some agreement exists about which foods and beverages are not in the best interest of student health and well being, there is less agreement about how access to these items should be addressed. The regulations are quite different in terms of scope, content, and expectations for their role in school food environments. Some of these differences can be explained using the theoretical concepts discussed in Chapter 3.

Federalism provides a broad explanation for the differences between the regulatory documents. Since the provinces have autonomy over education and health care, and school nutrition can fall under either or both, the various policies and guidelines can reflect the interests and priorities of each subnational jurisdiction. The Yukon Act provided Yukon Territory with the autonomy over many of the same areas as the provinces in 2003 (Government of Canada 2002). This act allowed the Territory to develop a unique school nutrition policy with unique content as each of the provinces did. The content analysis of the regulatory documents (Table 5.36) showed that there were twenty-four areas addressed within them, and each document or set of documents addresses a different number of those subjects. The four components of Comprehensive School Health can be found in different capacities in the regulatory documents, but not all components are represented in the same ways in each subnational jurisdiction.

In addition to the differences that can be identified from the content analysis, the interviews with those who developed the regulations as well as the interviews with those who implement them revealed differences that can be explained by looking further into how that autonomy granted through federalism has been exercised. Among those differences, there are trends that can help explain some differences between particular cases.

The department responsible for the school nutrition regulation within the subnational jurisdictional government provides some explanation for the differences in the approach and content of those regulations. For many jurisdictions, the regulations were a collaborative effort, bringing together various jurisdictional departments with a stake in school nutrition including not only health and education, but in some cases agriculture (e.g. Nova Scotia, Saskatchewan) and social services (e.g. Quebec, Saskatchewan) were also included in the creation of the regulations, depending on how the relevant responsibilities are divided within the subnational jurisdiction. Typically, how-
ever, the document is attributed to a single department that is then responsible for its oversight and implementation, and this impacts the scope of the regulations as far as what can be regulated. For instance, *Guidelines for Food and Beverage Sales in BC Schools* (British Columbia 2013) is a product of both the Ministry of Health and Ministry of Education; however oversight and implementation falls to the Ministry of Health through HealthyFamilies BC. As such, the policy that gives the nutrition requirements for food and beverages sold in schools is mandated and not legislated as it is outside the jurisdiction of the Ministry of Health to create legislation for schools. That being said, British Columbia does mandate that school districts abide by the nutrition standards set in the document (British Columbia 2013).

Of the subnational jurisdictions that have policies -- Yukon Territory, Ontario, New Brunswick, and Nova Scotia -- the department responsible for education is the principal department to oversee the school nutrition regulation in their jurisdiction. British Columbia and Prince Edward Island (PEI) are the exception to this. In British Columbia, the Ministry of Health facilitates schools in implementing the nutrition standards they are mandated to follow. In PEI, the Department of Education was involved in the development of the policy even though it is the English Language school board that holds the policy. Alberta, Manitoba, and Newfoundland and Labrador each have nutrition guidelines and their respective departments of health are responsible for the development, oversight, and facilitation of the guidelines in schools by offering resources and consultation, although they do not have authority to legislate to schools if policy was wanted.

Yukon Territory Department of Education is responsible for writing and passing the *School Nutrition Policy*. Yukon Territory is the only one of Canada’s three territories with a school nutrition policy, which is why Nunavut and Northwest Territories were not included in this research. *The Yukon Act* (Government of Canada 2002) gave Yukon Territory authority over many of the areas provinces have authority over without being given status as a province. One of these areas is education, which allowed the Yukon government the authority to pass a nutrition policy. The policy is distinct from the other subnational jurisdictional school nutrition regulations in a few obvious ways. Comparison between subnational jurisdictional documents is challenging on content alone, however there are significant differences that may be attributable to the unique characteristics of Yukon Territory. It is the least comprehensive, covering only eight of the twenty-four areas of the school food environment addressed across Canada, which is the lowest number of nodes among the documents analyzed for this research. The nutrition component of Yukon’s nutrition policy bans the selling or serving of foods canned at home and defers to Health Canada food guides.
(2007a; 2007b) for nutrition information, requiring schools to ensure “that foods available at a school based event reinforce nutrition education” (Yukon 2008: 2). It does not provide nutrient criteria that determine whether a food or beverage is appropriate to be sold to schools, as many of the other regulations do³, and instead encourages schools to create their own nutrition policy (Yukon 2008).

This is not to say that health and nutrition are not important to the Government of Yukon. In 2014, the Department of Education began to provide health resources to schools, influenced by Comprehensive School Health to support the efforts of the 2008 policy (YK_20150409). The majority of the actionable efforts being taken by the Territorial government in support of nutrition are coming from the Ministry of Health and Social Services through nutrition from public health initiatives. These initiatives include documents such as “Good Nutrition=Good Learning: Nutritious Choices for Breakfast, Lunch and Snacks” which emphasizes the importance of children going to school fed as well as discourages providing children with less nutritious snacks and offers suggestions to families about menu ideas that are nutritious to bring to school for lunch and snack times (Yukon Territory n.d.). The Department of Health and Social Services also produced the “Yukon Nutrition Framework” which outlines public health initiatives related to nutrition that apply to the general population of the Territory beyond just school-aged children (Yukon Territory 2010). As such, it is much more comprehensive, addressing nutrition promotion, food security, and the nutrition-related health issues that Yukoners face; however its applicability to the average resident is minimal as the document discusses the efforts the Territorial government will take to address each of those areas (Yukon Territory 2010). While health and nutrition are important to the Territorial government, as evidenced by the efforts of Health and Social Services, this is not reflected in the school nutrition policy.

A key theme that appears in School Nutrition Policy is Culture (Yukon Department of Education 2008; Table 5.36). Specifically, the three-page policy makes many references to the inclusion of First Nations, Inuit and Métis populations in relation to food and beverages. In addition to directing schools to follow Eating Well with Canada’s Food Guide – First Nations, Inuit and Métis (Health Canada 2007b) as well as Eating Well with Canada’s Food Guide (Health Canada 2007a), the policy also says schools should follow the Council First Nations Guide “Food from the Land: Traditional Yukon Food”, provide students with opportunities to learn about First Na-

³ British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, and Newfoundland require foods to have no more than maximum levels of sugar, sodium, and fats, and in some cases minimum levels of fibre, iron, or calcium.
tions culture and nutrition and “welcome First Nations involvement in lessons about harvest time” (Yukon Territory 2008: 2). Most of the regulatory documents across the country make reference to having culturally appropriate foods for the population of the school, including First Nations, Inuit and Métis populations; however none include them in as many capacities as the Yukon School Nutrition Policy (2008) does. This is a product of the demographics of the Territory as nearly one in four residents identifies as First Nations, Inuit or Métis (23.1%) according to the 2011 National Household Survey, but it is also a reflection of cultural appreciation and desire for inclusion. Ontario is the subnational jurisdiction with the largest population of First Nation, Inuit and Métis 301,425, or 1 in 5 people identify as Aboriginal reside in the province (National Household Survey 2011). Ontario’s School Food and Beverage Policy: Resource Guide (Ontario 2010) does not make any mention of this population. The Resource Guide does state, however, “the diversity of students and staff must be taken into consideration in order to accommodate religious and/or cultural needs” (Ontario 2010: 4), which would better serve the size and diversity of the population of Ontario. For Yukon Territory, having autonomy over education policy, specifically in the case of the school nutrition policy, allows the government to create a culturally inclusive school food environment.

6.2. Difference: Community Action and Government Response

“So that’s how democracy works, right?” (NFLD_20150706)

Each of the regulatory documents has an origin for its creation, which contributed to the distinctive approaches to regulation and variations in content. It was not possible to learn the origins of each of the school nutrition regulations so it is not possible to properly compare the influence of origination on the type of regulation produced and the response to them. Among the subnational jurisdictions where the origins of the regulation were available, there is an interesting distinction between those jurisdictions that initiated regulations from non-governmental organizations and those that began from the provincial or territorial government. Specifically, Manitoba (Summary of Content Analysis – Manitoba) and Newfoundland and Labrador (Summary of Content Analysis – Newfoundland and Labrador) both had nongovernmental organizations dedicated to providing breakfast, snack, and lunch programs in their respective provinces lobby their respective provincial governments for nutrition regulations and increased attention to school food environments. In both cases, guidelines for nutrition were produced to assist school boards or divisions in creating their own policy.
What is notable about the cases of Newfoundland and Labrador and Manitoba is that interview participants from each province made reference to the political culture of their province as an explanation for their community-oriented origins. In Manitoba, as was mentioned in the case in the previous chapter (Chapter 5), the political culture is cooperative (MB_20150617). The Ministry of Health responded to grassroots initiatives because “it’s a smaller province with not that many resources” (MB_20150617) so from that perspective, having community support makes development and implementation easier. Cooperation is perceived as the only way to overcome the lack of resources: “You’re not going to do anything if you don’t get people working together on these things and we, and Manitoba certainly doesn’t have big money to throw at anything so I mean the funding for this whole initiative has been very modest” (MB_20150617). Further, with advocacy from a nongovernmental organization that was already encouraging schools to embrace the idea of nutrition policies, the government could see that there was sufficient support from the population that it is worth moving forward and providing resources for an initiative like school nutrition guidelines (MB_20150707).

Similarly, when asked about the community organization origins of their school nutrition guidelines, one of the interview participants from Newfoundland and Labrador said, “that’s how democracy works” (NFLD_20150706). While not every province or territory has had a nongovernmental organization press the provincial or territorial government for a school nutrition intervention, it’s “how things happen” in Newfoundland and Labrador (NFLD_20150706). The provincial government of Newfoundland and Labrador regularly responds to community-oriented activism as it did when the community asked for school nutrition guidelines.

One of the key differences between Manitoba and Newfoundland and Labrador’s bottom-up approaches to establishing school nutrition regulations was in the responses from the provincial governments. While each had governments that responded positively to the request for intervention, and the final products were similar in terms of guidelines to assist with policy creation, the process of arriving at the final products differed. In Manitoba, in addition to consulting with Dietitians of Canada and Dairy Farmers of Manitoba, in the year the handbook was released three community nutrition forums were held to discuss opportunities and challenges, dietitians were made available to consult with school administrators and a website was developed to provide assistance in policy development (MB_20150525). Once the handbook was released, a second consultation was done to allow schools to discuss challenges and how they could be better supported (MB_20150525). While, as the case outlined in the previous chapter (Chapter 5) showed, the pol-
icities within the province vary in terms of level of comprehensiveness, the measures to improve
the school food environments in Manitoba were typically embraced favourably.

In Newfoundland and Labrador, the development was also collaborative. The departments re-
ponsible for Education and Health worked with the Coalition for School Nutrition, Kids Eat
First, a breakfast program in the province, the School Milk Foundation, representatives from the
teachers’ association and the school boards associations were consulted during the guideline de-
velopment (NFLD_20150706). In spite of the involvement of representatives from the schools
during the development, there was resistance from some schools due to misunderstandings about
what the guidelines were asking for food and beverage nutrition requirements
(NFLD_20150706). There were some school boards and individual schools in the province that
had already begun moving forward with healthier eating initiatives and were changing their men-
us prior to the development of the provincial school food guidelines, which made the implemen-
tation process less daunting.

For those school boards and schools that had not made nutrition a priority prior to the implemen-
tation of the provincial guidelines, changing the food and beverage offerings was perceived as
being much more onerous. Some schools had misunderstood what was being asked, believing that
the school food environment had to be entirely compliant with the Serve Most category, which
was then met with resistance from students. The province provided support for infrastructure and
School Health Liaisons to consult with food service providers after the guidelines were issued.
While the initial “learning curve” (NFLD_20150706) is over, and the province has a harmonized
school nutrition policy, in retrospect the interview participants believe having food service pro-
viders be consulted in the development of the guidelines would have prevented the difficulties
they experienced as well as the challenges faced by schools that struggled to replace the typical
cafeteria fare with items that conform to the nutrition requirements.

Communication and consultation have a significant impact on the success of school nutrition reg-
ulation implementation. What also helps, however, is having the initiative come from the general
population. De-centralizing the responsibility of policy development to the board or district level
will produce a variety of policies and be met with a variety of responses, with some being more
willing and enthusiastic than others. It is speculative to suggest that the grassroots origins of each
of these school nutrition regulations resulted in the provinces adopting the guideline approach, as
they were not the only two provinces to do so, but it is reasonable to assume that the origin contributed to this approach.

6.3. **Objective: Social and Cultural Aspects of Healthy Eating**

“We’ve ... worked for several years to change a culture” (AB_20150703)

Cultural aspects of foods and beverages do get addressed in the regulatory documents. By nature of being public schools, the foods and beverages provided must be culturally appropriate for the student population, and most of the documents address this in some way (Table 5.36). With that said, there are cultural aspects of food that do not get adequately addressed in the regulatory documents. In an earlier section of this chapter, the incompatibility of nutrient criteria and otherwise nutritious foods was discussed in terms of Aboriginal students in Canada. A participant from a school district in British Columbia provided an anecdote about how criteria-based nutrition regulations can be problematic to a majority Aboriginal student population that identifies as lactose intolerant, when the policy encourages milk consumption (BC_20150911). The Guidelines, in addition to *Eating Well with Canada’s Food Guide* and the First Nation, Inuit and Métis edition of Canada’s Food Guide emphasize consumption of unsweetened milk and milk alternatives, including fortified soy beverages (British Columbia 2013; Health Canada 2007a; Health Canada 2007b). The difficulty she had was while plain white milk is readily available to her schools, most of her students will not drink it, in part due to the prevalence of lactose intolerance in the Aboriginal community, although she did also mention the preference for sweetened beverages, like chocolate milk among the students in her schools (BC_20150911). While she did not mention whether soy or alternative dairy-type products had been tried in her district, she did mention that chocolate milk tends to sell better (BC_20150911). This was also the case in the Saskatchewan school that experimented with removing chocolate milk from schools (Henry et al. 2015) and in Ontario (Winson 2008). The absence of discussion regarding dairy alternatives may be due to the availability of and/or the expense associated with these products as her district is remote and she mentioned this made access to certain products challenging and often more expensive (BC_20150911). While chocolate milk is treated as an acceptable alternative to plain milk be-

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6 Only New Brunswick and Newfoundland and Labrador do not mention a cultural aspect of diet. Alberta, Ontario, Quebec, and Yukon explicitly mention including culturally appropriate foods in some capacity in their respective regulatory documents.
cause it contains the same nutrients, it is problematic because a serving of chocolate milk contains nearly as much sugar as a can of Coca Cola.\(^7\)

That same participant shared another incident of how the school food regulations in British Columbia, in an effort to incorporate nutritious foods, inadvertently exclude culturally appropriate foods. Salmon, which is local and easier for schools in their district to obtain does not conform to the nutrient criteria, but tuna, does, although it’s not “a west coast fish” and “the kids aren’t used to tuna” (BC_20150911). For this section, this situation indicates there can be difficulty accommodating the cultural and nutritional needs of the student population according to certain school nutrition regulations.

Public schools that provide foods and beverages need to consider the cultural aspects of diet of the student population while addressing nutrition. The nutrient criteria contained in the regulations are addressing the Culture of the Industrial Diet (Table 5.40), as discussed in the previous chapter (Chapter 5). The school nutrition regulatory documents represent an effort from each subnational jurisdiction to encourage healthier eating habits to improve the health and wellbeing of the students in their schools, typically by removing pseudo food from the internal school food environment. Even with resources and support from the subnational jurisdictions, school administrators have many policies that they are responsible for the oversight of, and nutrition regulation may not be a priority. Addressing the Culture of the Industrial Diet (Table 5.40) is difficult when the Role of Administration in the School Food Environment (Table 5.40) is not clearly defined, as one respondent commented:

> Our principals…are very busy people and their priority is education as it should be, right?…[T]hey have a whole variety of policies that they are to make sure that things are happening but at the end of the day, and we understand this and they’re very busy and the cafeteria’s down on their list of priorities to get to, right? (NB_20150619).

Participants from Alberta (AB_20150703), Manitoba (MB_20150617) and Newfoundland and Labrador (NFLD_20150706) echoed this sentiment as well. School nutrition regulations add responsibility to the workloads of administrators that, even with full preparation to oversee the implementation of the regulations, may still be challenging to oversee due to other responsibilities.

\(^7\) There are 39g of sugar in a 355ml can of Coca Cola. A 250ml carton of 1% chocolate milk from Beatrice contains 28g of sugar.
Since most of the regulations\(^8\) encourage, but do not require, staff to adhere to the school nutrition regulations, many do not want to change their own habits, meaning they are coming to school with pseudo foods and beverages, like pop for instance (SK_20150604). Successful implementation of school nutrition regulations requires the support from all stakeholders in order to ensure the objectives are being achieved because even where oversight measures are in place, they may not be consistently enforced. Having staff, parents, and students engaged in overcoming the consumption habits developed prior to the implementation of school nutrition regulations and improving the nutritional quality of the school food environment makes compliance easier.

Each of the subnational jurisdictional approaches to school nutrition regulation gives a significant amount of responsibility to the schools and school board/district/division administrators. All of the documents require the school board/district/division to either implement a jurisdiction-wide policy or develop their own policy to improve the nutrition of the foods and beverages available for sale to students as well as creating a supportive environment for healthy choices. For those subnational jurisdictions with policies, implementation happens at the board/district/division level. This is true of all policies pertaining to schools, but what makes nutrition policies different is the subject matter. For administration to implement education policy, their training and experience provides them with the skills necessary to implement educational policies with some efficiency. Educators and educational administrators, however, do not have a background in nutrition.

While the subnational jurisdictional governments have provided a variety of resources to support the implementation of these nutrition regulations, including websites and access to dietitians or nutritionists, these resources are not permanent components of the school food environments. The two nutrition professionals who participated in this research, also participated in the development of nutrition guidelines and policies, and continue to sit on nutrition committees, and visit schools when there is nutrition-related programming taking place but they are not permanent employees of the schools (MB_20150525; SK_20150604). In the event questions or concerns about menus or procurement arise, it may not be possible to have the question addressed in a timely fashion, requiring the administration and food service staff to resolve it with their own, comparatively limited knowledge. One participant partnered with the nutrition professional at the local hospital to provide assistance as necessary on a volunteer basis (BC_20150911). Community support is helpful, as is the dedication of the nutrition professionals who work within school food environments. They are not, however, available equally to all schools, which may require those in education

\(^8\) The guideline from Newfoundland and Labrador, which is geared to food service workers, does not discuss the role of educational staff in supporting healthy eating choices
administration and staff to become the nutrition experts for their schools, without possessing the knowledge and/or habits necessary to do so.

While there are dietitians and nutrition educators who come to schools to work with staff, and students to educate about nutrition and dietary habits, not all schools have access to these resources. These people are needed, however because there are those working in the internal school food environment who, prior to the implementation of school nutrition regulations, had not given nutrition much thought. An official from a school district in New Brunswick who described himself as a “finance guy” participated in this research because his job includes overseeing the contracts between food service providers and cafeterias (NB_20150619). He commented that even though his background is not in nutrition, he is committed to bringing healthier offerings to the cafeterias in the district because: “the feedback that I’ve heard from parents and from schools and… certainly recognizing the need for us to, where we can, educate, inform our students for healthy eating” (NB_20150619). Because the Francophone district that runs in the same geographical area was asking for more from their food service providers and they were obliging, he knew what he could ask for and that parents would appreciate it. Consequently, while the contract between the food service provider and the cafeterias in his district is expiring, the request for proposals asks not only for food service providers to provide nutritious foods, but fresh, local, and organic where possible (NB_20150619). In this school district, the culture of the industrial diet is diminishing among school staff, which is promising for supplying minimally processed, nutritious foods and for encouraging students to choose them over less healthful options.

Many of the documents, policies and guidelines, encourage administrators and staff to be role models or to model healthy behaviours to students to support their healthy eating choices. Having teachers and other staff support healthy eating initiatives is helpful for maintaining health and wellness messages students are receiving and encouraging them to make healthier choices. One culinary teacher speaking about her role in schools noted: “I always bring back the point that we’re role models. We need to teach” (SK_20150625). To be effective, however, this requires staff to possess healthy habits and knowledge themselves so they can be brought into their food and beverage choices that students see during the school day. With the pervasiveness of unhealthy eating habits in North America among adults as well as children (Nestle 2007; Winson 2013), asking staff to role model healthy eating behaviours would only be reasonable if they also receive educational supports and resources from the subnational jurisdiction.
Further, those who purchase for the school food environment must be fully aware of the contents of the regulations in order to enforce it as there is no oversight from the subnational jurisdiction. One participant, for example, did not realize that when the regulations were updated that elementary school students could not be sold products containing sugar substitutes (BC_20150911). This was a problem as she had been purchasing yogurt containing a sugar substitute for the lunch program because it was the one that was often on sale (BC_20150911). She caught the error eventually; however, the other responsibilities associated with her job prevented her from remaining fully informed on the changes to the regulations in her province (BC_20150911). When changes to regulations are made, those changes need to be communicated to those who implement the regulations in order to ensure the full benefits of the nutrition requirements are being received.

