

Municipalities Protect and Promote Children and Youth's Health By Supporting Healthy Food Environments

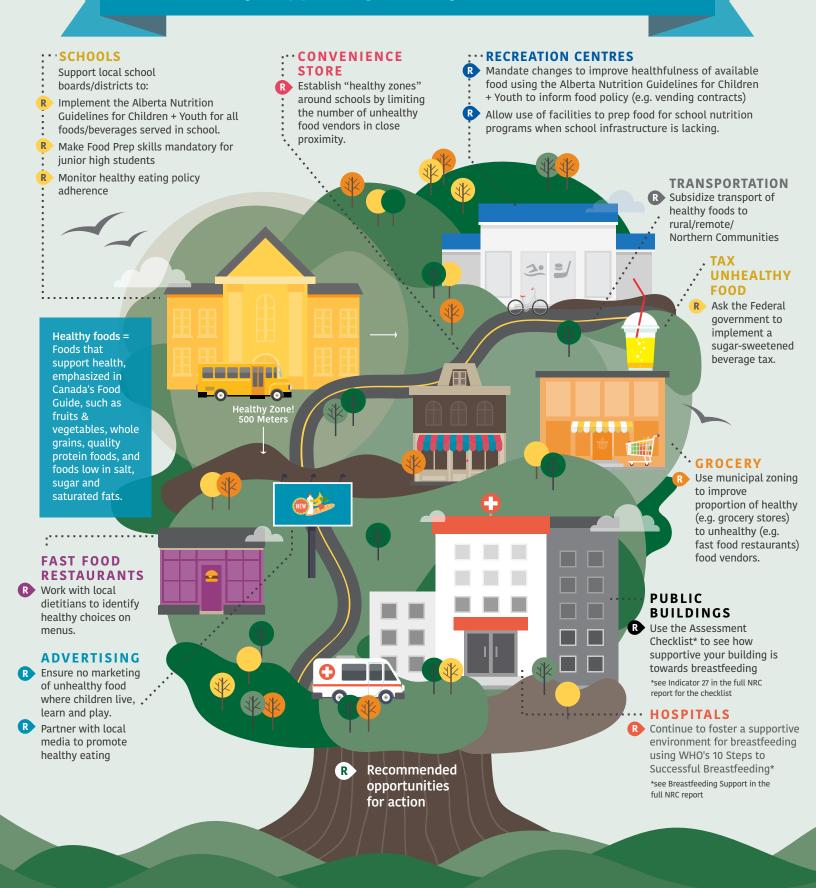


TABLE OF CONTENTS

- 4 Background
- 11 Grading the Nutrition Report Card
- 14 PHYSICAL ENVIRONMENT
- 15 Food Availability Within Settings
- 24 Neighbourhood Availability of Restaurants and Food Stores
- 32 COMMUNICATION ENVIRONMENT
- 33 Nutrition Information at the Point-of-Purchase
- 36 : Food Marketing
- 45 Nutrition Education
- 48 ECONOMIC ENVIRONMENT
- 49 Financial Incentives for Consumers
- 56 Government Assistance Programs
- **62** SOCIAL ENVIRONMENT
- 63 Breastfeeding Support
- 73 POLITICAL ENVIRONMENT
- 74 Leadership & Coordination
- 77 : Monitoring & Evaluation
- 83 : Key Findings and Recommendations
- 91 References

Background

Good food and nutrition are essential to promoting the health of children and youth. It is well established that healthy eating can help prevent chronic disease (World Health Organization, 2016; Wang & Lobstein, 2006; World Health Organization, 2003). Healthy eating promotes child growth and development, learning and even the prevention of diet-related chronic diseases once believed to affect only adults, such as obesity and Type 2 Diabetes (World Health Organization, 2016).



Furthermore, we know that children with obesity are more likely to have unhealthy body weights into adulthood (Kelder et al., 1994; Lien et al., 2001; Mikkila et al., 2004). Poor eating practices learned early in life can track into adulthood (Herman et al., 2009; Terry-McElrath et al., 2014; Chriqui et al., 2014), emphasizing the importance of supporting healthy eating in childhood and youth. Poor nutrition has become the leading cause of poor health among Canadians, surpassing tobacco as the number one health risk (Public Health Agency of Canada, 2016). There is an urgent need for preventive action to address the challenge of healthy eating.

Healthy Eating is More Than An Individual Choice

Contrary to popular opinion, healthy eating is more than an individual choice and is influenced by the environments in which we live (Ganann et al., 2014; Sadler et al., 2016). While children learn about healthy

eating in school, school vending machines contain pop, hot lunches consist of fast food and fund raisers sell chocolate bars, sending mixed messages to children. The healthy choice is not so easy. The community nutrition environment, defined as the number, type, location, and accessibility of food stores, also influences individuals' food choices for better or for worse (Glanz, et al., 2007). Living in a community with predominantly unhealthy food stores, such as fast food outlets and convenience stores, has been shown to have a negative impact of children's health (Smoyer-Tomic et al, 2008). To improve children's eating behaviours, it is helpful to understand the current landscape, and how policies and actions may act as barriers or facilitators to positive change (Swinburn et al., 2013; Swinburn et al., 1999; Story et al., 2008; Hawkes, 2012). Once we have a better understanding of the policy landscape within food environments, we can devise goals to move towards healthier eating options for children and youth (Sadler et al., 2016; Glanz et al., 2007; Swinburn et al., 2013; Swinburn et al., 1999; Story et al., 2008).

Policies and Environments Interact To Shape Children's Health-Related Behaviours

Applying the concept of benchmarking to food and nutrition policy is gaining momentum internationally. One group called INFORMAS (International Network for Food and Obesity/ Non-Communicable Disease Research, Monitoring and Action Support), has outlined the Nourishing Framework to monitor benchmarks relevant to food environments, which we used in creating the Indicators and Benchmarks in this Nutrition Report Card (Olstad et al., 2014). Brennan et al. (2011) provided a comprehensive overview of policy and environmental strategies to improve children's health-related behaviours, which we incorporated into the Nutrition Report Card as well. This conceptual framework depicts how policies and environments interact to shape children and youth's health-related behaviors and body weights. Five environments: physical, communication, economic, social, and political form the structure of the Nutrition Report Card (Brennan et al., 2011; Swinburn et al., 1999). Three major settings have the greatest relevance to children and youth's: schools, childcare, and community settings.

Municipalities Can Ensure Environments Provide and Encourage Healthy Food Choices

Municipalities have the ability to ensure environments provide and encourage healthy food choices, thereby protecting and promoting child and youth health. For example, municipal planning can address geographic (physical) access to food through zoning by-laws (Mah et al., 2016). Considering the proximity of typically unhealthy food vendors to places where children gather, such as in school zones, is a municipal responsibility. Municipalities additionally have the power to set policies around access to food within public buildings, such as vending contracts and franchising in recreation centres and civic buildings (Mah et al., 2016). Municipalities can play a role in providing access to fresh local food, by ensuring there are adequate green zones for agriculture, and permits for local vendors, mobile produce sellers or farmers' markets (Mah et al., 2016). Ensuring lower income areas have access to affordable food by limiting restrictive covenants on former supermarket sites could also improve economic access to food (Smoyer-Tomic et al, 2008). Paying attention to the type of foods advertised (communication) to children (Boyland et al., 2016) on billboards near schools, on transit ads on routes that children use, as well as the nature of products advertised in local arenas can ensure no marketing of unhealthy food occurs. While making changes may be difficult due to competing interests, municipalities can make political decisions about the type of food environment they want to provide for their children and youth.

MICRO-ENVIRONMENTS



PHYSICAL

The physical environment refers to what is available in a variety of food outlets (Swinburn et al., 2013) including restaurants, supermarkets (Glanz et al., 1992), schools (Booth & Samdal, 1997), worksites (Chu et al., 1997) as well as community, sports and arts venues (Corti et al., 1997; Fawkes, 1997).

COMMUNICATION



The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing (Glanz & Mullis, 1988; Glanz et al., 1995) as well as the availability of point-of-purchase information in food retail settings, such as nutrition labels and nutrition education.

ECONOMIC



The economic environment refers to financial influences, such as manufacturing, distribution and retailing, which primarily relates to cost of food (Swinburn et al., 2013). Costs are often determined by market forces, however public health interventions such as monetary incentives and disincentives in the form of taxes, pricing policies and subsidies (Jeffery et al., 1994), financial support for health promotion programs (Glanz et al., 1995) and healthy food purchasing policies and practices through sponsorship (Corti et al., 1997) can affect food choices (Swinburn et al., 2013).