For the subnational jurisdictions with guidelines where school boards/districts/divisions or individual schools use the document to create a nutrition policy, or are required to use the jurisdictional document to create a policy, the amount of responsibility the boards/districts/divisions have is even greater. Again, while the province or territory may be providing some form of support for development of the policies, different school boards/districts/divisions within the province or territory and sometimes different schools within a board/district/division have subscribed to the cause more than others, resulting in some students being more supported in choosing healthier foods and beverages than others (MB_20150617; NFLD_20150706; SK_20150604). This results in some policies with comprehensive, strict nutrition regulations, and others that are more lenient and less comprehensive as far as nutrition requirements and comprehensiveness for other aspects of the school food environment.

Even in the jurisdictions with policies, follow-up evaluation, either formally or through journalistic reports, suggests adherence to the nutrition guidelines varies. Struggles to replace food items with healthier options or insufficient time and resources to monitor menus means that foods and beverages of lower nutritional quality continue to be sold or sold more often than is deemed appropriate by the policy. Nova Scotia, which was supposed to fully implement its nutrition policy of having the majority of food and beverages available for sale be considered maximum nutritional value by 2009, still has schools serving students nachos, cookies, and chicken fingers (CBC News Sept 1, 2015). New Brunswick, where full compliance would allow foods and beverages of moderate nutritional value, like French fries, be sold up to two times a week, has also struggled with compliance. The Make Menus Matter Project, however, found that more than half were not compliant with these regulations, offering foods like burgers, pizza, and cookies every day (CBC
News Jan. 26, 2015). The report on Nova Scotia schools indicated that cost makes it difficult to replace popular foods with healthier options because food waste and decrease in purchases make it expensive for the schools to keep items in cafeterias long enough for students to start to like them (CBC News Sept. 1, 2015). This will be discussed in greater depth later in this chapter. In this section, it is important to recognize replacing less healthful choices with more healthful choices in the school food environment is a decision that is first made at the industrial agro-food subcomplex level. The school board/district/division must first make it a priority in order for the students to do so.

Where the regulations allow less nutritious offerings to be used as rewards or for celebrations and special occasions, or sold occasionally in the internal school food environment, there is insufficient coordination within the school to ensure that students are only receiving these treat foods on occasion, and not multiple times a week, or multiple times a day (AB_20150703, SK_20150604; SK_20150625). Another interview participant indicated that there are food service workers who have had their jobs for a long time, who are used to doing things a certain way, and believe they know what students like so they want to continue to serve cookies, and treats like that (NB_20150619). There are foods that are still associated with celebrations that some teachers and food service workers want to provide to students, even though they are aware of the efforts of the school to improve the nutritional quality of the foods and beverages available to students. In at least one case, classroom teachers felt that it was okay to offer treats because the cafeteria had been improved and therefore the school was healthy (AB_20150703; SK_20150625). The taste for treat foods and treat culture persists in spite of the regulations in place and this jeopardizes the efforts of the regulations to improve the nutritional quality of the foods and beverages sold in schools.

“Treat culture” (NFLD_20150706) and preference for pseudo foods are also evident in older students. The shift from less nutritious to more nutritious foods is especially difficult for older students who both remember what cafeterias sold prior to the implementation of nutrition policies and have access to the external school food environment. As a consequence, students who do not like the new food and beverage options can still exercise their ability to leave school property to purchase the foods and beverages they want, sometimes resulting in closures of food services. Many participants mentioned the external school food environment as being a hindrance to the efforts being made to improve the internal school food environment because the pseudo foods students like are still available to them (AB_20150703; BC_20150911; NB_20150619;
NFLD_20150706; ON_20150413; ON_20150420; SK_20150625). This will be discussed further in the next section. In one interview, the participants mentioned that students see the ability to leave school property as a rite of passage (NFLD_20150706). Another participant shared that research done in his board showed that “kids want to get away from the school to be with their friends”, further driving them away from the internal school food environment and into the unregulated school food environment (ON_20150413). In one case in Alberta, a student saw the opportunity to fill the void of the internal school food environment by selling pop from his locker, which led to his suspension not for violating the school nutrition policy but because the food service provider has a non-compete contract with the school and the student’s sales violated this (AB_20150703). Upon returning, he moved his entrepreneurial activity to the sidewalk beside the school (Canadian Press, 2014). The drive to exercise increased independence that comes with age, in addition to preference for pseudo foods, drives students to the areas of the school food environment that are not subject to regulation.

6.4. **Objective: Role of Food Programs in Improving Access to Nutritious Food**

> “Believe it or not some people don’t understand why we have to feed everybody else’s kids” (ON_20150529)

Over the course of the interviews, participants were asked what the objectives of the school nutrition regulations were and to discuss the impacts of the regulations they were perceiving in the school food environments. Typically, when discussing the impact of the school nutrition regulations in the school food environment, participants highlighted the successes. This result could be criticized due to the participants having a vested interest in the regulations succeeding and thus only sharing these stories. However, in addition to the offer of confidentiality, there were occasions for the participants to share the challenges to improving the overall health and wellness of the school food environment through the regulations as well as addressing the aspects of the school food environment that are not health promoting and are not addressed in the regulations.

This research did not set out to study external school feeding programs nor were they prominent in the regulatory documents. Over the course of the interviews, however, it became clear from those working in the internal school food environment that the organizations that operate nutrition programs in schools are considered important to increasing student access to nutrition and nutrition education, which is an objective explicitly stated by five of the eleven subnational jurisdictions either in the regulatory documents and/or in interviews. The content analysis also revealed
that all of the subnational jurisdictions recognize the link between nutrition and health in their respective regulatory documents (Table 5.35), and, as the interviews revealed, providing students nutritious food through these programs is an effective way of increasing consumption of nutrition and receiving the associated health benefits. Thus, though not directly linked to the research questions of this project, food programs are discussed below to allow for a more complete portrayal of Canadian internal school food environments while also showing how they contribute to achieving the goals of the nutrition regulations.

The interviews revealed that there are at least two instances of publically funded meal programs in Canadian schools. Participants who work in school food environments with high levels of food insecurity described the situation in their schools where the provincial government provides funding for a meal during the school day for students at low or no cost to them or their families. In British Columbia, CommunityLINK (Learning Includes Nutrition and Knowledge) is a government program funding “breakfast, lunch and snack programs, academic supports, counseling, youth workers and after-school programs” geared towards vulnerable students, depending on the needs of the school district” (British Columbia n.d. “CommunityLINK”). One of the interview participants in an area with a large number of vulnerable students uses the district’s CommunityLINK funding to run a lunch program by which family’s pay $30/child/month for lunches. (BC_20150911). Parents are given a menu in advance with a form for the student to return to school with the payment to cover the cost of a brown bag lunch each school day for the month, usually consisting of a sandwich, with yogurt or fruit (BC_20150911). This district receives $483000 per year to fund this program, and has received this amount for the last six years (BC_20150911). The cost of the lunches works out to be approximately $1.75/lunch/student (BC_20150911). In addition to the cost of food, there are also staff wages, both of which have risen over time while the amount received from the government remains the same (BC_20150911). While families are expected to pay, in an effort to include everyone, those who are unable to do so are told to “sign up anyways” and their children are included in the program without having paid (BC_20150911). The universality of this is positive for the students who remain included in the lunch program, but it puts additional strain on the program itself as yearly it only brings in approximately $20 000 from parents in an increasingly expensive program. That being said, it is an important contributor to the nutritional intake of the young people in this district. For lunches that do not get sold during the day “we hand out the food to anybody who wants to take food home and they line up for that food and they take it home… so I know that if it’s not eaten at lunchtime, it’s brought home and for many kids that’s what they have for dinner”
Additionally, the district has seen improvements in attendance rates that can be attributed to both the lunch and breakfast programs run in the schools (BC_20150911). This lunch program is not only addressing a need in a community, but it is also contributing to the overall nutritional health of it by providing some students with up to three meals a day that comply with British Columbia’s nutrition policy.

Saskatchewan also provides lunches to students in certain schools. The province designates certain schools, particularly those where a large portion of the students are “at risk” as community schools, which receive additional funding and supports from the province so that they can serve the whole community as hubs for service delivery (Saskatchewan “Community Schools in Saskatchewan”). This is separate from the Child Hunger and Education Program (CHEP), which also offers breakfast/snack/lunch programming in schools, but tends to focus on schools that are not designated community schools (SK_20150604). At risk schools are “schools with lower income kids, more poverty, more challenging life circumstances” (SK_20150604). One of the services that is delivered in many community schools is a universal lunch program, and in some, a breakfast program as well (SK_20150604). These meal programs are funded by Saskatchewan’s Ministry of Education and some schools apply for additional support from Breakfast for Learning but supplementation occurs on a school-by-school basis (SK_20150604). Meals are universal and provided to students at no cost. For students who are identified as at risk, this meal has an especially important role in their overall nutrient intake.

Charitably-run nutrition programs are prevalent across Canada. These programs may offer breakfast, lunch, and/or snacks to students. The objective of these programs is to address food insecurity, but to do so in a way that reduces the stigma associated with poverty. To achieve this, the meals and snacks are available to anyone who is interested in partaking, not only those who demonstrate need. Five of the eleven subnational jurisdictions made reference to some manner of food provision for students who are food insecure and encouraging, if not requiring, them to abide by the same nutritional regulations as the foods and beverages for sale. These programs are an important component of the school food environment because of the large number of students who participate in the programs. As mentioned already, these non-government organizations in Manitoba and Newfoundland and Labrador had a significant role in the development of the provincial school nutrition guidelines in their respective provinces. This is also true in Prince Edward Island, as the Healthy Eating Alliance in the province had a significant part in the development and continued implementation of the policy as well as other healthy eating initiatives geared to-
wards school-aged children (PEI Healthy Eating Alliance). The importance of these programs should not be underestimated and their popularity has implications for the study of nutrition regulation in Canada.

Because not all of the regulatory documents mentioned food programs, the content analysis does not provide a lot of information about the role of meal and snack programs in schools, but many of the interview participants did discuss the role these programs play in their areas and, in some cases, the participants were representing the organization responsible for the programs in their area. This section already included the programs that interview participants are involved in that are institutionalized within the schools. From the interviews, it was also learned that the snack and meal programs provided by NGOs are important not only to the nutrient intakes of students, but also for food literacy, since many of these programs introduce students to foods, especially fruits and vegetables, that they do not eat at home (BC_20150911; MB_20150707), and they also involve students in the preparation of the meals or snacks (NFLD_20150706; ON_20150526).

Regulatory documents that mention food programs encourage these programs to follow the nutrition regulations even though they cannot mandate this. In many cases, because the foods and beverages are not sold to students through these programs, they are exempt from the nutrition regulations. Prince Edward Island encourages schools to have a food cupboard “for students in need” and that it should contain healthy foods (PEI Eastern District School Board 2011: 2). PEI, Nova Scotia and New Brunswick each encourage schools to participate in their respective province-wide milk programs in the documents. Newfoundland and Labrador also has a province-wide School Milk Foundation; however it is a non-profit organization as opposed to the other subnational jurisdictional programs that are run in conjunction with the departments responsible for agriculture (NFLD_20150706).

Partnerships between schools and school nutrition programs make sense in context of the contents of the subnational jurisdictional nutrition regulations. All of the documents make reference to either the link between nutrition and health or the importance of student health in order for them to be effective learners and most make reference to both (see Table 5.35). Large and small organizations across the country have found ways to bring nutritious foods and beverages to students. Breakfast Clubs of Canada and Breakfast for Learning are two Canada-wide organizations that bring breakfast, lunch, and snack programs to schools. Both of these organizations, which were mentioned by some of the interview participants, share the goal of addressing food security
among school-aged children in an effort to increase the number of students in Canada who can more fully participate in school because they are receiving sufficient nutrition during the school day.

Based out of Vancouver, British Columbia, Breakfast Clubs of Canada (BCC) relies on fundraising and donations of food and equipment from a wide variety of food producers, processors, retailers, as well as other retail outlets and community partnerships to provide breakfasts to schools (Breakfast Club of Canada “Club Partners”). BCC currently has 1366 clubs across Canada and 298 in development (BCC “Our Mission”). Breakfast for Learning (BFL), in addition to working with schools to provide breakfast programs, also provides lunch and snack programs depending on the needs of the schools. Based out of Toronto, Ontario BFL was founded by Canadian Living Magazine in 1992 because the editors felt that they had a commitment to improving the wellbeing of Canadian families and part of doing so was “to help hungry kids” (Breakfast for Learning “Our Story”). In a similar fashion as BCC, BFL also has corporate and community partnerships that help with the provision of these programs while also running fundraising campaigns and working with schools to help them generate funding for their nutrition programs (Breakfast for Learning “Supporters”; ON_20150526). BFL is currently funding 2174 nutrition programs across Canada (Breakfast for Learning 2015 “Programs”). Between BCC and BFL, there are more than 3500 breakfast, lunch, and snack programs currently being run in Canadian schools. The need for programs like these to address concerns related to nutrition and capacity to learn does not appear to be slowing.

These larger organizations typically offer assistance to smaller groups in communities operating nutrition programs in schools. One interview participant coordinates a program within a school board in Ontario and provided insight into how nutrition programs impact a community. During the interview with a superintendent in the board, he mentioned the organization that runs the breakfast and snack programs in the board and their involvement on the Healthy School Committee. The coordinator of the program agreed to participate in an interview to explain how the organization contributes to the school food environment in this school board. It is important to note that in Ontario, food and beverages that are not sold to students (i.e. they are given to students for free) do not have to comply with the school nutrition policy (Ontario 2010). This organization, however, strives to meet the nutrition regulations set by the province and worked with others in the school board to assist with the implementation of the policy (ON_20150526).
The program is a nonprofit and relies on grants and donations to provide its programs. They have partnered with both Breakfast Clubs of Canada and with Breakfast for Learning to assist schools in the board with running their nutrition programs (ON_20150526). Her organization seeks donations and support from several local businesses including the local Tim Hortons, which has supplied toasters for the breakfast program (ON_20150420). It also receives grant money from the Ontario Ministry of Child and Youth Services as well as the local branch of the United Way (ON_20150526). The organization also works with the schools themselves to develop fundraising activities so they can contribute financially to their own programs (ON_20150526).

For schools to receive assistance from this organization to run their nutrition programs, there are eleven criteria that need to be met. One is a nutrition criterion set by the Ministry of Child and Youth services which insists that meals contain at least three of the four food groups from Eating Well with Canada’s Food Guide (Health Canada 2007a) and snacks contain two of the food groups (ON_20150526). While the programs are exempt from PPM 150, the Ministry of Education’s nutrition policy, the nutrition programs have been working with their suppliers to make their offerings comply, and at the time of the interview, all but one or two of their offerings did comply (ON_20150526). In the interest of being inclusive to the cultural needs of the students, like making sure meals are halal, this means introducing students to foods that they are not necessarily used to, like having beans at breakfast time (ON_21050526). Over time, however, students develop a taste for it and it stops being strange to them (ON_20150526).

Having the foods and beverages comply with the policy has produced some logistical challenges. In some cases, purchasing foods and beverages that comply with the school nutrition policy has increased the expense of providing the programs. This can compound the expenses these programs have since distribution, especially in more remote areas in the region, increases the cost per student to provide the meal or snack (ON_20150526). The local organization, however, believes the increase in cost is worth it because “in the long run, as I say it is the best thing for the kids” (ON_20150526). It is worth including that, previously, the cost of one breakfast or lunch per secondary school student was $2.05, but that cost has increased to $2.20 (ON_20150526). This is not due to the nutrition requirements, but the increases in food costs over time (ON_20150526). In the event an existing program is unable to afford the allowable foods and beverages, the organization has additional funds to assist with the transition, but “thank God, not many have had to ask for additional funding” (ON_20150526). The primary responsibility of the coordinator is fundraising and applying for grants to maintain their organization and the programs in the schools.
they are facilitating (ON_20150526). The inconsistency in the sources and amount of funding, as well as requiring to apply for grants annually, means that finding sustainable funding is challenging, and planning for schools requiring additional funds beyond what they would normally receive is even more difficult (ON_20150526). Consequently, one of the goals of the coordinator is to get a federal nutrition program so funding is less of a concern (ON_20150526).

Another example of a nutrition program addressing food security is CHEP, though it does not receive funding from BCC or BFL. CHEP Good Food Inc. is a nonprofit organization dedicated to improving food security in Saskatoon, Saskatchewan (CHEP “About”). The organization addresses food security in all aspects of the community, including the school food environment. With the assistance of volunteers and donations from community partners, they run breakfast, snacks, and/or lunch programs in schools that can also include food education and cooking tips, based on the needs of the school (CHEP “Children’s”). These schools in Saskatoon can identify a need for a nutrition program based on the needs of their students (SK_20150604). The school orders the appropriate number of breakfasts, snacks, or lunches from the centralized kitchen in Saskatoon to be delivered to the schools elsewhere in the city (SK_20150604; CHEP “Children’s”). A lunch program could include a sandwich and yogurt, which would be available to any student in the school who required one (SK_20150604). Through CHEP, vulnerable Saskatoon students are able to receive nutritious foods at no cost to them or their families.

Several participants spoke about the nutrition programs in their jurisdictions and the contributions they make to the overall nutrient intakes of their students. As discussed earlier in this chapter, the organizations that facilitate school nutrition programs in PEI, Manitoba and Newfoundland and Labrador were influential in the creation of the regulatory documents created by their respective subnational jurisdictions (Eastern School District 2011; MB_20150707; NFLD_20150703). In the case of the former, they were consulted in the creation of the eventual guidelines (MB_20150707). These programs have a significant impact on the students who partake in them. Because of the universal, and often participatory, nature of these programs, students are introduced to new foods, including fruits and vegetables, as well as how they can be prepared (ON_20150526). Further, these programs can help reintroduce foods that students previously had not liked, allowing them to develop a taste for it. These programs, along with existing public health research (Henry et al. 2015), show that students will take a nutritious item offered at no cost even if they would prefer something else that is for sale. Helping students develop a taste for nutritious foods, as well as how they can be prepared, allows them to bring this knowledge back...
home with them so that they can ask their parents/guardians to purchase these items to eat at home (BC_20150911; MB_20150707; NFLD_201507). Nutrition programs are contributing to the outcomes that appear in the regulatory documents themselves: they improve the nutritional intake of students, which contributes to improvements in their overall health and wellbeing, in turn facilitating their ability to learn. Nutrition programs also directly address food insecurity, for those jurisdictions that named this as a concern.

Regardless of the need of the students who participate in the programs, they do end up contributing to the overall nutritional intake of these students, making their nutritional value important. Further, participation in breakfast, snack, and lunch programs is indicative of a want, if not a need, for food during the school day. These programs contribute to food literacy in terms of both ability to recognize foods as well as nutrition intake, thus contributing to the overall health and wellness of the students who participate in these programs. When the need to generate revenue is removed, the delivery of nutritious foods and beverages to students becomes easier.

6.5. Limitation: Food Insecurity in Rural, Remote and Northern Communities and Food Deserts

None of the regulatory documents that guide or direct nutritional requirements for food and beverages in school mention issues that may face remote or rural communities in developing or implementing nutrition policies. Several of the interview participants, however, did mention difficulties experienced by schools or school boards/districts/divisions in rural and remote communities in their subnational jurisdiction implementing nutrition regulations. Those who participated in interviews and are responsible for developing policy at the school board/district/division level or implementing the regulations at the school board/district/division level that have schools in rural or remote communities, expressed challenges faced by these schools that are not faced by schools in urban areas.

One such challenge faced by schools in remote areas is access to fresh fruits and vegetables. One participant mentioned that, in addition to the expense of having fresh produce delivered, she also experienced difficulties with suppliers delivering pallets of produce with multiple boxes of a product where the:

top box looks great, but by the time you get to the fourth box, they’re all rotten and the problem is they’ve already left. They will take it back and they will refund us, but on that
day we need the food so then we’re forced to go to the grocery store and pay higher costs because we’re also buying it at the last minute (BC_20150911).

This happened frequently enough that this school district stopped purchasing from this supplier and instead has arrangements with a local Safeway and Overwaitea, two local grocery stores (BC_20150911). The school district is able to place their order with the grocery stores, and the stores inform the district when certain products are going on sale so they can incorporate them in the menu. This partnership is helpful for the school district, but it does not take away the difficulty they have faced acquiring fresh foods for their schools.

The location of the district in British Columbia is not conducive to agriculture (BC_20150911). This is not the only area of Canada that experiences difficulty producing and acquiring fresh food, and food in general in some cases. Newfoundland and Labrador also experience times of scarcity. The majority of the provinces’ fresh produce is shipped in, and inclement weather can cause shipments to be missed. This results in empty store shelves, which in addition to the problems this causes for households purchasing food, also impacts internal school food procurement (NFLD_20150706). Since this is a province-wide issue, Food Security Network in the province is working with rural and remote communities on the island and especially the north shore of Labrador to work with communities to create strategies to improve access to food (NFLD_20150706). When food security is a province-wide issue, however, it does become challenging to supply sufficient nutritious food to the school food environment as well.

A participant from Ontario who organizes nutrition programs for a school board expressed difficulty getting fresh foods to remote schools. She mentioned that it is more difficult for the schools “up north” to access the same fruits and vegetables at the same price as the schools “in the city” because the price is the same but the transportation costs are greater for the remote schools (ON_20150526). The organization was working with those schools to develop a distribution program that would reduce the transportation costs for these schools; however they are still at a disadvantage compared to their counterparts in the urban areas of the district.

Concerns regarding transportation and distribution of food were found in Manitoba as well. While the participant who informed this research of this issue in her province was not representing a specific school division, she was aware of the challenges of accessing food faced by the rural communities. Specifically, she noted schools in remote areas do not have the same affordable access to the same variety of products as the urban schools in the area, which makes it more chal-
lenging to promote healthy eating among young people in those areas (MB_20150525). This highlights the need to include affordability as well as geography when considering access in the institutional food sector.

Schools in rural and remote locations have challenges procuring sufficient nutritious foods for their internal food environments. Healthful foods can still be challenging to access for schools in food deserts. Another participant from Manitoba expressed that while rural schools may struggle with getting access to healthy foods, she also acknowledged that food deserts pose challenges for “inner city schools” (MB_20150707). The issue for urban food deserts in Manitoba was most pressing for the breakfast, snack and lunch programs, which require volunteers to be able to do the shopping and have access to a vehicle to transport the food (MB_20150707). While this may not be an example of “rural”, it is an example of “remote”, as food provision even in an urban area can be challenging with insufficient transportation. The point to be taken away from these instances is that healthy eating and access to healthy food can be encouraged and regulated within the school food environment, but it is more difficult for some areas than others and this has an impact on supplying the school food environment with foods and beverages that meet nutritional regulations.

The literature review included a section discussing food insecurity and the challenges it poses to school-aged children, both developmentally as well as socially and behaviourally. Populations that are particularly vulnerable to food insecurity in an area that is further struggling to supply the school food environment with foods, especially when it impacts breakfast, snack, and lunch programs, not only come to school hungry but are unable to find reprieve during the school day. These students are unable to fulfill their potential as learners, but are also more likely to be tired, irritable, and disruptive (Langlois 2006)9. The school nutrition regulations are meant to provide directives and tools to school administrators for improving the nutritional quality of the foods and beverages being sold in schools, however if schools are unable to supply them, or students are unable to purchase them, the regulations are not addressing the problems of nutrition, health, and learning that they recognize as important.

9 The impairments to development and cognitive ability as a consequence of food insecurity are also mentioned in the subnational jurisdiction school nutrition regulatory documents from Alberta, Nova Scotia, Quebec, and Saskatchewan. The others address, in some capacity, the benefits of healthy eating only.
6.6. Limitation: From Food Police to Health Champions

“You don’t want to be the food police” (NFLD_20150706)

The shift from fast foods and snacks containing little to no nutritional value like chocolate bars and potato chips has not been easy and some areas continue to struggle. The previous section discussed the requirement of the school community to role model healthy behaviours as well as the need for them to enforce the new rules and regulations. Many of the documents discuss how the school community, as well as the larger community and parents are necessary to support students in making healthier food and beverage choices. This section looks at the conflict faced by those who are asked to support students, and indirectly the subnational jurisdictions in making dietary changes. Regardless of the level of success, what the discussion above shows is changing the foods and beverages being sold and/or served in schools asks a lot of the teachers, food service staff, and administrators. If they are not being asked to develop a nutrition policy for their school board/district/division or school, they are being asked to implement one, which has meant changing suppliers or vendors, and changing their own purchasing and eating habits. The interviews with both those who developed regulations and those who have been implementing the resulting policies revealed individuals in both groups have had to negotiate dual roles as nutrition champions and food police. Those who implement nutrition regulations with more success require support from staff, not only for oversight and monitoring of the implementation of regulations but also role modeling healthy behaviours. That being said, there are students who still resist the changes and the staff do not want to become the food police to enforce them.

Food police or cafeteria police were terms that were mentioned by several interview participants as a way to describe the role of enforcer of nutrition requirements, especially when the requirements were being met with resistance. In one instance, it was mentioned that the province did not want to be the cafeteria police but rather wanted to encourage school cafeterias and canteens to comply with the policy (NB_20151906). As discussed in the previous chapter (Chapter 5), Alberta does not require schools or school districts to have a nutrition policy, so those that do, do so voluntarily, which will be discussed in more detail later in this section. Having the option however, means that there is reluctance among those districts that might be interested because enforcing a policy can be an onerous task. In one Alberta district that did implement a nutrition policy, one of the challenges “with high school cafeterias though is that um, it was pretty well left to the school principal to police the cafeteria and what was provided, which is a challenge because
school principals have many more roles than that in the school” (AB_20150703). This quote indicates that the role of enforcer when the policy is being met with resistance can be like policing. One respondent with a background in nutrition was willing to take on the cause of improving the nutritional quality of the foods and beverages young people; however confronting the violations of the nutrition guidelines, like serving hot dogs at a basketball tournament being held at a school, was frustrating and she “doesn’t want to be the food police” (NFLD_20150706). The quote in the subheading for this section came from the same interview. In Saskatchewan, where school divisions are supposed to develop their own nutrition policies, one division wrote an intentionally vague policy so they would not have to police it (SK_20150604). There is a fine line between food police and health champion and a key part of changing that dialogue is to have the people who are eating these foods and beverages support the efforts being made to change the menus.

Those who are enthusiastic about the changes to the school food environment, including those who took up this cause prior to regulations from the subnational jurisdiction, are celebrated as champions. Those responsible for oversight and implementation appreciate the enthusiasm and in some cases additional efforts, of these school food champions because they believe in healthy eating in a way that translates into students changing their eating habits. One respondent mentioned that champions are crucial to improving the eating habits of students. If “a volunteer or champion doesn’t pick up the cause within the school… it’s a dead issue. There’s definitely a need for somebody to champion it” (ON_20150526). In Alberta, where having a school district level policy is optional, a champion is required to initiate the development of one (AB_20150625). Without a champion, policies do not get developed or implemented.

There are champions. Many respondents spoke of achievements in their jurisdictions that are moving the school food environments towards more healthful offerings and having them be accepted by students. While the focus of this research is on English-speaking Canada, both participants from New Brunswick highlighted the efforts of the Francophone school districts in the province. The three Francophone districts created the Réseau des Cafétérias, which translates to Network of Cafeterias. Cafeterias in these districts used Policy 711 as an opportunity to improve their school food environments further by sharing best practices and resources, and purchasing foods together allowing for savings by buying in larger quantities (NB_20151906). It has allowed them to purchase more fresh produce and sell it to students at a more affordable price, which has been a benefit to improving access to healthy foods in these schools (NB_20151906). While Le Réseau des Cafétérias is an initiative between Francophone school districts in New Brunswick,
the Anglophone districts have noticed, and are able to follow their lead, knowing what to ask for from suppliers and food vendors, even if they are not creating their own network, which has improved the school food environment within a district (NB_20150619). The work and enthusiasm of individuals have been a boon to their school food environments.

In one school district, the impetus for a school food policy came from a health initiative for the staff through their health insurance after finding high incidents of illness and missed days (AB_20150703). In conjunction with the Mayo Clinic, staff could volunteer to participate in a program where certain health statistics were taken and monitored and they were coached with the help of the Mayo Clinic to improve their diet and exercise (AB_20150703). Part of this initiative involved changing what foods and beverages were sold in the buildings the staff work in, including the central office of the school district and the schools themselves (AB_20150703). As the staff were brought into healthier eating habits, changing the attitudes and habits of students into the healthy eating movement became easier. It was not without resistance, as there were some in opposition to a school nutrition policy because they believed food is personal and people should have choices in what and how they eat (AB_20150703). Having the support of many of the school board staff made it easier to support the policy and support the students in the transition. The participant noted that it is easier to remove pop from the school food environment when the teachers are not coming to class with a bottle (AB_20150703). Instead, the policies are applicable to the staff, making it easier for them to role model healthy behaviours for students. Further, the overall health and wellness of the staff was improved and the staff continues to log physical activity and diet to be entered into draws for prizes organized in part through the staff health insurance plan and the school district (AB_20150703). The attitudes toward healthy eating and healthy choices have improved in the whole of the school food environment, and it began and continues to be supported by the commitment of the staff.

The changes to the menu can be met with resistance and drive students off of school property to the external school food environment, which can cause some in administrative roles to want to revert to selling the less nutritious foods and beverages to keep students on school property. Food champions need to not only convince students to adjust to healthy offerings, but encourage administration and staff to continue with efforts to improve the nutritional quality of foods and beverages in the internal school food environment. One participant remarked:
I’ll say ‘Well, they can get drugs and alcohol down the street. How is that any different?’ Do we start selling drugs and alcohol in our cafeteria because they can get it down the street?’ No, we need to be role models. We need to set the standard. We are educators. We need to be those people in their lives, ‘cause lots of our students don’t have anyone else to teach them that. (SK_20150625).

This same champion commented on the need for persistence and education to combat the resistance to the changes from students. Having changed breads to whole-wheat, for instance, students would say:

‘I don’t like brown’ like they made those comments but we were the only place in the school to get food and I didn’t ever approach nutrition as a negative thing. I would say “You know what? Whole wheat bread has tons of fibre. It makes you feel full longer. It, like I would go, I would give them nutrition information to empower them (SK_20150625).

Spending the time and the effort to educate students helped make the transition easier. It is also helpful that this cafeteria does not need to make a profit since it is not a private catering company. If students do not like a new food that has been introduced, the loss in sales and food waste, while frustrating, will not cause the food services to stop. It allows the cafeteria to continue serving the food until students develop a taste for it (SK_20150625).

Another participant shared the story of a nutrition champion in her province. A parents association for a high school in the province, pre-dating the creation of a division level school nutrition policy, hired a chef for the purpose of improving the cafeteria (MB_20150707). Previously this cafeteria would serve forty litres of French fries every day (MB_20150707). This chef did not eliminate French fries entirely, but reduced the amount made daily to approximately four litres (MB_20150707). The chef began making soups and salads on site, which also allowed him to introduce new foods to students (MB_20150707). The interview participant shared a story about this chef and a football player in the high school who “didn’t eat salad” and did not want to have the salad with mango in it. The chef offered a sample to the football player who took it back to his table to try and brought the rest of the football team back to the food service to buy the salad (MB_20150707). The chef was able to engage students in healthy eating by giving them an opportunity to challenge their preferences and try new foods. The chef had a profound impact on this particular cafeteria.
In Saskatchewan, there is a school that runs a commercial cooking course, which also supplies the cafeteria for a vocational school in the province. In this class, students learn how to prepare food and beverages for an industrial kitchen and do so by preparing food for the cafeteria (SK_20150625). While previously it was the typical cafeteria offerings of pizza, hamburgers and French fries, the teacher who instructs this course used it and the infrastructure of an industrial kitchen as an opportunity to teach students about how to prepare healthier foods and in doing so, help them develop a taste for them (SK_20150625). For some of the foods, like hamburgers, she began to make them on site to replace the ones that had been served that came frozen from a box (SK_20150625). In this way, the students in the commercial cooking class are involved in the preparation, and the hamburgers themselves are more nutritious because the recipe for the patties includes vegetables and they are served on whole-wheat buns (SK_20150625). The cafeteria used to sell three of the frozen hamburgers during a lunch period, and now sells more than forty fresh hamburgers (SK_20150625). This is only one example of the positive improvements made to this school food environment. Because it is a class, the recipes are changed frequently so the students continue to learn and develop their kitchen skills. For pricing, the foods that are not nutritious are priced higher than the more nutritious items. During sporting events, for instance, “if we’re selling a can of pop it will be for $2.00, but we sell milk for a dollar and we might have a chocolate bar, but the chocolate bar is two dollars whereas if we sell banana bread it’s going to be a dollar” (SK_20150625). This is done to encourage students to purchase the healthier option without eliminating the options of unhealthy foods and beverages.

This particular participant describes herself as being passionate about nutrition (SK_20150625). Not only did this passion translate into the desire to improve the nutritional quality of the foods and beverages sold in the cafeteria and participation in her school division’s nutrition committee, but to create resources that can support others in their efforts. This teacher has created a binder of her recipes that meet the division’s nutrition policy (SK_20150625). To develop her own recipes and to make sure they will appeal to the students in her school, she spends her evenings looking for food trends online as well as watching fast food trends to modify the recipes so they can be sold at school and keep students purchasing the healthier version rather than leave school property (SK_20150625). This work is done during her evenings, but the drive to continue working on her own time comes from her passion for nutrition (SK_20150625).

In addition to the need for champions in the school, and champions in the community, parents are also viewed as being important to improving the school food environment. Where some parents
may resist the changes to the foods and beverages made available for sale because they do not see it as the school’s role to decide what their children can eat, others were not only supportive, but wanted to see stricter regulations, which contributed to revising the policy so it included nutrient criteria in New Brunswick (NB_20150906). School nutrition regulations were met with less resistance and in some cases even improved not only with the support of those in the school food environment like food service staff, teachers, and administrators, but also with the support of those in the community, especially parents.

Participants shared stories of champions within their subnational jurisdictions and the impact they have had in improving the school food environment by changing the menu through eliminating the pseudo foods, asking for stricter regulations, or incentivizing healthier lifestyles. In some cases students who started healthy eating initiatives received recognition from the school (AB_20150703; MB_20150525). Successful implementation of a policy, or changing the menu without one, requires initiative and patience to cope with the resistance that accompanies changing a cultural norm like preferring pseudo food products. The examples given in this section show the impact that individuals and small groups have on the success of implementing school nutrition regulations, policies and guidelines alike. Cultural change is difficult and takes time. The champions mentioned throughout this section have been able to remain in their positions for years, allowing the changes in food culture to evolve over time.

Champions are instrumental to getting students to change their dietary preferences, or at least their choices and thus allow the regulations have some impact on the health and wellbeing and learning potential of students, which is the goal of these documents. Conversely, many educators and administrators do not want to be the food police or be the one enforcing rules that are not wanted. Champions are not available in all regions and keeping pseudo foods that have been consistently sold in cafeterias for years prior to the regulations out of the school food environment as well as introducing more fruits, vegetables, and whole grains to students who are not accustomed to eating them adds stress to the job, as they have to address student complaints and concerns that the food services in the schools will not be able to sustain themselves. While the subnational jurisdictions have offered supports in terms of nutrition professionals and resources, the schools that are still struggling to comply nearly ten years after having policies put in place suggest that the resources are not enough.
The success stories are encouraging, and the enthusiasm of those who participated in this research suggests that there are gains being made, but they rely on champions, and not all schools, or school board/districts/divisions have one. Ideological neoliberalism is present in these school food environments in part because of the requirement of a champion within the environment. Since, as discussed in Chapter 3, neoliberalism is about freeing individuals from government regulation (Harvey 2005), passing on the responsibility of regulating the school food environments to individuals at the jurisdictional level is a form of cultural neoliberalism. Individuals are held responsible for their actions, and success is praised as a reflection of their ability to channel their initiative and use their own resources (Harvey 2005), specifically to successfully change the school food environment. Failure to develop or implement a nutrition policy can by the same lens be viewed as a failure of the administrators and educators, although no participants shared anecdotes about the shortcomings of their efforts. Neoliberalism also appears generally in terms of the requests for community, non-government organizations or private business to help support these efforts. Nine of the eleven subnational jurisdictions appealed to the community to support the efforts of their regulations. It would be cynical to suggest this is entirely to remove the burden of making the social and cultural dietary changes from the government because additional support is helpful in changing the attitudes young people hold towards food if it is something that everyone supports. The inclusion of suggestions or requests to schools or school boards/districts/divisions to reach out to the wider community for support in the regulatory documents does imply that successful implementation requires the voluntary support of those outside of the jurisdiction of the regulations.

6.7. Limitation: The Incompatibility of Nutrition Regulation and Revenue Generation

“The free market’s going to kill us” (NFLD_20150706)

The content analysis revealed that the only commonality in the content of the documents across all eleven cases was reference to revenue generation. This commonality informs the state of public education in Canada, as well as reveals a severe limitation to achieving the nutritional, health, and educational aims of the regulations. This section will discuss the problematic nature of requiring schools to fundraise for a variety of costs that are not covered by their operating budgets as well as the contradiction in regulating nutritional standards of the internal school food environment and not the external school food environment.
The regulatory documents typically referred to revenue generation in terms of fundraising. Nova Scotia explicitly acknowledges the importance of fundraising campaigns to schools in the document in that it “contributes to educational programs and opportunities for students” (Nova Scotia 2006 Policy Directives: 2). While the other documents do not discuss why fundraising is necessary or important to schools, it is implicitly acknowledged when they express that any fundraising activities must comply with the nutrition policy or should uphold the messages students receive about nutrition in the classroom. When the topic arose in interviews, participants mentioned that additional equipment, such as playground equipment and computers are sometimes paid for through fundraising; field trips, speakers or special event days may also be funded through fundraising endeavours (ON_20150420). Fundraising generates additional revenue for schools to provide additional learning supports or to facilitate non-classroom learning opportunities, which are important to a school community but are often beyond what the operational budget of a school can afford.

Prior to the implementation of the school nutrition regulations, many of the fundraising efforts involved selling chocolates, cookie dough, baking kits, or similar products to people in the community; however each the regulatory nutrition documents have either explicitly required schools to discontinue these practices, or have required schools to participate in fundraising activities that are not-food based or that the products comply with the nutrition messaging taught in schools10. Some of the regulatory documents further made suggestions about what fundraising efforts would be compliant with the nutritional requirements. These include wrapping paper sales, cookbooks with healthy recipes, and soup kits, among many others.11 Several respondents mentioned that they have partnered with local farmers to sell fruits and vegetables as fundraisers (NFLD_20150706; ON_20150420) and others mentioned that they now do events like spell-a-thons, math-a-thons, dance-a-thons as fundraising events in place of food-oriented ones (AB_20150703; ON_21050420).

It is positive to see that the fundraising that occurs in schools is consistent with the messaging about nutrition students receive in school. Consistency is important to reinforce nutrition education and lead to changes in dietary choices (Fisher, Birch 1999). The regularity with which fundraising and revenue generation appeared in the nutrition regulations still indicates a problem that should be addressed. Chapter 3 discussed the concept of de-commodification of services in the

10 References can be found in at least one document of each of the eleven subnational jurisdictions included in this research.
11 See the documents of British Columbia, New Brunswick, and Ontario
context of welfare regimes. Social-democratic welfare regimes typically de-commodify services on the basis of citizenship, where liberal welfare regimes typically de-commodify services on the basis of need. For education, however, the countries being examined by Esping-Andersen (1990) all de-commodified education by making it public and available to all children in the country to some extent. What the need for fundraising indicates is education is not entirely de-commodified in Canada. In 2013, funds from private sources made up 5.44% of school board revenue across the country (Statistics Canada 2015). Provincial governments provide nearly 70% of funds to school boards, which is to be expected since education falls under the preview of the provinces (Statistics Canada 2015). The private sector, however, is providing more of school boards’ revenues than the Federal government, which provides only 0.57% (Statistics Canada 2015). There is opportunity for the state to contribute more so school boards/districts/divisions need not turn to the market to provide the necessary materials.

There are aspects of schooling that are not receiving government funding, in full or in part, which may point to needing to share costs with individual schools or school board/district/divisions. There is also more to be said about the costs incurred by individuals to send their children to public school; however it is beyond the scope of this dissertation. Regarding the events and equipment that schools fundraise for (which is to say they attempt to spread the expense across the community because the item being fundraised for is for the whole or a portion of the school rather than an individual student), fundraising indicates these items are important enough to target, but not for the subnational jurisdiction to fund. Thus there are aspects of public education in schools across Canada that are not de-commodified. Further, as people in the community are already supporting schools in purchasing equipment or funding special events, it is reasonable to assume that these communities could support institutionalized public funding to schools to support these efforts instead. Canada’s tendency towards neoliberal policy, which as discussed in this section as well as in Chapter 3 does apply in some respects to education (Harvey 2005), classifies it as a liberal welfare regime according to Esping-Andersen (1990). As such, the parts of education currently being fundraised for and the school day meal will likely continue to rely on the market for provision.