İ

SOCIAL

The social environment refers to the attitudes, beliefs and values of a community or society (Swinburn et al., 2013). It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models (Swinburn et al., 2013), values placed on nutrition in an organization or by individuals, and the relationships between members of a shared setting (e.g. equal treatment, social responsibility).



POLITICAL

The political environment refers to a broader context, which can provide supportive infrastructure for policies and actions within micro-environments (Olstad et al., 2014; Glanz et al., 1995).

Examining current food environments is a step in the right direction toward creating more supportive environments for healthy eating. Alberta's 2018 Nutrition Report Card is the fourth annual assessment on Food Environments for Children and Youth, and contributes to understanding the impact nutrition-related policies and actions have by highlighting where we are succeeding, and where more work is needed to support the health of children and youth (Olstad et al., 2014).

Development of the Nutrition Report Card

In 2014, a literature review was conducted to identify indicators relevant to children's food environments, and a grading system was developed. Over 20 of Canada's top experts in nutrition and physical activity worked together with policy makers and practitioners to develop the initial Nutrition Report Card (Olstad et al., 2014).

In 2018, an Expert Working Group of 13 academic experts and representatives from non-governmental organizations (NGOs) across Canada with expertise related to childhood obesity, eating behaviours, food environments, and nutrition policy convened to evaluate the available evidence for Alberta's fourth Nutrition Report Card. Thirty-seven indicators were graded by the Expert Working Group in the 2018 Nutrition Report Card.

The Nutrition Report Card is made up of 37 Indicators in key areas from each of the environments:

INDICATORS	BENCHMARKS
1. High availability of healthy food in school settings	Approximately 3/4 of foods available in schools are healthy.
2. High availability of healthy food in childcare settings	Approximately 3/4 of foods available in childcare settings are healthy.
3. High availability of healthy food in community settings: Recreation Facilities	Approximately 3/4 of foods available in recreation facilities are healthy.
4. High availability of healthy food vendors	The modified retail food environment index across all census areas is ≥ 10.
5. Limited availability of unhealthy food vendors	Traditional convenience stores (i.e. not including healthy corner stores) and fast food outlets not present within 500 m of schools.
6. Foods contain healthful ingredients	≥ 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving.
6. a. Foods meet Health Canada's Phase III Targets for Sodium Reduction	≥75% of processed foods (breakfast cereals, infant & toddler foods, bakery products) available for sale meet Health Canada's Phase III targets for sodium reduction.
7. Menu labelling is present	A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations.
8. Shelf labelling is present	Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.

INDICATORS	BENCHMARKS
9. Product labelling is present	A simple, evidence-based, government-sanctioned FOP food labelling system is mandated for all packaged foods.
10. Product labelling is regulated	Strict government regulation of industry-devised logos/ branding denoting 'healthy' foods.
11. Government-sanctioned public health campaigns encourage children to consume healthy foods	Broad-reaching child-directed social marketing campaigns for healthy foods.
12. Restrictions on marketing unhealthy foods to children	All forms of marketing unhealthy foods to children are prohibited.
13. Nutrition education provided to children in schools	Nutrition is a required component of the curriculum at all school grade levels.
14. Food skills education provided to children in schools	Food skills are a required component of the curriculum at the junior high level.
15. Nutrition education and training provided to teachers	Nutrition education and training is a requirement for teachers.
16. Nutrition education and training provided to childcare workers	Nutrition education and training is a requirement for childcare workers.
17. Lower prices for healthy foods	Basic groceries are exempt from point-of-sale taxes.
18. Higher prices for unhealthy foods	A minimum excise tax of \$0.05/100 mL is applied to sugar- sweetened beverages sold in any form.
19. Affordable prices for healthy foods in rural, remote, and northern areas	Subsidies to improve access to healthy food in rural, remote, or northern communities to enhance affordability for local consumers.
20. Incentives exist for industry production and sales of healthy foods	The proportion of corporate revenues earned via sales is taxed relative to its health profile (e.g. healthy food is taxed at a lower rate and unhealthy food is taxed at a higher rate).
21. Reduce household food insecurity	Reduce the proportion of children living in food insecure households by 15% over three years.