Returning to the discussion of de-commodification of education in the OECD, as discussed in the literature review and theory chapters (Chapter 2 and Chapter 3), they de-commodify education to varying degrees by funding it through taxes. Chapter 2 highlighted those countries that more fully de-commodify education, especially those that provide all expenses pertaining to education to all
students, including transportation, supplies, and a meal during the school day. The United Kingdom and the United States, once education became mandatory, in order to ensure parents would send their children to school and that they would not be disruptive during the school day, found ways to ensure that they would be fed (Gustafsson 2002; Vernon 2005; Poppendieck 2010). This began in the United States as an act of charity but eventually became the NSLP, which is institutionalized, government funded and government run to provide a meal at full or reduced cost to students who are unable to come to school with a lunch. The United Kingdom, while it has also offered a meal during the day for students whose families meet a means-test, has recently expanded the free option to all students until the age of seven (United Kingdom n.d. “Apply”). While not universal, the means-testing for students to receive a free or subsidized meal during the school day makes it less commodified than the meal for those who pay the full price.

As covered in Chapter 3, the agro-food complex includes the institutional subcomplex, referring to foods and beverages procured for locations where large numbers of people eat, including places of business, government offices, prisons, hospitals, and schools (Winson 1993). Procuring for public institutions like the latter four examples can be referred to as the public plate because procurement is subject to greater scrutiny and regulation to ensure fairness (Morgan, Sonnino 2008). Procuring for the public plate can also address additional objectives of the government, for instance achieving greater levels of environmental sustainability through the foods and beverages procured (Morgan, Sonnino 2008). For schools in many countries including Italy (Morgan, Sonnino 2008), the United States (Morgan, Sonnino 2008; Poppendieck 2010) and of course Canada, the public plate is being regulated to improve the quality of the foods and beverages procured, and in Canada the emphasis is on nutrition. Earlier in this chapter, the Request for Proposals from a New Brunswick school district was included because the district used feedback from the community to know what could be asked for from food service providers so compliance with Policy 711 is the minimum requirement; however they used the period of bidding for the contract to see who can provide more fresh, local, and/or organic products (NB_20150619). The Request for Proposals as a process is an example of procuring for the public plate and of how additional goals of the government can be moved forward through the bureaucracy of public procurement.

To ensure that no single food service provider receives preferential treatment, and to ensure that public funds are spent properly, procurement for the public plate in democracies typically includes protocols and processes that must be followed (Morgan, Sonnino 2008). The protocols for procuring for the public that have been described as byzantine (Morgan, Sonnino 2008) but their
objectives are, in part, to make sure that public funds are not misused. In New Brunswick\textsuperscript{12}, there is a protocol that must be followed for signing contracts with food service providers built into the nutrition policy, with reference to another provincial policy (Policy 315, *School Community Partnerships and Sponsorships*) (New Brunswick, 2008). The section of Policy 711 that addresses food services includes points such as “no food provider shall receive exclusive access to any school district indefinitely” and “competitors will not be excluded at the request of a food provider” (New Brunswick, 2008: 3). Anytime a contract between a school district and a food service provider expires, renewal is not guaranteed and must be opened to other service providers to bid on. The bids must be evaluated on “in large part, on their provision of nutritious menu options” (New Brunswick 2008: 3), implying that past economic performance or personal relationships with a particular provider may not guarantee a renewal of a contract and instead, what is in the best interest of the students will be given priority (in this case, nutrition).

Protocols for procuring for the public plate, as New Brunswick outlined, offer the most desirable aspects of neoliberalism. Primarily, they ensure competition so no single supplier can become complacent and not offer what the school board/district/division wants. For schools, adding provisions for nutritional requirements of foods and beverages to food service contracts means it is the food service providers who are competing with each other to offer nutritious offerings at the best price, or with the best returns for the schools. The inconsistency between neoliberalism and regulation re-emerges in the issue of the public plate. Some school boards/districts/divisions have found food service providers willing and able to provide them with food and beverage options that fit the nutrition requirements outlined by the relevant regulatory document, while others have expressed difficulty receiving the same level of compliance at an affordable price (AB\_20150625; ON\_20150413). Federalism allowed each of the subnational jurisdictions to produce its own school nutrition regulations.\textsuperscript{13} For the provinces with a policy for the whole subnational jurisdiction, there is one set of standards - a single formula for the whole province. For those jurisdictions that have guidelines for policy creation, the nutrition standards can vary within the jurisdiction. For food service providers, the variety of nutrition standards requires a number of formulations of their products to fit those standards (AB\_20150625). Food service providers do not have to bid on contracts if it is not economical for them to do so, which is the case when mul-

\textsuperscript{12} This is not meant to suggest that other subnational jurisdictions do not have protocols for procurement. New Brunswick included policies about procurement in the nutrition policy where others did not

\textsuperscript{13} See the *Provincial, Territorial Guidance Document for the development of Nutrient Criteria for Foods and Beverages in Schools* 2013, Appendix B to see a comparison of the nutrient recommendations in each of the subnational jurisdictional documents
multiple versions of the same product need to be produced. The *Provincial, Territorial Guidance Document for the development of Nutrient Criteria for Foods and Beverages in Schools* in 2013 was created in an effort to harmonize nutrition guidelines so food service providers, especially those that operate on a national level, can comply with them (FPTGN 2013). The harmonization has not taken place. Only the public plate can be regulated, in other words, the foods and beverages sold in schools can be regulated. The food service providers are not required to supply schools, which has resulted in some schools losing their food and beverage vending, or schools being reluctant to implement nutrition requirements if they are not required to do so (AB_20150625; ON_20150526). In both cases, students lose the exposure to the healthful foods and beverages the subnational regulations are meant to provide access to. While the additional regulation of the public plate, beyond the considerations for responsible public expenditures, can be beneficial, the outcomes of the additional regulations must reach the public to be useful.

In most Canadian schools, students and their families are fully responsible for the provision of the school-day meal. It is either brought from home, or students are sent to school with money to purchase a meal if facilities exist. The nutritional regulations examined for this research pertain to the latter. The policies from British Columbia, Nova Scotia, Ontario, and PEI explicitly mention that they are not to be applied to lunches brought from home. This project did not study what students are bringing for lunch from home; however, from existing literature (Poppendieck 2010; Winson 2013) it is reasonable to suggest that the nutritional content of lunches brought from home varies significantly, with some being nutritionally balanced, and others consisting of the same or similar products that are no longer allowed for sale in the school food environment.

The regulations do apply to those foods and beverages sold on school property. In other sections of this chapter, and in the previous chapter (Chapter 5), information from those who participated in interviews explained that within their subnational jurisdiction or school board/district/division, there are schools without food and beverage facilities of any kind, or they are limited to vending machines, or ordering from restaurants to be brought into the school occasionally. Other schools have more complete facilities like cafeterias or canteens, typically in middle or secondary schools. Nutrition regulations do apply to them, but since schools are not obligated to provide food and beverage vending facilities, they must be cost-effective to remain. For some schools, the facilities are run entirely by the school or school board/district/division in that they hire their own food service staff, purchase food and supplies, and prepare on site. In these cases, the foods and beverages only need to meet costs and additional money can be put back into the school. For oth-
ers, food services are contracted out to catering companies like Aramark and Chartwells, both of which are publicly traded and thus need to make a profit for their respective shareholders. To remain in schools, catering companies like Aramark and Chartwells have modified their menus to meet the needs of the schools and the nutrition regulations. Some school boards, like one in New Brunswick, have been able to use the opportunity of changing the menu to also ask for more local products to be included and to find ways to incorporate the school food environment in more learning opportunities (NB_20150619). The caterers are happy to oblige as long as they can both make their costs and their profits. It should be noted however, that in some cases, these larger food companies offer a form of profit sharing with the school so they may benefit from the sales as well.

If however, students decide that, regardless of who is making the food, they do not want to eat the healthier menu items, they do not have to. They can “vote with their feet” (BC_20150911) and purchase foods and beverages from the external school food environment or bring food from home, which as discussed before, are not subject to the nutrition regulations. Chapter 3 included discussion about how to define the school food environment to account for the spaces off of school property that sell food and beverages and are accessible to students during the school day, the external school food environment. Many participants found implementing the school nutrition regulations difficult due to competition from the external food environment:

The second school, they had, there was more difficulty with them because they were finding the need to provide unhealthy choices more because they were in close proximity to some of the convenience stores and so the kids would go to the convenience store and then come back and sit in the cafeteria with the unhealthy food (AB_20150703).

The participant from British Columbia mentioned a golf course that is accessible to middle school students and a “mini mart” that is accessible to a high school in her district (BC_20150911). One of the Saskatchewan participants named A&W, McDonalds, and a Ruckers being accessible to the students in her high school (SK_20150625). This gives these students access to the restaurants and convenience stores that are not regulated by the subnational jurisdictional regulations and continue to sell the pseudo foods that had previously been sold throughout the internal school food environment. As a consequence of decreased sales, some schools have experienced a loss in their revenue. As the internal food services are no longer generating the same amount of income, those that have agreements with food service providers are not receiving the same amount of rev-
enue from those agreements, and in several cases, reducing the services or closing the facility (BC_20150911, ON_20150413, ON_20150526 NB_20150619).

If the internal school food facilities close because they are not economically viable, students lose the availability of healthful options while maintaining access to the less healthful options from the external school food environment because these options are not subject to the regulations. There was one participant who shared that his school board was working with the local health unit to encourage local business to also support the nutrition policy (ON_20150413). Businesses are under no obligation to support such an initiative, nor are they likely to find themselves being regulated in such a way because they are within close proximity to a school. The cafeteria manager who informed this research of the Safe School Zone in his school board is skeptical of the effectiveness of such an initiative because he “would assume that this man, who’s, in the business of being profitable would not want to lose those things in his store or on his menu that brings in the kids” (ON_20150413). While public health units may reach out to businesses near schools, because Canada as a country has embraced neoliberalism, laws will continue to protect the rights of the businesses in the school food environment to sell what the market asks for, regardless of the consequences to the students (Harvey 2005). While the sale of lottery, tobacco, and alcohol are age regulated, it is unlikely that restrictions will be extended to pseudo food and beverage products. As a result, the internal school food environment’s attempts to provide healthier offerings are undermined, and the maintenance of an internal school food environment is jeopardized, leaving students with only the external, unregulated school food environment to purchase from. This suggests that in order to improve the nutritional quality of the foods and beverages offered and consumed by students during the school day, which contributes to their achievement as learners, the external school food environment be recognized as part of the school food environment, as discussed in Chapter 3, and be regulated in the same way, or schools no longer allow students off of school property during the school day. Both of these would be logistically challenging: in the first case passing a regulation of private businesses or certain goods is highly unlikely, and the second case would be difficult to enforce.
6.8. Limitations

This research, with eleven cases, has a relatively high number of cases compared to other studies that use this approach. While having eleven cases is appropriate for answering the research questions, two separate but related problems emerge. First, the case-oriented comparative approach works best when there are a small number of detailed cases because as the number of cases increases, the number of causal conditions increases and “the number of possible comparisons increases geometrically” (Ragin 1989: 50). Having many qualitative cases increases the amount of data to be compared, which also makes it challenging to identify conditions that contribute to a meaningful explanation. The additional information from interviews and supplemental documents helped direct the analysis, which minimized the number of comparisons that needed to be made to address this research question, although additional comparisons may provide important information for further research on this subject.

A limitation to the scope of this research is this study only looks at public school environments. This meant excluding separate school boards since not every subnational jurisdiction publically funds them. For example, Catholic schools and school boards/districts/divisions were excluded because they do not exist in each province and territory. This is a potential area of inquiry for future research. In the same vein, due to the linguistic limitations of the researcher, only English-speaking Canada was included in both the content analysis and the interviews. As an unfortunate consequence, French-language documents were excluded and the experiences of francophone schools are largely absent, except where noted in the analysis. The small amount of data collected about francophone schools is not enough to generalize from. This absence is especially notable in New Brunswick as nearly half of students in the province attend schools in francophone school districts or attend French immersion (Government of New Brunswick 2013). It is also notable in Quebec, which has English-language documents, but few English-language school boards to contact, which limited the population and opportunities to find participants. Future research in this area could look exclusively at these school food environments, compare anglophone and francophone Canadian school food environments, or include them as part of building towards pan-Canadian data on school nutrition regulation.

There are several limitations to the content analysis conducted for this research. To begin, multiple coders often perform content analysis with one coding system in an effort to ensure reliability. In other words, the coding system is consistent and would produce the same results if another re-
searcher were to repeat the study (Neuendorf 2002). For this research, only one coder was used. That being said, not having multiple coders reduced the risk of validity being compromised because multiple coders could interpret the system differently (Neuendorf 2002). Since this research is interested in manifest content and school board/district/division administration, principals, and cafeteria managers, the manifest content is meant to be easily understood by those responsible for their implementation, which reduces the ambiguity in the content of the documents and subsequently reduces the risk of miscoding a unit. The review of codes and additional round of coding also helped to improve the reliability and validity of the coding process.

Because the regulatory documents are different with regards to writing style and length, the comparative analysis is limited to descriptive statistics like the presence and absence of themes in the documents. Analytical statistics would not be significant even though the procedures used for this research were as rigorous as they would be for any content analysis. While being able to include analytical statistics would be beneficial to the overall analysis of the comparison, it is not necessary to do so as this research is primarily qualitative in nature.

There are gaps in the interviews conducted. While there was no need to create a sample of cases, as the researcher was able to get data for each of the ten provinces and Yukon Territory, lack of time, financial resources, and general access to key informants restricted the number of interviews conducted in each subnational jurisdiction. The researcher wished to speak not only with someone from each subnational jurisdiction who could inform about the regulation development and/or implementation but also with those who work in other capacities in the school food environment to obtain a variety of experiences in the internal school food environment. This would have provided more information about differences in implementation and school food environments generally. Unfortunately, this was not possible. In addition to an interview conducted with two people in British Columbia who withdrew their participation, no one from Quebec, Nova Scotia, or Prince Edward Island agreed to participate in this research. In the case of Quebec, as mentioned above, the linguistic barrier reduced the number of potential people to speak with. Yukon Territory has participants only from the territorial level; however it does not have school boards, divisions or districts. Newfoundland and Manitoba have participation only from the provincial level, and Ontario and Saskatchewan only have participation at the school board/division level. For subnational jurisdictions with school board/district/division level policies, where it was intended to include more than one board/district/division, the researcher was unable to find someone from a second board/district/division in Alberta and Saskatchewan. Manitoba has conducted
research internally on the division-level policies, which compensates for the absence of division level interviews. The results of the research conducted within Manitoba were used in the case study. Multiple requests for an interview were not responded to at the school board level in Newfoundland and Labrador and Prince Edward Island, each only having one English-Language school board.

Those who did participate in interviews contributed significantly to the contextual knowledge necessary to build subnational jurisdiction-level cases about the school food regulations and their implementation. As mentioned before, however, the experiences of those from school board/district/division level cannot necessarily be generalized to the whole of the province or territory. Some participants who work at the department level for a subnational jurisdiction provided information about the differences between school boards/districts/divisions, but informants who work with local health units or in schools are unable to speak with much accuracy about experiences outside of their own area of experience and knowledge.

With the limitations acknowledged, the results and analysis can be properly understood. The content analysis of the current school nutrition regulatory documents for the ten provinces and Yukon Territory along with semi-structured interviews with key informants and supplemental materials provided rich contextual data which was organized into cases to be compared. From this, the differences between the subnational jurisdiction have been identified as well as some shared characteristics that contribute to understanding Canada’s absence of a school meal program. Many of the limitations of this research provide opportunities for future inquiry.

6.9. Summary

The following research questions have guided this research. Why are the subnational jurisdictional regulations for food and beverage sales in schools different? What are the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property? What are the objectives of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property? What are the limitations to achieving the objectives within the scope of the relevant documents?

This chapter and the previous chapter (Chapter 5) presented evidence to suggest that the subnational jurisdictional regulations for food and beverage sales in schools are different because each subnational jurisdiction addressed its unique needs and circumstances pertaining to school food
and beverage regulations, especially in the cases that chose to create guidelines for school boards/districts/divisions to create their own policies.

There are many differences in the content of the school nutrition regulations. Some of those pertain to how Comprehensive School Health principles were applied to the regulations. Other differences reflect the capacity of the subnational jurisdiction to address the nutrition of the foods and beverages allowable for sale in schools as those with more resources to regulate such matters are able to develop regulations that address concerns in more depth than those with fewer resources for this matter.

There are four key objectives of the subnational jurisdictional school nutrition regulations: Addressing Childhood Overweight and Obesity, the link between Health and Ability to Learn, Hunger, and the link between Nutrition and Health. The one objective of the school nutrition regulations that is consistent between the eleven subnational jurisdictions is the link between Nutrition and Health. Interview participants spoke about increasing access to healthy foods as a goal of regulating the internal school food environment.

There are numerous barriers to successfully implementing the regulations that were addressed throughout this and the previous chapter (Chapter 5). One of the key barriers to preventing the regulations from addressing nutrition and health is the options for students to eat that are beyond the scope of the regulations: food from home and the external school food environment, both of which provide ample opportunities for students to continue to consume foods and beverages that are not healthful. If the reason for regulating the school food environment is to address the link between nutrition and health, then it is necessary to ensure students are consuming healthful foods and beverages.

Overall, respondents spoke of the positive changes in the quality of foods and beverages available to students in schools. The subnational jurisdictional regulations, or the school boards/districts/divisions policies that are implementing school nutrition regulations have addressed the mixed messages students had previously been receiving about health and nutrition in the classroom with what was available for sale to them. With the implementation of nutrition regulations, students receive health and wellness education, and they are supported by having a school food environment that does not sell pop, potato chips, candy, chocolate bars, French fries, and other items that were previously staples of cafeterias, canteens and vending machines. Even if nutrition and health education are not priorities for the curriculum, the school food environments
across the country have reduced the number of food and beverage offerings that are not supportive of the health and wellbeing of students.

Also, there is a wide variety of people engaged in the efforts to improve the health of the school food environments across the country. Superintendents, district principals, dietitians, public servants, community members, cafeteria managers, and teachers cover the variety of people who participated in this research, but not the parents, the corporate partners, and the food service providers who are committed to improving the nutrition and wellbeing of young people across Canada. In addition to role modeling healthy behaviours, there are people who are changing menus, connecting with community members for additional support or supplies, fundraising and asking for donations - all ways the school food environment is supported by the larger community.

It is difficult for school administrators to know for sure what the impacts of the regulatory documents have been on the lives of the students. Most students eat only one meal at school during the school day, and typically Canadian students bring a lunch from home (Harper, Wood, Mitchell 2008). For those who do purchase their lunches, schools are not keeping health metrics on their students and it is additionally challenging to account for what students eat when they are at school. Minimizing exposure to pseudo food products and having teachers and food service staff to support healthier choices are constructive measures.

As this chapter has shown, there are limitations to what can be achieved by these regulations even in the most supportive environments. The changes to the foods and beverages served are often met with resistance from students many of whom prefer the less healthful products that were previously allowed. Sometimes, nutrition regulations inadvertently exclude culturally appropriate foods or permitting nutritionally inappropriate foods. For rural or remote communities, accessing foods and beverages that comply with the nutrition regulations is more challenging than for their urban counterparts. Elsewhere, successful implementation requires staff to role model and champion healthful eating choices to mitigate the resistance from students who otherwise feel that their food choices are being policed.

Where students continue to resist the changed school food environment, it is the school that faces the immediate consequences. Older students, especially at the secondary school level, can access foods and beverages off school property that are not subject to nutrition regulation. In addition to lost revenue for the schools when students discontinue purchasing food and beverages from schools, in some cases this results in the loss of the facilities. Since they are privately run and
schools are not obligated to provide facilities, and if vendors leave or it is no longer financially viable for a school to run a cafeteria or canteen, there are no options for food and beverages at all for students on school property, regardless of their nutritional value. The unregulated external school food environment, however, is available to students.

Since many of these nutrition programs facilitated through nongovernmental organizations are universally available and do not require students to pay anything to participate, students are much less likely to resist the nutritious offerings than when they are available for sale. While the objective of these programs is to target students in need, to reduce stigma they are available to anyone who is interested, and many do partake, increasing the number of servings they get from the four food groups rather than foods of little or no nutritional value. These programs also add to the food literacy of students, which increase the students’ familiarity with and taste for foods and beverages that they do not have at home. Additional benefits of programs like these, for those coming from food-insecure homes, improving attendance at school, as students begin coming more regularly in order to eat. Nutritious foods and beverages are not only more palatable when students do not have to pay for them, but they bring students into schools.

In some areas of the country, the number of students coming from food-insecure homes is so large, subnational jurisdictional governments have provided funds to facilitate universal lunch programs. While there are not many programs like these in Canada, they do exist and offer to those students all of the benefits of nutrition programs run elsewhere through nonprofit organizations without the need to continuously search for funding. Like students in other parts of the country participating in nutrition programs, they are receiving the health benefits of a nutritious meal, which contributes to their ability to learn. These two outcomes are what each of the subnational jurisdictional school nutrition regulations mention in some capacity. It is reasonable to suggest that, with the growing number of nutrition programs in Canada, as well as the institutionalized support from subnational jurisdictional governments, there is not only a need for, but also public support for, a publically funded, universal program in Canada, like those in other OECD countries. While there are some who would rather target those students who are in need, for those who work in the school food environment, it is clear that universality of such a program would be necessary to be successful to address the nutrition, and health of students and to facilitate their learning.
It is to the benefit of Canada to have a universal, voluntary lunch program. Making the public plate of public schools universally available would address the link between nutrition, health, and academic performance concerns expressed in the school nutrition regulatory documents, while also providing support for those experiencing food insecurity. Making it voluntary allows parents and guardians to maintain the responsibility of providing food and beverages for their children if they choose to do so. It is not just this research that supports such a program. A program has been proposed and is being advocated for by Food Secure Canada (FSC), a “pan-Canadian alliance of organizations and individuals working together to advance food security and food sovereignty through three interlocking goals: zero hunger, healthy and safe food, and sustainable food systems” (Food Secure Canada “Who We Are”). Within FSC is the Coalition for Healthy School Food, which includes Dietitians of Canada, Breakfast Clubs of Canada, CHEP, Child Nutrition Manitoba, Le Réseau des Cafétérias Communautaires among many others. This coalition is advocating for a universal, healthy school lunch program at the federal level. The coalition’s proposal, For a Universal Health School Food Program, asks the federal government for $1 billion dollars over 5 years for a cost-shared universal school food program in Canada, which would put the country on par with other high-income countries in terms of school food provision (The Coalition for Healthy School Food 2015: 1).

The arguments the coalition make for such a program include the link between having enough nutritious food and better behaviour and performance in school, and the contribution of healthy eating habits to long-term health and chronic disease prevention, which are also mentioned in the subnational jurisdictional regulatory documents (The Coalition for Healthy School Food 2015). Other arguments in favour of a universal nutritious school lunch program from the coalition include addressing poor eating habits, as students who participate in nutrition programs eat more vegetables and fruit and fewer trans fats daily than those who do not, improving attendance and secondary school graduation rates, and addressing food insecurity (The Coalition for Healthy School Food 2015:). The proposal also includes economic arguments in favour of a universal healthy school meal program to justify the expenditure. Using the links between food security and secondary school graduation rates, the document argues funding a universal lunch program would improve secondary school graduation rates and, in turn, those individuals and Canada as a whole reap the benefits of having a higher proportion of the population be secondary school graduates. More graduates mean fewer people are liable to encounter the justice system or rely on social assistance programs, as well as have more earning power than if they did not graduate secondary school (The Coalition for Healthy School Food 2015: 3). Also, a universal school food program
in Canada has the potential to “create thousands of new jobs in communities across Canada” (The Coalition for Healthy School Food 2015: 3).

A universal voluntary school lunch program, such as the one proposed by the Coalition for Healthy School Food, would address the concerns that regulating the nutrition of the food and beverages available for sale in school do not. Such a school lunch program would increase consumption of nutritious foods because students would be offered these foods at no cost and would not have to rely on students to choose the more nutritious choice. Even if students still prefer less nutritious foods and beverages instead of more healthful ones, when offered for free students will eat the healthier option (Henry, et al. 2015). A universal meal program would not only increase access to healthy food, but also encourage the consumption of it, contributing to the development of healthier eating habits, and by extension prevention of diet-related diseases. A lunch plan would also alleviate parents and caregivers of the task of purchasing and preparing lunches if the students choose to participate. By having participation be voluntary, it would allow the plan to be palatable to parents and guardians who may want to retain control of the content of the lunches, and/or accommodate picky eaters while still allowing those who want or need the plan to have it.
Chapter 7
Conclusions

The research for this dissertation set out to answer these questions:

1. Why are the subnational jurisdicalional regulations for food and beverage sales in schools different?
2. What are the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?
3. What are the objectives of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?
4. What are the limitations to achieving the objectives within the scope of the relevant documents?

Following the analysis of the regulatory documents, in addition to the data provided by interview participants and supplemental materials, these questions can begin to be answered.

7.1. Why are the subnational jurisdictional regulations for food and beverage sales in schools different?

Explaining the reasoning for the differences in approaches to and content of school nutrition regulations begins with federalism. Federalism provides a simplified answer to why this is; in other words, since each jurisdiction is responsible for creating its own regulations relating to education and health care, each does so differently. The resulting regulatory documents reflect which departments were involved in the regulation development process as well as the needs of the jurisdiction. In some subnational jurisdictions, the initiative to create regulations came from within the government, while in others it came from the community. It is the details of each jurisdictional approach that provide additional understanding of what the differences mean.
7.2. What are the differences in the content of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?

There are many differences among the subnational jurisdictional approaches to regulating the internal school food environments in Canada, including what is allowable for sale to students. Key differences in the content of each of the regulatory documents includes the objective(s) of the regulations, with some acknowledging that a healthy school food environment can help address childhood overweight and obesity and/or hunger, while others strictly address the link between nutrition and health. Regulations also differed in their approach. Some subnational jurisdiction issued policies, meaning all schools in the subnational jurisdiction are required to uphold the regulations. Other subnational jurisdictions issued guidelines, and school boards/districts/divisions can create their own nutrition policy from the guidelines.

With regards to content, some regulations addressed the physical environment of the school itself, included policy or suggestions for increasing physical activity, and creating a pleasant dining environment for students, while others addressed only nutrition. These differences reflect the regulators inclusion of the principles of Comprehensive School Health (Veugeulers, Schwartz 2010).

Harmonization of school nutrition regulation has been discussed. The desire to harmonize nutrition regulations culminated in the creation of the Provincial and Territorial Guidance Document for the development of Nutrition Criteria for Foods and Beverages in Schools (FTPGN 2013). It is unlikely that all provinces and territories will adopt the nutrition criteria provided in this document. Some subnational jurisdictions have refrained from providing nutrient-criteria in their regulatory documents entirely.

7.3. What are the objectives of the subnational jurisdictional documents regulating the foods and beverages allowable for sale on school property?

All of the subnational jurisdictions agree on some components of school food environment nutrition guidance. For instance, the use of Eating Well with Canada’s Food Guide (Health Canada 2007a) and discouraging the sale of certain foods, including deep-fried foods, and high-calorie, low nutrient snack foods that are not conducive to the health and wellbeing of school-aged children. Each of the subnational jurisdictions have at least one regulatory document that acknowledges the link between nutrition and health and most subnational jurisdictions further recognize
that being healthy makes it easier for students to learn. Some also recognize that childhood over-
weight and obesity and hunger are issues in their schools and have provisions in their regulations
for what teachers and staff can do to address these concerns. Some interview participants dis-
cussed improving access to healthful foods and beverages as an objective of the regulatory docu-
ments. The subnational jurisdictions take different approaches to incorporating pieces of nutrition
guidance into their regulations to achieve these objectives.

7.4. What are the limitations to achieving the objectives within the scope of the
relevant documents?

Each of the subnational jurisdictions of Canada recognizes the importance of nutrition in the
health and wellbeing of children in their regulatory documents. Each also recognizes foods and
beverages are popular choices for fundraising events for the school, and also recognize that food
and beverages sold at school must at least recover their costs if not generate revenue for the
school. Nutrition promotion and revenue generation are not necessarily compatible but negotiat-
ing these two aspects of the school food environment is the reality for Canadian schools and can
impede the efforts to improve the health of the school food environment.

There are many barriers to successfully implementing the regulations that were addressed
throughout this and the previous chapter (Chapter 6). One of the key barriers to prevent-
ing the regulations from addressing nutrition and health is the options for students to eat that are
beyond the scope of the regulations: food from home and the external school food environment,
both of which provide ample opportunities for students to continue to consume foods and bever-
ages that are not healthful. If the reason for regulating the school food environment is to address
the link between nutrition and health, then it is necessary to ensure students are consuming
healthful foods and beverages.

7.5. Implications for Theory and Practice

The liberal welfare regime, which characterizes social service provision in the United States, and
Canada, provides a framework to understand why nutrition regulation and revenue generation are
incompatible. The liberal welfare regime assumes the market is “emancipatory, the best possible
shell for self-reliance and industriousness…poverty or helplessness is in principle not unlikely to
occur. Yet this is not the fault of the system, but solely a consequence of the individual’s lack of
foresight and thrift” (Esping-Andersen 1990: 42). The neoliberal ideals contained in this assump-
tion when applied to school food provision puts the onus of healthy eating on individuals, irrespective of restrictive financial resources and food illiteracy that can make healthful eating more challenging for some. The liberal welfare regime also suggests that the market-based provision for food and beverages at school should not be regulated. This means that demand should determine supply, as it has, because popular but less nutritious food items continue to be sold in the internal school food environment when nutrition guidance suggests that they should be restricted. In the case of school food in Canada which is market-based, young people are expected to make choices about which foods and beverages to purchase. In the context of the school nutrition regulations, these young people are expected to choose more healthful food and beverage choices over less healthful food and beverage choices.

Cuts to public school funding, or sustained levels of funding while expenses increase require school administrators to find alternative sources of revenue, including fundraising events, operating businesses in the internal school food environment, or receiving a portion of the revenue generated from private business operating on school property. These enterprises include cafeterias and canteens. Regulating the nutritional content of the food and beverages sold in these spaces interferes with the neoliberal assumptions that define the liberal welfare regime. Since the market provides Canadian lunch programs, state nutrition regulations interfere with the ability of the private caterers to provide this service and to remain financially viable. If students choose not to purchase the food and beverages that meet the nutrition standards, the business folds and the school board/district/division loses the revenue. This is especially problematic for vendors in the internal school food environment that must compete with vendors in the unregulated external school food environment. Vendors in the external school food environment continue to provide students with the products that are not suitable for sale in the internal school food environment, making it more difficult for the internal school food environment to attract students to healthier offerings. Students are expected to choose the healthful foods and beverages offered in the internal school food environment over the less healthful options still accessible in the external food environment. When the internal school food vendors are not financially viable because they are no longer allowed to sell the unhealthful food and beverages, they close, leaving only the external school food vendors and their typically less nutritious fare. Internal school food vendors fail not as a consequence of their own choices, but because they are regulated in a wider, unregulated market.
Caveats in the school nutrition regulations allow for school administrators to include less nutritious, but popular offerings in the internal school food environment. While using the public plate as an opportunity to make foods and beverages in schools healthier, having a public plate compete with an unregulated market puts the public plate at a disadvantage. To be competitive with the many options available to students in the external school food environment, schools are given special occasion days and 50/50 or 80/20 rules permitting the sale of foods and beverages that are otherwise restricted. These rules allow moderately or minimally nutritious foods and beverages to be sold on school property as long as they are sold with foods and beverages considered most appropriate for sale. Because these moderately and minimally nutritious items sell, and the revenue is important to the schools, it is difficult to make the internal school food environment a health promoting one without losing it altogether to free market forces. A liberal welfare regime tends to rely on the market to provide services, but regulating a portion of the market limits its ability to compete. This, combined with limited state support for social services like public education, makes regulating the school food environment for nutritional quality challenging.

Further, many interview participants expressed frustration with the external school food environment because it undermines the efforts to encourage students to make healthful choices while at school. The pervasiveness of the industrial diet in North America is difficult to combat in the regulated internal school food environment. It is especially frustrating for educators and health professionals working within schools when they know that many students are eating high-calorie, low-nutrient foods at home.

It is characteristic of a country with a liberal welfare regime, like Canada, to rely on the market to provide a school-day meal to students. Welfare regimes are characterized, in part, by how social services are provided to citizens and how citizens qualify for those services (Esping-Andersen 1990). For the latter in a liberal welfare regime, the state provides the service to those who meet a means test with the understanding the market failed to provide it for them (Esping-Andersen 1990). As applied to school lunches, the United States and the United Kingdom have programs that fit the principles of a liberal welfare regime. Students from low-income families are eligible for a free or reduced-price lunch while at school. Canada, while also having a liberal welfare regime, does not provide such a program for school meals. None of the provinces or territories have institutionalized school meal programs, though there are a few individual schools or school boards/districts/divisions that receive subnational jurisdictional funding to provide snack or meal programming where need is pervasive. In most cases across the country, if the markets have
failed to provide students with a lunch because the student or the family is unable to afford it, the student does not eat. Where available, charitable options can address this need, but otherwise those students do not have a program to take advantage of.

Other welfare regimes address meals during the school day differently than liberal welfare regimes. Instead of requiring the market to provide lunches and snacks, in social-democratic regimes, as found in Sweden and Finland, the state provide these to students on the basis of their citizenship (Esping-Andersen 1990), as education is guaranteed to all citizens and food, along with supplies and transportation and other associated costs of the education, are covered to ensure it is accessible to all. In conservative welfare regimes, as found in Italy and Spain, the family is principally responsible for the provision of social services. Where the family cannot provide such services, as when children are at school, the state acts as the family, which is why school meals more closely resemble what students eat at home, which is especially important when the midday meal is the largest of the day.

In the absence of a national lunch program, foods and beverages in the school food environment are sold to students or provided on a charitable basis. Charitable organizations have had a significant impact on Canadian school food environments. Across the country, these charities are running nutrition programs addressing the nutritional needs of students where the market has failed as well as increasing access to all students who wish to participate. These organizations are addressing food insecurity as experienced by students at school, which is a continuation of food insecurity experienced by the families they are coming from. Because food insecurity is the lack of access to nutritious food, areas where fresh foods are more expensive and in short supply for families are also expensive and in short supply for charitable organizations. The organizations meant to address this problem are not always able to, compounding the hunger, malnutrition and associated problems for those who experience it in the home.

Being situated in a rural community typically does not increase food insecurity in the home, but participants with such experience expressed that rurality and remoteness can contribute to problems accessing fresh, affordable foods that meet the nutrition requirements of the regulations. Unfortunately, the regulations themselves do not address procurement issues that these communities may experience as a consequence of fresh produce needing to travel long distances to arrive to the internal school food environment. Like food insecurity, food deserts impact institutional food en-
environments as well, which hinders the effectiveness of the nutrition regulations put forth by the subnational jurisdictions.

The efforts to improve the nutritional quality of foods and beverages through regulatory levers have, overall, been successful in reducing access to less healthful products. In some cases, the regulations have even improved access to healthful food and beverages in the internal school food environment. Access to nutritious foods, however, is only part of the equation for creating a strategy for addressing the nutrition-health-academic performance issue mentioned in the regulatory documents. Students still need to choose these foods and pay for them. This is particularly challenging when the external school food environment (spaces students have access to during the school day off of school property that sell foods and beverages) remain unregulated. While documents and interviews suggest the internal school food environment supports healthy choices, it is difficult to compete with the products that students prefer when they are available nearby. When the internal school food environment is unable to remain financially viable and closes because it cannot compete with the unregulated external food environment, then the regulations are not increasing access to nutritious foods and beverages. The regulations also do not address food and beverages brought from home, or those students who do not have anything to bring for lunch or can afford to purchase food during the school day. When foods and beverages are available to students in the internal school food environment they are more nutritious because of the regulations, but it does not mean students have access to them.

Teachers and staff are enforcing these regulations and have been asked to encourage and role model healthy eating habits to support students in making the same choices. There are resources to assist in this and those who participated in this research indicated willingness to role model healthy behaviours to the best of their abilities. It does mean that educators and administrators, in addition to the other responsibilities of their jobs, are enforcing the nutrition regulations for the school food environment as well as themselves to the best of their abilities. This has, unfortunately, meant lapses in enforcement and inappropriate foods and beverages remain available to students and healthy behaviours are not always modeled for them.

For the reasons given throughout this dissertation, the regulation of the internal school food environment in Canada is not conducive to improving access to healthful foods or addressing the link between nutrition and health. The liberal welfare regime, and neoliberal ideologies that underlie the liberal welfare regime require that individual responsibility and choice be prioritized over
other philosophies, like egalitarianism. Neoliberalism also requires government not intervene in the interests of businesses. This hinders the ability of subnational jurisdictional regulations addressing the nutritional quality of foods and beverages available to students on school property to effectively achieve their intended outcomes. The school meal programs in other countries, especially those that are universal, can have a more significant impact on the nutritional intake of students because a meal is provided to students, counteracting the influences of pseudo food products from the external school food environment and the home. To more effectively address the nutrition, health, and educational performance concerns that subnational jurisdictions mention in their regulatory documents, a school meal program is necessary in Canadian provinces and territories.

Such government-funded meal programs exist in certain boards/districts/divisions across the country, which, along with the charitable nutrition programs address the nutrition and health concerns of especially vulnerable populations. The few government-run programs are financed by taxes, while the charitable organizations rely on government grants and donations. Support exists for these programs and institutionalizing the funding would be a logical step to achieving the objectives of the nutrition regulations. Due to the underfunding of public education requiring students to engage in fundraising activities, it is unlikely this will happen unless there is a fundamental shift in the approach to welfare provision in Canada and its subnational jurisdictions.

This dissertation opened with quotations from *The Physiology of Taste* (Brillat-Savarin 1825) to highlight the personal and political importance of learning what and how people eat. Using the information from this dissertation to show Canada has opportunities to improve access to healthy foods, there are opportunities to improve the destiny of the nation. To do this, interventions need to get beyond the regulation of nutrition of foods and beverages allowable for sale on school property. In the same list of aphorisms, Brillat-Savarin wrote: “The pleasure of the table belongs to all ages, to all conditions, to all countries” (1825: 6 if 318). Given the importance of food and education to the success and wellbeing of citizens and the country as a whole, ensuring the pleasure of the table is accessible to all Canadians, at least through a school-day meal is crucial.
REFERENCES


Brillat-Savarin, Jean Anthelme. 1825 The Physiology of Taste or Transcendental Gastronomy. Translated by Fayette Robinson. Paris. pp. 318


British Columbia. 2013. Guidelines for Food and Beverage Sales in BC Schools.


Coalition for Healthy School Food. 2015. For a Universal Healthy School Food Program. Food Secure Canada.


Prince Edward Island Eastern School District. 2011. *Administrative Regulation: School Nutrition (For all Grade Levels K-12)*.


Appendix A

Summary of the Documents Used For the Content Analysis

Appendix Table A.1: Table summary of the documents used for the content analysis

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<th>Region</th>
<th>Administrative Body</th>
<th>Document Title</th>
<th>Year Published</th>
<th># of pages</th>
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<td>British Columbia</td>
<td>Healthy Families BC (Division of Ministry of Health) in conjunction with Ministry of Education</td>
<td>Guidelines for Food and Beverages in BC Schools</td>
<td>2013</td>
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<td>Healthy Child Manitoba</td>
<td>Moving Forward with School Nutrition Guidelines</td>
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<td>New Brunswick</td>
<td>Department of Education</td>
<td>Policy 711</td>
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<td>Newfoundland and Labrador</td>
<td>Healthy Students Healthy Schools (A portfolio under Departments of Education and Seniors, Wellness and Social Development)</td>
<td>School Food Guidelines For Administrators and Caterers</td>
<td>2009</td>
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<td>Nova Scotia</td>
<td>Department of Education and Department of Health Promotion and Protection</td>
<td>Policy Directives and Guidelines</td>
<td>2006</td>
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<td>Executive Summary</td>
<td>2006</td>
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<td>Ministry of Education</td>
<td>School Food and Beverage Policy: Resource Guide</td>
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<td>School Nutrition for all Grade levels – K-12</td>
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<td>Policy Statement: School Nutrition</td>
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<td>Quebec</td>
<td>Ministry of Education, Leisure, and Sports; Ministry of Health and Social Services</td>
<td>Going the Healthy Route at School</td>
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<td>Saskatchewan</td>
<td>Ministry of Education (In partnership with the Ministries of Health and Social Services)</td>
<td>Nourishing Minds Towards Comprehensive School Community Health: Nutrition Policy Development in Saskatchewan Schools</td>
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<td>Saskatchewan School Boards Association (written by Kathy Berlinic)</td>
<td>Food for Thought: School Nutrition Policy</td>
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<td>Yukon Territory</td>
<td>Yukon Education</td>
<td>School Nutrition Policy</td>
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Appendix B

Ethics

B.1. University of Guelph Research Ethics Board (REB) Application to Involve Human Participants in Research (REBApp)

Research Ethics Board of the University of Guelph approval REB#15JA003.

Application with amendments that was approved by the Research Ethics Board (Attached below)
University of Guelph
Research Ethics Board (REB)
Application to Involve Human Participants in Research (REBApp)

DIRECTIONS

You will find, as you proceed through this form, that some questions do not seem to apply to your research. Please be aware that there is a wide range of disciplines which use this form to apply for ethics clearance. If something does not apply – please feel free to choose the n/a option, or explain in a text box.