INDICATORS	BENCHMARKS
22. Reduce households with children who rely on charity for food	Reduce the proportion of households with children that access food banks by 15% over three years.
23. Nutritious Food Basket is affordable	Social assistance rate and minimum wage provide sufficient funds to purchase the contents of a Nutritious Food Basket.
24. Subsidized fruit and vegetable subscription program in schools	Children in elementary school receive a free or subsidized fruit or vegetable each day.
25. Weight bias is avoided	Weight bias is explicitly addressed in schools and childcare.
26. Corporations have strong nutrition -related commitments and actions	Most corporations in the Access to Nutrition Index with Canadian operations achieve a score of ≥ 5.0 out of 10.0.
27. Breastfeeding is supported in public buildings	All public buildings are required to permit and facilitate breastfeeding.
28. Breastfeeding is supported in hospitals	All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards.
29. Healthy living and obesity prevention strategy/action plan exists and includes eating behaviours and body weight targets.	A comprehensive, evidence-based childhood healthy living and obesity prevention/action plan and population targets for eating behaviours and body weights exist and are endorsed by government.
30. Health-in-All policies	Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.
31. Childhood health promotion activities adequately funded	At least .01% of the Alberta provincial budget is dedicated to implementation of a whole of government approach to a healthy living and obesity prevention strategy/action plan, with a significant portion focused on children (health is accountable for earmarking prevention funding).
32. Compliance monitoring of policies and actions to improve children's eating behaviours and body weights	Mechanisms are in place to monitor adherence to mandated nutrition policies.
33. Children's eating behaviours and body weights are regularly assessed.	Ongoing population-level surveillance of children's eating behaviours and body weights exists.

INDICATORS	BENCHMARKS
34. Resources are available	A website and other resources exist to support programs and initiatives of the childhood healthy living and obesity prevention strategy/action plan.
35. Food rating system and dietary guidelines for foods served to children exists	There is an evidence-based food rating system and dietary guidelines for foods served to children, and tools to support their application.
36. Support to assist the public and private sectors to comply with nutrition policies	Support (delivered by qualified personnel) is available free of charge to assist the public and private sectors to comply with nutrition policies.

The Nutrition Report Card is organized according to the elements of the adapted theoretical framework into environments, with additional subdivisions of categories, indicators, and benchmarks (Brennan et al., 2014). Examples of each subdivision are described below.

ENVIRONMENTS	Four types of micro-environments (physical, communication, economic, social) and the political macro-environment. Example: Physical Environment
CATEGORIES	Indicators are grouped into broader descriptive categories within each type of environment. Example: Food Availability Within Settings
INDICATORS	Specific domains within each category in which actions and policies will be assessed. Example: High availability of healthy food
BENCHMARKS	Benchmarks of strong policies and actions are provided for each indicator. Example: Approximately 3/4 of foods available in schools are healthy

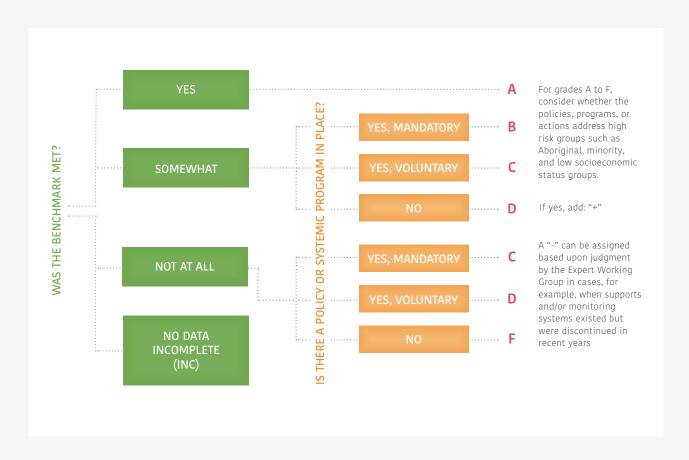
Finally, the Nutrition Report Card aims to catalyze and inform various stakeholders about the landscape of policies in Alberta, and then delineate recommendations based on a broad portfolio of evidence-based strategies. Recognizing that success in healthy eating behaviors cannot be achieved through any single strategy, the Nutrition Report Card is not intended to exhaustively document the state of children's food environments, but rather to provide a snapshot of key levers for change. Benchmarking helps to strengthen the accountability of systems relevant to food environments with the overall goal to stimulate a greater effort from governments to reduce diet-related chronic diseases and their related inequalities.