The questions asked in the REB-App are drawn from the TCPS2. There is an online tutorial – the CORE tutorial - discussing the TCPS2 which anyone can take. Create a new account using your University email address so completion can be tracked by the ethics office. This tutorial is highly recommended.

Filling out your REB-App:

As you fill out the REB-App you will see this symbol: 📋
It means that there is an information entry in the table below that corresponds to that question.
Find the entry using the section letter and question number.
The notes provide further information about the question, and the Tri-Council Policy Statement quotation (in italics) will provide a reference to the section of the TCPS2 which generated the question.

This form is ‘unlocked’ to allow the ‘cut and paste’ function and the ‘track changes’ function to be used. You can use Ctrl F to navigate the form.

Email the completed form with all accompanying documentation (as separate files – do not merge documents into one long file) to reb@uoguelph.ca
SECTION A: ADMINISTRATIVE INFORMATION

A.1 Title of the research project: Taste Test: Identifying and Comparing the Limits to English-Speaking Canadian School Food and Beverage Regulations in a Liberal Welfare Regime

A.2 Investigator Information

Note that in the case of student research, the Principal Investigator is the faculty advisor for the purposes of this submission.

<table>
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<tr>
<th>Name &amp; position</th>
<th>Principal Investigator</th>
<th>Faculty Co-Investigator</th>
<th>Student Investigator</th>
<th>Other Investigator</th>
<th>Department</th>
<th>Phone No.</th>
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<td>Dr. Anthony Winson</td>
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<td></td>
<td></td>
<td>Sociology and Anthropology</td>
<td>519-824-4120 ext 5219 3</td>
<td><a href="mailto:twinson@uoguelph.ca">twinson@uoguelph.ca</a></td>
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<td>Dr. Jennifer Sumner</td>
<td>n/a</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>OISE University of Toronto</td>
<td>416-978-0784</td>
<td><a href="mailto:jennifer.sumner@utoronto.ca">jennifer.sumner@utoronto.ca</a></td>
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<td>Dr. Irena Knezevic</td>
<td>n/a</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Communication Carleton University</td>
<td>613-520-2600 ext 4121</td>
<td><a href="mailto:irena.knezevic@carleton.ca">irena.knezevic@carleton.ca</a></td>
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<td>Shawna Holmes</td>
<td>n/a</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>Sociology and Anthropology</td>
<td>519-400-9510</td>
<td><a href="mailto:sholme02@uoguelph.ca">sholme02@uoguelph.ca</a></td>
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Provide name of person who completed this form: Shawna Holmes

**A.3** Are there any issues or concerns regarding the timeline for approval that you would like to raise?  
☑ N/A

**A.4** Research Ethics Approval (other than University of Guelph)

**A.4.1** Will any other Research Ethics Board be asked for approval?  
☐ Yes ☑ No

If YES, please specify:


Copy of the clearance certificate or approval will be provided to the REB when available

☐ Yes

☐ Attached
A.4.2 If you are undertaking research in a country other than Canada, submit a copy of the clearance certificate/approval from the Research Ethics Board in that country. □ Attached

OR discuss what alternative measures are being taken (see information guide):

A.5 Level of the Project: please check all that apply

- Faculty Research
- PhD Thesis
- Master’s Thesis
- Master’s Major Research Paper
- M.Sc by Coursework
- Undergraduate
- Honours Thesis
- Class Project Specify course:
- Internship
- Practicum
- Independent Study
- Administration
- Contract – for profit sponsor
- Other – please specify:

A.6 Funding of Project

A.6.1 Has funding been granted for this project? □ Yes ☒ No □ Pending

A.6.2 Agency or Sponsor

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229
A.6.3 Contract – will there be an agreement with a research partner/funder (i.e. data sharing agreements, research funding agreements, confidentiality agreements etc.)?  

☐ N/A

Name of Research Partner/Sponsor:

Title of Research Project:

Has a copy of the contract been submitted to the Contracts Department of the Office of Research?  
☐ Yes

Has the contract received final signatures?  
☐ Yes

Comments:

A.7 Peer Review

☐ Yes ☐ No

A.7.1 Has this project undergone peer review for scholarly merit during the course of funding approval?

☐ Yes ☐ No

A.7.2 Has this project undergone peer review for scholarly merit by a graduate advisory committee?

☐ Yes ☐ No

A.7.3 Comments: My advisory committee has reviewed and approved my proposed research project

A.8 Disclosure of Conflict of Interest

☑ Yes ☐ No

A.8.1: Will the researcher(s), members of the research team, and/or their partners or immediate family members receive any personal benefits This might include a financial benefit such as remuneration/income, intellectual property rights, rights of employment, consultancies, board membership, share ownership, stock options etc.

If YES, please describe the benefits below. Include details of all fees and/or honoraria directly related to this study, such as those for participant recruitment, advice on study design, presentation of results, or conference expenses.
A.8.2 Describe any restrictions regarding access to or disclosure of information (during or at the end of the study) placed on the investigator(s), including those related to the publication of results. Note the nature of these restrictions and who is applying these restrictions.  N/A

A.8.3 Describe the possibility of commercialization of the research findings.  N/A

A.8.4 Describe any personal or professional relationship between a member of the research team and any participants aside from the researcher/participant relationship.  N/A

A.8.5 Disclose any employment that research team members have outside the University of Guelph, if it is related in any way to the study (e.g. as the source of research participants.)  N/A

A.8.6 Describe any consultancy or other contractual agreements, financial, partnership, or business interests within the last two years that might be perceived as a conflict of interest pertaining to this study.  N/A

A.9 Experience and Licensed Qualifications

A.9.1 What experience does the principal investigator have with the kind of research undertaken in this project and in this context, including the nature of the participants, methods of data collection, etc.?  

Dr. Winson is an accomplished scholar who has conducted in-person and telephone interviews,
among other fieldwork over the course of his career. Some of the interviews he has conducted have been with people who work in schools and address the same school food and beverage regulation issues I am addressing in this research. An example of his research relevant to this project is:


A.9.2 What is the role of each member of the research team?

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<th>Name</th>
<th>Role</th>
<th>Contact with Identified Data</th>
<th>Direct Participant Contact</th>
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<td>☑Yes</td>
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A.9.3 How will the faculty with principal responsibility ensure that each team member has the expertise and experience necessary to carry out the research? How will s/he ensure that all team members are familiar with the contents of the ethics protocol? Discuss for each team member.

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</table>
Dr. Anthony Winson

Dr. Jennifer Sumner

Dr. Irena Knezevic

Shawna Holmes

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<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
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<td>Yes</td>
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</table>

Dr. Winson's primary role is to supervise the student investigator. He will see the interview questions, offer advice about how to build report with respondents and offer options if difficulties arise.

This particular faculty member will not be directly involved with the participants or data.

This particular faculty member will not be directly involved with the participants or data.

I have also taken the "Preparing for a Career in Research - Research Ethics" seminar presented through the University of Guelph Library.

If more space is required, please add information here:

A.9.4 Does any specific procedure require professional expertise/recognized qualifications (e.g. performance of a controlled act)?

If YES, describe, and specify which team members have this expertise:

Yes   No
SECTION B: SUMMARY

Provide a summary below, of the research to be undertaken. Please do not attach copies of detailed proposals submitted to a funding agency or sponsoring agency protocols; these will not be reviewed.

B.1 Describe the purpose and background rationale for the proposed project, as well as any hypotheses and/or research question to be examined.

The provinces of Canada and Yukon Territory have recently instituted or updated policies and guidelines regulating the foods and beverages available for sale to students on school property. The regulation of food and beverage sales on school property addresses nutrition for which Canadian guidelines exist and yet each region has its own approach to addressing this issue. This research sets out to answer the question why are the approaches to regulating food and beverage sales different in each region? Related to this question, several additional questions will be answered through this research: what are the objectives of the provincial school food regulations and guidelines, how were the objectives established, are there limitations to achieving the objectives under Canada’s liberal welfare regime?

It is necessary for this research to conduct interviews with those who were involved in the development of these documents and those who are currently monitoring the implementation of these documents. The purpose of the interviews is to understand how the decision making process during development as well as how the regulations are being implemented, unanticipated consequences of the regulations, as well as if and how the regulations have been changed since being published or if there are plans to change them.

While a limitation of this study, I will only be examining English-speaking Canada.

B.2 Describe in clear and concise detail and sequentially each of the procedures in which the research participants will be involved. Use flow charts, diagrams, and/or point form.

Procedure 1 I will make contact with potential participants initially through e-mail or a telephone call, depending on the available contact information. I will introduce myself, the objectives of the research and ask them if they are interested and able to participate.

Procedure 2 If they do not agree, I thank them for their time and contact ends. If they agree to participate, I will send them the necessary consent information, ask the participants if they have any questions, and arrange a time to conduct the interview. If the participant is available for an interview at the time of initial contact then I will proceed with procedure 3.

Procedure 3 Before beginning the interview, I will review the consent information with the participant, highlighting the parts addressing confidentiality and ensuring the participant understands. Participants will have the opportunity to ask questions about the consent.
information. After any questions have been sufficiently answered, I will begin the interview with the reminder that they can ask questions at any time and they are

**Procedure 4**

**B.3** Indicate the location(s) where the research will be conducted (*check all that apply*):

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</table>

- University of Guelph
- South Western Ontario
- Ontario
- Canada
- State Country:

- Participant's home
- Participant's place of business or workplace
- School
- University or College
- Health Institution
- Correctional Institution
- Senior's Institution
- Other – please describe:

**B.4** List and submit all documents used for data collection:

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</table>

- Published scale/survey
- Researcher generated survey
- Focus group probing questions
- Screening questionnaire
- Interview questions
- Health questionnaire
- Other – please describe:

**B.5** If you are using a survey or questionnaire, please indicate if this survey or questionnaire is a published scale or has been created by the research team.
SECTION C: METHOD

Answer each question below for each of the procedures/methods discussed in Part B.

C.1 Time required of participants

For each type of interaction listed in B.2, describe the time required of participants. Also state the total time required over all interactions:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Time Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Initial contact</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>2 (contingent on agreement to participate)</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>3</td>
<td>30-45 minutes</td>
</tr>
</tbody>
</table>

Total amount of time required for someone who agrees to participate should be approximately 65 minutes.

C.1.1 Do you plan to re-contact participants for any purpose? If YES, this must be discussed here and in the consent form.

No

C.2 Language

In what language(s) will the research be conducted?

- [x] English
- [ ] French
- [ ] Other
- [ ] N/A

C.2.1 Is the participant sufficiently fluent in this language to understand the consent process?

- [x] Yes
- [ ] No

C.2.2 Is interpretation available?

- [ ] Yes
- [x] No

C.2.2.1 How will interpreter(s) be recruited? From what organization? From what region and cultural background?

C.2.2.2 Discuss the possible relationship between the interpreter(s) and the participants.
C.2.2.3 Sample of Confidentiality Agreement or script for interpreter is:

☐ attached
☐ pending – will be provided to the REB.

C.2.2.4 Project documents (such as consent forms, information letters, surveys) should, where possible, should be made available to participants in translation. Will this occur for this project? ☐ Yes ☐ No

If NO, explain:

N/A

C.2.3 Discuss any issues there may be with literacy in your participant population, and how you intend to address literacy issues N/A

C.3 Participants

C.3.1 Estimate the number of participants you will be recruiting 25

C.3.2 Estimate the size of the pool from which you are drawing participants, if possible 200

C.3.3 Will you be recruiting either males only or females only? ☐ Yes ☐ No ☐ N/A

If YES, please state the rationale:

N/A

C.3.4 What is the age range of the participants you will be recruiting? N/A

Lower Age Limit: 18

Upper Age Limit: No Upper limit

Justify both the upper and lower limit. Children and the elderly should not automatically be excluded from research based solely upon their age.

Only adults will be contacted since the population being interviewed are those who have been involved with the development and implementation of regulatory documents. This means
all potential participants will be adults.

C.3.5 Are participants University of Guelph students? ☐ Yes ☒ No

Are participants affiliated with (formally or informally) a particular organization/institution (other than the University of Guelph)? ☒ Yes ☐ No

If YES, please name and provide details of the affiliation:

N/A The participants are affiliated with organizations relevant to the regulatory documents being studied and vary between regions. Some examples of affiliations include Ministries of Provincial and Territorial governments, School Board officials, Public Health nurses, nutritionists

C.3.6 Participant Inclusion and Exclusion Criteria: List all inclusion/exclusion criteria. Indicate with an asterisk (*) those criteria which will be included in the Letter of Information.

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those directly involved with the development and/or writing of school food and</td>
<td></td>
</tr>
<tr>
<td>beverage regulations</td>
<td></td>
</tr>
<tr>
<td>Those indirectly involved with the development and/or writing of school food and</td>
<td></td>
</tr>
<tr>
<td>beverage regulations</td>
<td></td>
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<tr>
<td>Those directly involved with the implementation and/or oversight of school food</td>
<td></td>
</tr>
<tr>
<td>and beverage regulations</td>
<td></td>
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<tr>
<td>Those indirectly involved with the implementation and/or oversight of school food</td>
<td></td>
</tr>
<tr>
<td>and beverage regulations</td>
<td></td>
</tr>
</tbody>
</table>

C.4 Recruitment

C.4.1 What form will recruitment take: (please check all that apply): ☐ N/A ☐

☐ Poster
☐ Advertisement
☒ Email
☐ Web page
Letter of Invitation

Telephone Call

Social Media

Verbal Script

SONA - Psychology

SONA – Marketing & Consumer Studies

Office of Research Participant Recruitment Site

Other – describe below

Attach a copy of the above with your submission.

Describe how/where you will use each of the instruments selected above:

If the relevant person or position has an e-mail address publically available, I will send an e-mail explaining who I am, my contact information, the purpose of my research, why I am contacting them and an invitation to respond if they are interested in participating in the research.

If the relevant person or position has a phone number publically available, I will cold call explaining who I am, the purpose of my research, why I am contacting them and an invitation to participate in the research.

C.4.2 Indicate the location of the participant at the time of recruitment. Is the physical location of the participant at the time of recruitment of importance? For example, could contacting the individual at their place of business increase risk of harm?

At home

At work

Other – describe below

Discuss for each of the instruments selected in C.4.1, as appropriate:

Neither of the instruments indicated in C.4.1. should increase risk of harm to participants. If I am cold calling, this can be disruptive to a potential participant’s workday, however initial contact will be kept brief so an interview can be scheduled at a more convenient time and location.

C.4.3 If you have used Mass Testing as a recruitment tool, discuss the selection criteria used, and provide the REB number under which the mass testing item was approved.

C.5 Incentives and Reimbursement
C.5.1 What is the dollar value of incentive payments and other forms of reimbursement to participants?

- Participants will be reimbursed for costs incurred while participating
  - Travel:
  - Child Care:
  - Parking:
  - Other:

- Participants will receive incentives to encourage participation
  - Gift card:
  - Cash:
  - **Lottery or draw:** If yes, describe in C.5.2.
  - Course Credit: Name of course:
  - Other:

- Participants will receive non-financial benefits
  - Food and Drink:
  - Other:
  - Other – describe:

C.5.2 If you have indicated in C.5.1 that you will be using a **Lottery or Draw**, please provide the following information:

- Estimated chances of winning
- Number of prizes
- Value of prizes
- Give detailed description of how draw will be managed.

C.5.3 If you have indicated in C.5.1 that you will be providing payment to participants, how will you record dispersal of funds for audit purposes (i.e. reporting to Financial Services)? You may need to describe this in the consent form if you will be asking for a participant signature or initials.

C.5.4 If you have indicated any incentives or reimbursement in C.5.1, detail how will you deal with incentives, reimbursements if participants choose to withdraw? (Cash payments should be prorated.)
C.5.5 Are the participants likely to incur any expenses or inconveniences in addition to those described above as a result of their participation in this project?  

☐ Yes  ☒ No  ☐

If YES, describe:
SECTION D: THE INFORMED CONSENT PROCESS

Are you planning on providing participants with a **hard copy consent** document, which they will sign? If so, fill out **D.2**.

Are you planning on obtaining **oral consent**? If so, fill out **D.3**.

Are you planning a survey, which will display the consent information at the front of the survey, and you will **assume participants consent** if they complete and return the survey? If so, please fill out **D.4**.

Will your participants be **unable to give consent** themselves, but must have a parent or guardian give consent on their behalf? These participants might be children, or an adult with a cognitive impairment, for example. If this is the case, fill out **D.5**.

Section **D.6** should only be filled out if your project involves **deception**. Please see Guideline 1-G-020 for information about deception.

Section **D.1** is seldom used, and is a **waiver of prior informed consent**. See the information guide for an explanation of when **D.1** applies.

You may fill out more than one type of consent section. You need not fill out ALL consent sections – only what you need.

**D.1. Alteration of Informed Consent:**

If you are applying for a waiver of prior informed consent, see the information guide, and discuss Article 3.7 (a) to (e).

**N/A**

**D.2 Written Consent:** Will you be obtaining **consent with a signature**? ☐ Yes ☒ No

If **NO**, please explain why signed consent is not appropriate in this case then go to **D.3**.

The questions being asked of participants pose a low risk to cause harm to participants. Additionally asking for consent orally instead of requiring written consent allows me to take advantage of cold-calling.

If **YES** to consent with a signature, please answer the following:

**D.2.1 What consent documents will be used to inform potential participants about the details of the project and to obtain consent for participation?**

☐ Separate information letter, and consent form with signature section

☐ Consent form with signature section

☐ Other – Specify
Discuss:

D.2.2 How will consent documents be delivered to participant?

D.2.3 How will consent documents be returned to researcher?

D.2.4 Which member of the research team will manage the consent process?

D.2.5 Has this individual had the necessary training to administer consent? Describe the training received or planned.

D.2.6 Verify the following:

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<tbody>
<tr>
<td>□ Yes □ N/A</td>
<td>Copy of consent form is attached to this application</td>
<td>Comment</td>
</tr>
<tr>
<td>□ Yes □ N/A</td>
<td>Copy of consent form will be given to participant</td>
<td>Comment</td>
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<tr>
<td>□ Yes □ N/A</td>
<td>Script for introducing consent process is attached to this application</td>
<td>Comment</td>
</tr>
<tr>
<td>□ Yes □ N/A</td>
<td>Letter of information is attached to this application</td>
<td>Comment</td>
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<tr>
<td>□ Yes □ N/A</td>
<td>Copy of information letter and/or consent form shows University of Guelph letterhead or logo</td>
<td>Comment</td>
</tr>
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</table>

D.2.7 Will the participant have an opportunity to have questions about the project and their role as a participant answered? How will this opportunity be communicated to them? □ N/A
If this written consent is from a parent or guardian, please fill out section D.5 as well.

**D.3 Oral Consent:** Will you be obtaining oral consent?  
☐ Yes ☐ No

If NO, please go to D.4

If YES, to oral consent please answer the following:

**D.3.1** What documents will be used to provide participants with information about the project to supplement the oral consent?

- Information letter
- Consent script
- Other – Specify

Discuss:

Once a participant has expressed interest in participating in an interview, I will send them the Letter of Information and Consent to Participate Form. I will also read it aloud, pausing to ask for questions throughout. At the end I will ask if the potential participant understands the information before proceeding with the interview.

**D.3.2** How will the written information be delivered to participant?

Orally and participants will receive an electronic copy of the information letter and consent form

**D.3.3** How will oral consent be documented by the researcher?

I will record the portion of the telephone call where I will read the consent script to the potential participant, asking if they have any questions throughout. At the end of the script, I will ask if they understand all of the information presented, including that the interview will be recorded and transcribed. If they are comfortable with that, I will ask if they consent to participate in the interview. Before the interview begins, I will reiterate that they can ask the interview questions at any time, and that their participation in the research is voluntary, without coercion.

**D.3.4** Which member of the research team will administer consent?

Shawna Holmes
D.3.5 Has this individual had the necessary training to administer consent? Describe the training received or planned.

I have taken graduate level qualitative research methods courses where administering consent is part of the course content.

D.3.6 Verify the following:

<table>
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<tr>
<th>Option</th>
<th>Comment</th>
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<tbody>
<tr>
<td>☑ Yes</td>
<td>Copy of consent script is attached to this application</td>
</tr>
<tr>
<td>☑ Yes</td>
<td>Copy of information letter will be given to participant</td>
</tr>
<tr>
<td>☑ Yes</td>
<td>Copy of information letter shows University of Guelph letterhead or logo</td>
</tr>
<tr>
<td>☑ Yes</td>
<td>Copy of information letter is attached to this application</td>
</tr>
</tbody>
</table>

D.3.7 Will the participant have an opportunity to have questions about the project and their role as a participant answered? How will this opportunity be communicated to them?

Yes, participants will be given many opportunities to ask questions throughout the interview process. Beginning with initial contact, as well as going through the consent information with participants and a final reminder before the interview begins that they may ask questions at any point during the interview.

D.4 Assumed Consent: Will consent be assumed or implied?

If NO, please go to D.5
If YES to assumed or implied consent, please answer the following:

D.4.1 What consent documents will be used to provide potential participants written information about the details of the project to supplement the assumed or implied consent?

| Information letter |
| Consent form |
| Other – Specify |

Discuss:
D.4.2 How will the written information be delivered to participant? For online surveys, invite the participant to print the consent information.

D.4.3 How will consent be documented by the researcher (for example, by return of the completed questionnaire)?

D.4.4 Which member of the research team will administer consent? □ N/A

D.4.5 Has this individual had the necessary training to administer consent? Describe the training received or planned. □ Yes □ No □ N/A

D.4.6 Verify the following:

<table>
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<th>Yes</th>
<th>N/A</th>
<th>Comment</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Copy of information letter will be available to participant (provide PRINT button for online survey)</td>
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</tbody>
</table>

<table>
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<tr>
<th>Yes</th>
<th>N/A</th>
<th>Comment</th>
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<tr>
<td></td>
<td>Copy of information letter shows University of Guelph letterhead or logo</td>
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</tbody>
</table>

D.4.7 Will the participant have an opportunity to have questions about the project and their role as a participant answered? How will this opportunity be communicated to them? □ N/A

D.5 Proxy Consent: Will you be obtaining proxy consent (e.g. of parent/guardian)? □ Yes □ No

If NO, please go to D.6

If YES to proxy consent please answer the following:
D.5.1 Why is proxy consent necessary?

D.5.2 How will competence of the participant be established, and who will determine this?  
N/A

D.5.3 Will you be obtaining informed assent from the participant?  
No

If NO, explain why not:

D.5.4 How will oral assent, if used, be documented?  
N/A

D.5.5 Verify the following:

- Copy of written assent form attached to this application
- Written assent form printed on University of Guelph letterhead
- Copy of written assent form will be given to participant
- Copy of oral assent script attached to this application
- Copy of written information for participant providing oral assent attached to this application

D.5.6 Attestation regarding Proxy Consent: Article 3.9 TCPS2

- The researcher will involve participants who lack the capacity to consent on their own behalf to the greatest extent possible in the decision-making process
- The researcher will seek and maintain consent from authorized third parties in accordance with the best interests of the persons concerned
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<tbody>
<tr>
<td>☐ Yes</td>
<td>☐ N/A</td>
<td>the authorized third party is not the researcher or any other member of the research team</td>
</tr>
<tr>
<td>☐ Yes</td>
<td>☐ N/A</td>
<td>the research is being carried out for the participant’s direct benefit, or for the benefit of other persons in the same category. If the latter, the researcher has demonstrated that the research will expose the participant to only a minimal risk and minimal burden, and that the participant’s welfare will be protected throughout the participation in research</td>
</tr>
<tr>
<td>☐ Yes</td>
<td>☐ N/A</td>
<td>when authorization for participation was granted by an authorized third party, and a participant acquires or regains capacity during the course of the research, the researcher shall promptly seek the participant’s consent as a condition of continuing participation</td>
</tr>
</tbody>
</table>

**D.5.7** Are provisions planned for participants, or those consenting on a participant’s behalf, to have special assistance, if needed, during the consent process  
☐ Yes  ☐ No  
If **YES**, discuss:

---

**D.6 Deception:** Are you using *partial disclosure or deception* (i.e. the participant may not know that they are part of a project until it is over or is not informed of the true purpose of the research in advance)?  
☐ Yes  ☒ No  
If **NO** go to question D.7  
If **YES** to deception or partial disclosure, please answer the following:

**D.6.1** Describe the deception(s) or partial disclosure(s) being used and why they are necessary.

**D.6.2** Describe how and when the deception or partial disclosure will be revealed.

**D.6.3** State who will debrief the participants regarding the nature of the deception or partial disclosure, and describe how they have been trained.

**D.6.4** Verify the following:
<table>
<thead>
<tr>
<th>Yes</th>
<th>N/A</th>
<th>A second consent form will be used.</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>N/A</td>
<td>Second consent form will be printed on University of Guelph letterhead</td>
<td>Comment</td>
</tr>
<tr>
<td>Yes</td>
<td>N/A</td>
<td>Copy of second consent form will be given to participant</td>
<td>Comment</td>
</tr>
<tr>
<td>Yes</td>
<td>N/A</td>
<td>If participant declines to sign the second consent form, data will be removed from the study without penalty. Participant will still receive any incentives or reimbursement due.</td>
<td>Comment</td>
</tr>
<tr>
<td>Yes</td>
<td>N/A</td>
<td>Copy of second consent form attached to this application</td>
<td>Comment</td>
</tr>
<tr>
<td>Yes</td>
<td>N/A</td>
<td>University of Guelph guideline on deception has been followed</td>
<td>Comment</td>
</tr>
</tbody>
</table>

**D.7** Is community or institutional consent required for your project?  
☐ Yes  ☒ No  ☐ N/A  
Please discuss why this is required, how it will be managed.

**D.8** Will the participant be free to give consent, or refuse, without any undue influence or coercion?  
☒ Yes  ☐ No  ☐ N/A  
Explain any details you feel are relevant.

The researcher will not influence or pressure a potential participant to participate at any time. There are no incentives for volunteers to participate in the research. Throughout the consent process, participants will be reminded that their participation is voluntary and that they do not have to answer a question if they are not comfortable doing so.

**D.9** How will you ensure that consent is ongoing throughout the project? How will you ensure that necessary information is provided to participants on an ongoing basis?  
☐ N/A  
Before beginning the interview, participants will be reminded that their participation is voluntary and that they may withdraw at any time. Throughout the interview, if a participant has hesitated answering a question, they will be reminded that they do not have to answer that question or we can end the interview.
D. 10 Discuss the likelihood that the **confidentiality** offered to participants may be **limited** by the legal obligation to “report information to authorities to protect the health, life or safety of a participant or third party” or that “a third party may seek access to information obtained and/or created in confidence in a research context” through either “voluntary disclosure” or “force of law”. [TCPS2, Article 5.1]  

This is highly unlikely. The participants in this research do not belong to a vulnerable population. Even though some potential participants may work with children, the interview questions do not address sensitive information that could be relevant to a legal procedure.

**D.11 Participant withdrawal**

**D.11.1** Participants must have the right to withdraw from the project at any time. Describe how the participants will be informed of their right to withdraw and outline the procedures that will be followed to allow the participants to exercise this right.

The participants’ right to withdraw will be stated during the review of the consent information. They will be reminded before the interview begins and informed that they do not have to answer any question they do not want to.

**D.11.2** Indicate what will be done with the participants’ data and any consequences for the participant of withdrawing from the study. Participants must have the right to withdraw their data from the project. Exceptions include anonymous data and collectively recorded data (such as focus group recordings).

If a participant withdraws from the study, I will stop recording and delete the recording. If they choose to withdraw once the interview is completed, the transcription will be deleted.

**D.11.3** If the participants will not have the right to withdraw from the project, please explain.

N/A
SECTION E: DESCRIPTION OF THE RISKS AND BENEFITS

E.1 Risks: Itemize your response by each method/procedure employed during this research.

Risk (check all that apply)

<table>
<thead>
<tr>
<th>N/A</th>
<th>Physical (including bodily contact or administration of any substance)</th>
<th>Yes</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Psychological (including feeling demeaned, embarrassed, worried, or upset)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Social (possible loss of status or reputation)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Economic (risk to livelihood or income)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

E.1.1 If you indicated YES to any of the above, are any of the risks indicated greater than the participant would encounter in their everyday life?

Yes ☐ No ☑

E.1.2 For each risk identified above describe how the risk will be managed and include an explanation as to why alternative approaches could not be used.

N/A ☑

The potential social harms that could occur because of this research are minimal. I am aware that some questions may address interpersonal conflicts in a professional setting which may be upsetting to discuss for the participant. The interview portion is critical to my research so I will ensure that the questions and my demeanour are appropriate and respectful to minimize this risk. Data will be encrypted and data will not be published with any directly identifying information which will minimize the potential risks to participants.

There potential for economic harms that could occur because of my research are minimal. I am aware that if identifying information of a participant who is critical of a co-worker or superior could cause conflict in the workplace, however the nature of the questions and the efforts to keep responses confidential will minimize this risk. This risk is further minimized by not publishing direct or indirect identifying information without the permission of the participant.

Indirect identifiers will be used in the final write-up. Direct and indirect identifiers will be used to identify and contact potential participants. They will be used to link participants to a code. A master list will be used to link the identifying information to the transcript, but this will be stored separately from the transcripts. In the write-up, only indirect references will be used to maintain confidentiality.

E.2 Possible Benefits Describe any benefits to the participants/discipline/society that would justify to participants why they should be involved in this study.

N/A ☑

Benefits to Participant | This research will not provide direct benefits to the participant
Benefits to Discipline | This study will be the first to compare school food regulations across
the country from a sociological perspective. This will show how political economy can limit what can be regulated plays in what administrators

| Benefits to Society | This research may help improve the quality of foods and beverages available to students contributing to their overall health and wellbeing. Further this research may encourage provinces to adopt a universal lunch program for students |

E.2.1 Research results should be provided to participants where possible.

Will aggregate research results be provided to participants? [ ] Yes [ ] No

If YES, explain what information will be provided to the participants upon completion of the project, and how will they receive this.

Participants may receive a copy of the dissertation or part of the dissertation if interest in a particular section is expressed.

If NO, explain why this is not feasible or desirable.

E.2.2 Will an individual’s research results be provided to participants? [ ] Yes [ ] No

If YES, explain what information will be provided to the participants upon completion of the project, and how will they receive this.
SECTION F: CONFIDENTIALITY AND DATA SECURITY

F.1 Indicate what type of information will be collected

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F.2 Describe any personal identifiers – both direct and indirect - that will be collected during the course of the research and justify the need to collect them. Researchers should reduce the number of identifiers to a minimum.

N/A

I will learn the participants’ names for the purpose of initiating contact and the interview. I may also know where they work or that they belong to an organization also for contact purposes but also to organize the interview responses by location (province or territory) and involvement with the regulation (government department, special interest group, public health).

F.3 Under some circumstances, identified data must be made available to authorities. This may occur at the request of auditors (e.g. Health Canada, Tri-Council), or under subpoena (see D.10). Describe the likelihood of this applying to this research project, and how or if you plan to communicate this possibility to participants.

N/A

I will not be storing a master list containing identified direct and indirect identifiers will be stored. However, the low-risk nature of the work-research would suggest that it is
 unlikely that any data would be requested by an auditor or be subpoenaed.

F.4 Describe any action that should be taken by the Principal Investigator prior to beginning the project, or any information which should be communicated to participants in the consent process, which deals with potential incidental findings.

It is unlikely for this research to generate incidental findings that would be relevant to a participant. If my research should generate incidental findings that have significant welfare implications for a research participant, I will contact the Principal Investigator, Dr. Anthony Winson and the University of Guelph R.E.B.

F.5 If any personal identifiers will be retained once data collection is complete, provide a comprehensive rationale explaining why it is necessary to retain this information – including the retention of master lists that link participant identifiers with unique study codes and de-identified data.

The master list will contain the direct and indirect identifiers and a code. The code will appear with the transcript. Keeping a master list of identifiers once data collection is complete will allow me to remove a participant should one decide to no longer participate in the study after completing the interview. The list will be stored separately from the transcripts on an encrypted hard drive.

F.6 If existing records (e.g. health records, other records/databases) are to be used, describe how permission was obtained.

Submit Appendix X – Secondary use of Data

F.7 What would the impact be on the participant should privacy be breached?

In the unlikely event that privacy is breached, the impact of the participant would be minimal. The nature of the questions is not invasive. They do ask about what has happened or is happening with a specific project which may be a source of disagreement among coworkers but would be unlikely to lead to dismissal or loss of income.

F.8 State who else will have access to the identified data. If they are not members of the research team, they should sign a confidentiality agreement.

Submit Appendix Y – Confidentiality Agreement
F.9 Describe the procedures to be used to protect the identity of the participant and/or ensure the security of the data:

F.9.1 During the conduct of the research:

While direct identifiers will be necessary for the interview (primarily name), the interviews will be conducted from a location the participant is comfortable to speak in and does not feel intimidated or unable to speak freely. A master list containing directly identifying information linked to a code will be kept by me, stored separately from the transcripts. The transcription of the interview will not include the names of participants and instead will be assigned a code based on region and date the interview was conducted. The transcriptions will be stored on my laptop and backed up on an external hard drive, both of which will be encrypted. The recording of the interview will be deleted within 24 hours of its completion. The master list containing the codes will be kept only on the encrypted laptop.

F.9.2 During processing of data:

Directly identifying information will be anonymized during the processing of data. Location and association are relevant to the project but it will not be sufficient to directly identify a participant.

F.9.2.1 Will data be transcribed? ☑ Yes ☐ No

If YES, attach copy of transcriber confidentiality agreement (if transcriber is not part of the research team) ☐ Attached

I will be doing the transcribing

F.9.2.2 Will the identified data be transferred electronically? ☐ Yes ☑ No

If YES, by what medium and how will it be protected during transit?

F.9.3 After research is complete:

☒ N/A

This information will not be transferred electronically.

F.9.4 In the release of findings:

☒ N/A
F.10 Long Term Data Security

Discuss how long data will be stored, justify the duration of the storage period, discuss the security measures which will be employed, and name the individual who will be charged with stewardship of the data:

The recordings of the interviews will be transcribed and deleted within 24 hours. The transcriptions will be stored on my encrypted laptop and deleted upon completion of the dissertation. The transcriptions will also be stored on an encrypted external hard drive for 7 years.

F.10.1 Will paper records be retained, and if so, which of the following apply?

- [ ] Confidential shredding after
- [ ] De-identified data will be retained in secure location
- [x] Identified data will be retained in secure location

Describe secure location:

The master list of participant names and their codes will be stored on my encrypted laptop (using FireVault for Mac). The transcriptions containing participant codes will be stored on my encrypted laptop and backed up on an encrypted hard drive.

F.10.2 Will audio/video recordings be retained, and if so, which of the following apply?

- [x] Destruction of audio/video recordings after 24 hours
- [ ] Will be retained in secure location

Describe secure location:

F.10.3 Will electronic data be retained, and if so, which of the following apply?

- [ ] Secure erasing of electronic data after
- [ ] De-identified data will be retained in secure location
- [x] Identified data will be retained in secure location

Describe secure location:
The recordings of the interviews will be transcribed and then deleted within 24 hours. The transcriptions will be stored on my encrypted laptop and encrypted external hard drive. The hard drive will be stored in a locked cabinet while my laptop will remain with me or in a locked cabinet.

F.11 Do you intend to link the data you have gathered with any other set of data?

☐ Yes  ☒ No

Describe:


SECTION G: POST APPROVAL

G.1 Continuing Ethics Review

Minimum requirement for Continuing Ethics Review is the submission of a Status Report at least annually. The principal investigator’s responsibility for the project must notify the REB using the Status Report when the project is completed, or if it is cancelled.

Indicate whether any additional monitoring or review would be appropriate for this project. N/A

G.2 Adverse Events

Unanticipated consequences or results affecting participants must be reported to the Research Ethics Board and the Ethics Office as soon as possible using the <<adverse event report>>.

G.3 Additional Information

Please add any other information relevant to the project that you wish to provide to the Research Ethics Board. N/A
SECTION H: SIGNATURES

DIRECTIONS

Create a jpeg of your signature and insert it on the signature line
OR Sign the last page of the REBApp, scan it, and submit it as a .pdf with the application.
OR Send an email to reb@uoguelph.ca from your @uoguelph.ca account stating:

I acknowledge that I have the ultimate responsibility for the conduct of the study described in this application including my responsibilities as an advisor to any students involved in this project. I have read and am responsible for the content of this application. If any changes are made in the above arrangements or procedures, or adverse events are observed, I will bring these to the attention of the ETHICS OFFICE.

In the subject line, quote the project title to which this email will be attached

REVIEW WILL NOT PROCEED UNTIL A SIGNATURE IS RECEIVED BY THE ETHICS OFFICE.

TITLE OF PROJECT: Taste Test: Identifying and Comparing the Limitations to Canadian School Food and Beverage Regulations in a Liberal Welfare Regime

PRINCIPAL INVESTIGATOR SIGNATURE:

I, ___Anthony Winson_________________________ [PLEASE PRINT] have the ultimate responsibility for the conduct of the study described in this application including my responsibilities as an advisor to any students involved in this project. I have read and am responsible for the content of this application. If any changes are made in the above arrangements or procedures, or adverse events are observed, I will bring these to the attention of the ETHICS OFFICE.

_________________________________________  __________________________
Signature                                                                 Date

Graduate Student Signature (optional)  __________________________

Date
Appendix C
Consent

C.1. Initial Interview Information Letter

Hello

My name is Shawna Holmes, I am a student at the University of Guelph and I am conducting research examining the development and implementation of the public school food and beverage regulations in your area. I’m contacting you because I know that you/your department/organization is/was involved with the development/implementation/oversight of this regulation.

Would you be interested in speaking with me about your involvement with this? The interview will take 30-45 minutes. We can arrange a time to do so by telephone or Skype at your convenience.

The interview will be recorded and transcribed within 24 hours of the interview, at which time the recordings will be deleted. Additionally, any identifying information will be kept confidential.

This research will contribute to my dissertation and Ph.D in sociology.

This project is being supervised by Dr. Anthony Winson from the Department of Sociology and Anthropology at the University of Guelph.

If you are interested in participating, please contact Shawna Holmes at 519-400-9510 or sholme02@uoguelph.ca. More information regarding the interview process will be given to you before the interview begins.

If you have any questions or concerns about participating in the interview or the research, please feel free to contact Shawna or Dr. Anthony Winson at 519-824-4120 ext 52193

Thank you for your time.
C.2. Official Letter of Information and Consent to Participate in Research

Letter of Information and Consent to Participate in Research

Research Project: Taste Test: Comparing and Identifying the Limits to English-Speaking Canadian School Food and Beverage Regulations in a Liberal Welfare Regime

Questions about the research: Questions about the research project can be directed to Shawna Holmes, student investigator, Department of Sociology and Anthropology sholme02@uoguelph.ca or Anthony Winson, Professor, Department of Sociology and Anthropology twinson@uoguelph.ca 519-824-4120 ext 52193.

Thank you for considering participating in this research project

Purpose of the Research:
This study examines the variations in priorities between provincial policies and guidelines regulating foods and beverages sold in public schools. We are interested in understanding the decision-making process during the development and writing process including who was involved and how criteria were chosen. What you have to say about your experience and knowledge with this will help me understand the situation in your province.

Description of the Research:
If you volunteer to participate in this study, we would ask you to participate in a telephone interview with the student investigator. The research will ask about your participation in or knowledge about the development and implementation of the school food and beverage guidelines in your area. The interview will take 30-45 minutes. You answers will help us understand how priorities were chosen and how they are represented in the relevant policies and guidelines.

Potential Risks:
There is the possibility that some of the interview questions may make you feel uncomfortable. You participation is voluntary and you may choose not to respond to some questions. There are no other potential risks to you.

Potential Benefits to Participants and/or Society:
This research will not benefit you directly. Your participation will contribute to a body of knowledge understanding decision-making processes regarding food and beverage policy in public schools.

Confidentiality:
Data will be stored for 7 years after the completion of this study and then destroyed. Interviews will be recorded and transcribed. Transcription will take place within 24 hours of the interview after which the original recording will immediately be disposed of. As a research participant you have the right to review interview material once transcribed. If
you wish to see the transcription of your interview, you may contact Shawna Holmes by e-mail or telephone.

In the process of transcription all direct identifiers (information that could identify you) will be removed unless you give permission to the researcher to use them. Otherwise, quotations will be attributed to your province or territory and type of affiliation. For example, a quotation may be attributed to an official from an Ontario School Board. All data collected in this study will be secured through encryption and will not be accessible to anyone other than the researchers.

**Publication:**
The results of this research may be presented at conferences and submitted for publication in scholarly journals. Your identity will be fully protected in all research results.

**Reimbursement:**
You will not be reimbursed for your participation in this interview. If you wish, you will be provided with any publications resulting from the interviews.

**Participation and Withdrawal:**
Your participation in this research is completely voluntary. You have the right to refuse to participate without consequences of any kind. If you choose to participate and in the middle of the interview you change your mind, you can say so and stop the research at any time. You may also refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.

**Rights of Research Participants**
The University of Guelph Research Ethics Board has reviewed this study (REB# 15JA002). Questions about ethical concerns and your rights as a research participant can be addressed to S. Audl, Director of Research Ethics, University of Guelph reb@uoguelph.ca 519-824-4120 ext 56606

**Consent:**
Thank you for participating in this research. Please indicate that you agree to the following statement:
I understand all of the information presented to me on this form. I also understand that the interview will be recorded and transcribed, and that I can ask the interviewer questions at any time and I can expect an honest answer.

By signing below I indicate that I understand the consent form and that I am participating in the research voluntarily without coercion. I will be provided with a copy of this form.
Appendix D
Codebook

D.1. **Justification Nodes:** These nodes indicate a reason for creating the regulation.

**Childhood Overweight and Obesity:** references belonging to this node indicate concern for eating habits or activity habits that can lead to weight gain and related health problems. This node also contains references to statistics about rates of childhood overweight and obesity in children either within the region, nationally or worldwide.

**Hunger:** references to food insecure or vulnerable students. This includes references about how being hungry may lead to concentration and behavior problems. This also includes references to the role eating breakfast plays in helping students stay full.

**Health being necessary for learning:** references belonging to this node mention how in order to be effective learners, or to be attentive, students need to be healthy. This may be in relation to eating nutritionally balanced foods and/or in relation to healthy lifestyle choices including getting enough physical activity or hygiene.

**Nutrition is a component of health:** codes belonging to this node explain the link between nutrition and health and that children or students who eat nutritiously are healthier. This may also include references to improved attendance or fewer missed days from students who eat well.
D.2. **Regulation Nodes:** These nodes outline the directives and suggestions contained in the documents used in the analysis.

**Culture:** Includes references to cultural or ethnic food education and provision. Examples include kosher, halal, vegetarian, vegan. This also includes references to giving preference to local foods as well as organically produced foods.

**De-centralized solutions:** This includes references to engaging the community outside of the school/teachers/administrators in healthy eating. This may refer to including parents and families in nutrition education, or including community groups in educating or otherwise supporting healthy eating habits in young people.

**Dining:** These references suggest the amount of time students should have to eat as well as having appropriate space for students to eat in, including the atmosphere.

**Environment:** This includes references to food packaging, recycling, and making sure the infrastructure associated with the school food environment, like stoves, ovens, and refrigerators are energy efficient.

**Exceptions:** References under this node exempt the school food environment from the nutrition regulations.

**Food programs:** This node contains references to breakfast, snack, and lunch programs offered to students that are provided to students at low or no cost.

**Nutrition – Banned foods:** These references prohibit serving or selling specific foods or beverages to students or being on school property. This does not include the nutrition criteria that results in foods being placed in a “Do Not Serve/Sell” category.

**Nutrition – Education:** References to learning about nutrition and food as part of the curriculum. This includes cooking classes, culinary arts, food literacy, garden projects and nutrition education in health or sciences.
**Nutrition – Maximum Values:** This node contains references to the highest amounts of a certain nutrient in a food or beverage or the highest number of servings of a product allowed to be served or sold in the school food environment.

**Nutrition – Minimum Values:** This node contains references to the recommended daily intakes for certain foods or nutrients like whole grains and fibre. It also includes references to school food caterers and vendors to provide a minimum number of food groups in mixed dishes.

**Nutrition – Moderation:** Statements about there being no good or bad foods or references to restricting the number of servings, or the portion size of foods, beverages, or nutrients that the document otherwise discourages consuming.

**Personal Responsibility:** The idea children or their parents/guardians are ultimately responsible for their own food and beverage choices, health, and wellbeing are contained in this node.

**Physical Activity:** References to encouraging or increasing the amount of physical activity students get while at school. This includes physical education, making time for recess, as well as extra-curricular activities that contribute to the time being physical active.

**Physical Environment:** This node contains references to the infrastructure of the school food environment. This includes vending machines and their contents but also references to refrigerators, microwaves and whether or not students have access to them. References to what the regulators say contributes to a healthy school food environment are also included in this node.

**Pricing – Health Promotion:** This node refers to mentions about selling foods and beverages of higher nutritional value at cost or subsidized to encourage students to purchase them.

**Private Sector Partnerships:** This node includes references that encourage schools to work with business and/or caterers and/or vendors that can be beneficial to the school, students, and to the businesses.

**Promotion – Healthy Choices:** References coded to this node contain ideas about the school food environment placing healthier foods and beverages in prominent, optimal locations to encourage students to choose them, to make healthier options as appealing as possible, using menus, specials, and some references include encouraging attractive packaging.
**Promotion – Restricting Unhealthy Choices**: In short, references coded to this node recommend or insist that students have limited or no access to less nutritious foods and beverages. This also includes references to limiting/restricting or prohibiting the promotion or advertising of those foods and beverages.

**Restricting food as reward**: References coded to this node discourage teachers and school administrators from offering “treat” foods and beverages as a way to reward positive behavior or achievements.

**Revenue Generation**: References categorized to this node include fundraising with foods and beverages, including alternatives, as well as suggesting that programs that use food and beverage sales to fund them can be viable with healthier offerings.

**Social Determinants of Health**: This node contains references from the regulatory documents that acknowledge the societal aspects of health and wellness like poverty, the link between socio-economic status and food security as well as food literacy. The document may reference “environmental factors” and discuss family, neighbourhood and peer groups as being influential on the health and lifestyle choices of young people.

**Social responsibility**: This node contains reference to the role of the school in the lives of young people in regards to health and wellness. This includes the amount of time spent at school, the role of teachers, and the long-term societal benefits of developing healthy habits as children as well as the societal consequences of carrying unhealthy habits into adulthood.

**Socialization**: References made to how eating with others is an important part of social development of children, including attitudes towards food generally, but also in terms of supporting healthy eating habits are coded to this node. This also includes references to having teachers and administrators be role models of healthy eating.

**Water**: This node includes references to having sufficient drinking water for students, encouraging students to bring reusable water bottles to school, as well as encouraging students to drink water over other beverages.
D.3. Nodes Unique to Interviews: These nodes refer to areas of the school food environment that appeared exclusively in the interviews, and did not appear in the documents used in the content analysis.

Access to Healthful Foods: This node includes references to increasing the healthful options in the internal school food environment, as well as encouraging students to make healthier food choices with food brought from home.

Alternative Food Networks: This node includes references to food production or procurement that are different from conventional production or procurement, for example purchasing from local or organic production sources.

Barriers to Success*: References to obstacles or challenges that make achieving the goals of the school nutrition regulations challenging are coded to this node. The barriers that were referenced by the participants are outlined in section D.4.

Champions: This node contains references to individuals who have made achieving the desired outcomes of the school nutrition regulations as well as references to the absence of an individual to move forward with the directives of the policy or the creation of a guideline.

External School Food Environment (SFE): References to places where food and beverages can be purchased by students during the school day that are not on school property are included under this node. This does not include food from home.

Food from Home: This node includes references to the food brought from home, as well as references to changes to food purchases by parents as a product of nutrition education in the school.

Food Waste: References to discarded food that would otherwise be edible are included in this node.

Impact*: This node refers to changes to the school food environment as a product of the regulations. The types of changes are defined in section B.5.

Learn by Example: References coded to this node mention occasions where a subnational jurisdiction or school board/district/division or school used the regulations or practices from another
subnational jurisdiction or school board/district/division or school to influence their own regulations or practices

**Lessons Learned:** This node refers to what would be done differently if the regulations were to be revised, or what was done differently if the regulations have been revised.

**Nutrition Criteria:** References coded to this node refer to the maximum and minimum values of nutrients, or the associated categories as given by the subnational jurisdiction’s regulatory documents.

**Problems to be Addressed in SFE:** This node includes references to issues that exist in the internal school food environment that are not addressed in the regulatory document.

**D.4. Barriers to Success:** These are the obstacles or challenges to complying to the subnational jurisdictional school nutrition regulations identified by interview participants

**Affordability:** The compliant foods are priced beyond what the typical student is able to afford

**Appeal of Compliant Food:** References coded to this node suggest that there is a decline in interest in the foods and beverages offered in the internal school food environment after the regulations have been implemented

**Availability of Compliant Foods:** This node includes references to difficulty procuring foods and beverages that conform to the school nutrition regulations.

**Competing Priorities:** Refers to other issues in the school that administration and staff believe are more important. For example, classroom educational outcomes, bullying, obtaining other school resources like substitute teachers

**Costs:** This node includes references to the increased cost of procuring compliant foods and beverages

**Culture of Industrial Diet:** This node includes references to beliefs held by the students about healthier foods and beverages, as well as references to preferences for less nutritious foods.
**Enforcement:** References coded to this node refer to the absence of oversight regarding compliance.

**Food Service Providers:** This code refers to reluctance, resistance or inability on the part of food service providers to comply with the school nutrition regulations.

**Insufficient Resources:** References coded to this node include a need for more staff, dedicated staff, different infrastructure, and/or financial resources to successfully implement the regulations.

**Logistics of School Board/District/Division Organization:** Where food providers are used in different schools, making board/district/division compliance more challenging, or creating consistent compliance across schools in a board/district/division is difficult, those references are coded to this node.

**Misconceptions:** The references coded to this node refer to ideas held by others in the internal school food environment about the regulations that were not true.

**Role of Administration in the Internal School Food Environment:** References coded to this node refer to educators or school administrators expected to upholding nutrition standards or teaching nutrition education without having a background in nutrition themselves.

**Rural/Remote/North:** This node includes references to difficulties faced by internal school food environment in complying to the regulations as a result of the location of the school or school board/district/division in the subnational jurisdiction.

**Size of Jurisdiction:** The references coded to this node refer to challenges to complying to the regulations faced by school boards/districts/divisions or individual schools due to the magnitude of the jurisdiction.

**D.5. Impact:** These nodes refer to the changes that have happened in the school food environment as a consequence of the school nutrition regulations.

**Change in Food Service Provision:** This node refers to either changing food services providers or causing food service providers to change their offerings as a result of the nutrition regulations.
**Change in Food/Beverage Options:** This node includes references to foods or beverages added or removed from the internal school food environment as a result of the school nutrition regulations without mentioning the food service providers.

**Change in Attitude toward Health Initiatives:** References to increased acceptance of the health/wellness/nutrition initiatives taken in the internal school food environment through the regulations. These references may be measured in food and beverage sales in the internal school food environment or anecdotal.

**Change in Educational Outcomes:** This node includes a reference to improved educational advantages or outcomes.

**Change in Health/Wellness of Student Population:** Some measured through surveys, some anecdotal references to improvements in population health statistics or health and wellness practices like food purchasing or physical activity.

**Change in School Attendance:** This node includes references to increased or improved attendance as a result of food programs, which have also conformed to school nutrition regulations.

**Change in Number and/or Type of Health/Wellness Activities:** References to activities, including fundraising and physical activities, which conform to school nutrition regulations are coded to this node.

**Create Policy:** This node refers to when subnational jurisdictional guidelines resulted in the creation of school board/district/division or school level policy.

**Legitimize Regulatory Levers:** This node includes references to how those who are implementing the health and wellness regulations in the internal school food environment benefit from having support from a higher level of government (the subnational jurisdiction).

**Positive Impact:** References coded to this node refer to a general positive impact in the internal school food environment because of the school nutrition regulations.
Appendix E
Interview Schedules

E.1. Interview Schedule for those involved with the Regulation Development

Section 1 – Establishing the narrative

1.1 I’d like to begin by asking about your experience with the regulation. Anything you can tell me about what it was like developing with the regulations would be helpful.

Prompts: I’d like to know what prompted this project in the first place, what your role was, how you became involved, what you did, who worked with you, what the goals were. Did the goals change? What were the regulations meant to change? What did they change?

1.2 How would you describe the implementation process?

Prompts: What were the successes? What were the challenges? Did the schools (administration/parents/students) support the changes? Were they met with resistance? If so, who resisted and why?

1.3 What was the reasoning behind creating guidelines to help school boards establish policy instead of creating a policy for all school boards to follow?

Follow-up – What differences have been seen within the region? Are they meeting expectations? Are they not meeting expectations? How so? In what ways?

1.4 Have there been noticeable results since the regulations were implemented?

Prompts - Have the desired effects been achieved? Have the regulations brought about unexpected benefits? Have the regulations brought about unintended negative consequences? Has there been feedback? If so, what have you heard? Have you provided feedback? If so, what? Would you like to provide feedback?
Is there anything else you’d like to add about your experience developing the regulations before we move on to the next section?

**Section 2 – Specifics**

2.1 Quality of food

2.1.1 Nutrition and health appear to be the focus of the regulations. What changes has this meant for the food and beverages sold in schools? If you are not aware of specific changes, what were the intended changes to the food and beverages sold in schools?

Prompts – increase the number of healthy options? Decrease the number of unhealthy options? Increase the amount of locally and/or organically produced food available to students?

2.1.2 What were the problems with the foods and beverages being sold in schools that needed to be addressed in terms of health and nutrition?

Prompts – was it limiting the amount of sugar and salt in foods and beverages? Was it changing how foods were prepared to reduce the amount of fat, for example, eliminating deep-fried food options, reducing the amount of dressings or sauces on sandwiches and salads? Was it increasing the amount of whole, fresh fruits and vegetables, whole grains, etc. available to students?

2.1.3 Were there additional goals in terms of food quality you hoped to achieve or were able to achieve?

Prompts- Were you seeking to encourage schools to purchase locally produced food, organically produced food, vegetarian/vegan foods, foods associated with ethnic or cultural identity (e.x. kosher, halal, First Nations or Inuit cuisine etc.)?

2.2 Nutrition in the curriculum

2.2.1 In what ways, if any, have health and nutrition been incorporated into the curriculum?

Prompts-Health, physical education, nutrition science, cooking/food literacy. What changes have been made? What changes still need to be made?
2.2.2. Given the limitations of changing what can and cannot be sold in schools, has there been/was there additional emphasis on the education component of the regulations?

2.2.3 Is there a sense that the changes in the regulations are having a positive impact on eating habits? How do you know?

2.3 Food and beverage programs

2.3.1 What types of food and beverage programs exist in your region?

Prompts- Do schools in your region have breakfast programs, food cupboards, milk programs, etc.?

2.3.2. If there are programs, do these programs receive government funding? If so, does the department have a further role in the program (creating relationships with suppliers, deciding the nutrition guidelines for the food and beverages in the programs, deciding who can and cannot participate in the program)? If the programs do not receive government funding, are there funds available for such programs? Would the department make such funds available? Why or why not?

2.3.3. If there are no programs, is the department concerned about students who are coming to school hungry or malnourished?

Prompts- Is hunger or malnutrition a concern for you or the government generally in terms of student performance and behavior? Is there something being considered to address it?

2.4 Price and Revenue Generation

2.4.1 What role, if any do food and beverage sales play in generating revenue for the schools in your region?

2.4.2 What impact, if any, would you say the food and beverage regulations have had on the revenue generation for the schools?

2.4.3 Has the department offered financial support to school boards or individual schools that have had difficulty implementing the regulations or funding programs?

Is there anything else you’d like to add about the details of the regulations and their implementation before we move on to the next section?
Section 3 – Theoretical questions

3.1.1 What are the biggest problems you see with the school food environment?

Prompts – Is hunger/food insecurity the biggest concern? Is it poor nutrition in terms of access and consumption of junk food? Is it childhood overweight and obesity in general?

3.1.2 Are these regulations having the desired impact on students’ eating habits?

3.1.3 What do you see as being the limitations to achieving the goals of the regulations?

Prompt- What, if anything is preventing the regulations being successful in terms of what you and/or the committee wanted from them?

3.2.1 What are your thoughts on school-lunch programs in other countries?

Prompts – what is your knowledge about programs in other countries? Are you aware of the changes being made to the nutrition regulations?

3.2.2 Was a school-lunch program considered for your region?

If yes, why was it not implemented? If not, why not?

3.2.3 Would you have been supportive of a lunch program if it had been proposed?

Why or why not?

Prompts- For instance, would you have supported a universal lunch program? Would you support a needs-based program for students from low-income families?

What do you see as being barriers to implementing a lunch program, needs-based or universal? For instance, time for students to receive a meal during the lunch hour, the funding for such a program, the infrastructure to provide students with food, students leaving school property for lunch?

Is there anything else you would like to add before we finish the interview?
Thank you again for taking the time to speak with me. Please let me know if you have any questions or concerns moving forward.

E.2. Interview Schedule for those involved with Regulation Application (school boards, administrators)

Section 1 – Establishing the narrative

1.1 I’d like to begin by asking about your experience implementing the regulations. What has your role been? Who did you work with? What are the goals?

Prompts – What prompted this project? What was your job? Why were you participating? Who were you working with? How long have you/were you working with the regulations? What were you meant to accomplish? What were the goals? Did goals change?

1.1.1 What was your reaction or the reaction of the school board administration when it was learned that the province had created (or revised) the food and beverage regulations?

Prompts – Was it supported? Was it entirely supported, or supported in part? Did it cause concern? If so, which parts of it caused concern and why?

ALTERNATIVELY (Dependent on the situation of the region)

1.1.2 What was your reaction or the reaction of the school board administration when it was learned that the board would have to create (or revise) the school food and beverage regulations?

Prompts- Was it supported? Was there enthusiasm for the project? Was it seen as a burden or cumbersome? Did the provincial government provide sufficient support (in terms of information, human and financial resources, etc.) to carry out this project?

1.2 How would you describe the implementation process?

Prompts- What went well? What were the challenges? Who was supportive of the changes? Why were they supportive? Who resisted the changes? Why did they resist?
1.3 Have there been noticeable results since the regulations have been implemented?

Prompts- Have the desired effects been achieved? Have the regulations brought about unexpected benefits? Have the regulations brought about unintended negative consequences? Has there been feedback? If so, what have you heard? Have you provided feedback? If so, what? Would you like to provide feedback?

Is there anything you’d like to add about your experience before we move on to the next section?

Section 2 – Specifics

2.1 Quality of Food

2.1.1 Nutrition and health appear to be the focus of the regulations. What changes has this meant for the food and beverages sold in schools?

Prompts - Have the number of healthy options increased? Have the number of unhealthy options decreased? Has there been a change to the number of students leaving school property to purchase food and beverages?

2.1.2 What changes, if any have the regulations had on how food and beverages are sourced for schools?

Prompts- Have vendors and caterers been cooperative? Has there been additional expense to the school? If so, has it been passed on to the student? Has it changed the amount of sales?

2.1.3 Have there been changes to the foods and beverages sold in schools that are not necessarily related to nutrition or health?

Prompts - Has your district considered purchasing locally or organically produced foods and beverages? Has it considered making more vegetarian or vegan options available? Ethnic or cultural cuisines (e.x. kosher, halal, First Nation or Inuit cuisines)?

2.2 Nutrition in the Curriculum

In what ways have schools in your district been able to incorporate or add nutrition and health to the curriculum?
Prompts – Is cooking, food preparation or food safety a part or a larger part of the curriculum? Are there school gardens in your district? Has there been increased emphasis on physical education since the regulations have changed? Have there been changes to the attitudes towards food and nutrition from students, parents or teachers? Have there been obstacles in adding to or changing health and nutrition curriculum? Projects or lessons that would like to be done but cannot be done?

2.3 Food and beverage programs

2.3.1 What types of food and beverage programs exist in your region?

Prompts- Do schools in your region/board have breakfast programs, food cupboards, milk programs, etc.?

2.3.2 If there are programs how are they funded/run? How are supplies acquired? What is the take-up like? How is participation determined? If they are need-based, do supplies match the need?

2.3.3 If there are no programs, how does your board/district deal with student who come to school hungry or malnourished?

2.4 Price and Revenue Generation

2.4.1 Have the regulations changed the price students pay for food and beverages?

If so, how?

2.4.2 Do schools in your region use food and beverage sales to fundraise?

If so, for what expenses are the funds used for?

2.4.3 Has the amount of revenue changed since implementing the regulations?

If so, how has this impacted the programs that use the funding?

Is there anything else you’d like to add about the details of the regulations and their implementation before we move on to the next section?
Section 3 – Theoretical questions

3.1 What are the biggest problems you see with the school food environment in your region?

Prompts- is it hunger/food insecurity? Is it junk foods? Is it the rates of overweight and obesity among children in general?

3.1.1 Are the regulations addressing these problems?

3.1.2 What are the limitations of the regulations in terms of addressing these problems?

3.2 What are your thoughts on school lunch programs in other countries?

Prompts- in the United States, or the United Kingdom, as well as elsewhere, students in need are provided with a free lunch. What would you think if the province or Canada were to require schools to provide a free lunch to students in need? Would you be supportive? Why or why not? In other countries, all students are provided with lunch at school. What would you think if the province or Canada were to require schools to provide a free lunch for all students? Would you be supportive? Why or why not?

3.2.1 Would you be supportive of some manner of government funded lunch program in your region? Why or why not?

Prompts- For instance, would you have supported a universal lunch program? Would you support a needs-based program for students from low-income families?

What do you see as being barriers to implementing a lunch program, needs-based or universal? For instance, time for students to receive a meal during the lunch hour, the funding for such a program, the infrastructure to provide students with food, students leaving school property for lunch?

Is there anything else you would like to add before we finish the interview?

Thank you again for taking the time to speak with me. Please let me know if you have any questions or concerns moving forward.