Grading the Nutrition Report Card

Based on the best available scientific knowledge and data on policies, programs, and actions relevant to each indicator, the 2018 Expert Working Group used the grading scheme illustrated below to assign a grade to each indicator. The grading scheme follows a series of three key decision steps:

- 1. Has the benchmark been met?

 If yes, indicator receives "A" and proceed to step 3.
- 2. Is there a policy or program in place? If yes, is it mandatory or voluntary?
- **3. Are high-risk groups** (e.g., First Nations, Indigenous, minority, and socioeconomically disadvantaged groups) addressed?



THE GRADING PROCESS

This section illustrates the process the Expert Working Group used to assign grades for each of the indicators.



Has the benchmark been met?

First, the Expert Working Group determined whether the benchmark was met. Consider the following benchmark (remember, a benchmark is a specific action that can be taken for each indicator):

Example of a Benchmark

A minimum excise tax of \$0.05/mL is applied to sugar-sweetened beverages sold in any form

A jurisdiction that levies a \$0.05/100mL tax on sugar-sweetened beverages meets the benchmark.

A jurisdiction that levies a \$0.03/100mL tax on sugar-sweetened beverages does not meet the benchmark.



Are policies/systemic programs in place? If so, are they mandatory or voluntary?

Next, the Expert Working Group considered whether policies/systemic programs were in place to support achievement of the benchmark. Policies/systemic programs can include, but are not limited to:

- Government-sanctioned guidelines for healthy foods
- Provincially mandated programs
- Dedicated personnel supporting strategies/action plans
- · Government food and nutrition acts and regulations



Are high-risk groups addressed?

Determine whether identified policies and/or programs took high-risk groups under consideration. If the answer is yes, a "+" was given.

Grades are given per Environment, per Category, and per Indicator. An Overall grade of Alberta's current food environment and nutrition policies is given as well.

What overall grade did Alberta receive on the 2018 Nutrition Report Card?



Following this year's rigorous grading process, Alberta received an overall score of 'C'.

Following this year's rigorous grading process, Alberta received an overall score of 'C'. In the following pages, each of the five environment categories starts with 'What Research Suggests' to highlight current best evidence. This is followed by 'Key Findings' based on Alberta data, and then the grades for 15 Indicators and Benchmarks as they relate to municipalities – our area of focus for the 2018 Nutrition Report Card.

FIGURE 1. Adapted Conceptual Framework - highlighting key categories embedded within each environment (Brennan et al., 2011; Olstad et al., 2014; Swinburn et al., 1999)





> FOOD AVAILABILITY WITHIN SETTINGS

Policies and actions that increase availability of healthy* foods and limit availability of unhealthy foods in schools, childcare, and community settings (including foods served at meals and sold in concessions and vending machines).

*Healthy foods = 75% of food offered meets the 'Choose Most Often' and 'Choose Sometimes' categories according to the Alberta Nutrition Guidelines for Children and Youth (ANGCY).

SETTING	HIGH AVAILABILITY OF HEALTHY FOOD IN SETTINGS
SCHOOL	C+
COMMUNITY	D

What Research Suggests

Consumption of energy-dense, nutrient-poor foods and beverages is associated with poor eating behaviours and an increased risk for obesity (Jaworowska et al., 2013; Burgoine et al. 2014; Terry-McElrath et al., 2014; Basu et al., 2013; Malik et al., 2013; Mâsse et al., 2014). Eating behaviours are shaped by community food environments, which influence access to healthy or unhealthy foods (Fitzpatrick et al., 2017; Burgoine et al., 2014). Children tend to choose healthier foods when such foods are readily available, and when unhealthy foods are harder to access (Chriqui et al., 2014; Cohen et al., 2014; Driessen et al., 2014; Ganann et al., 2014; Mikkelsen et al., 2014; Niebylski et al., 2014; Rudelt et al., 2014; Afshin et al., 2015; Litwin et al., 2015). The WHO Report of the Commission on Ending Childhood Obesity emphasizes the importance of establishing healthy food environments within schools and recreation facilities—key environments frequented regularly by children and youth (World Health Organization, 2017).

Nutrition policies and programs which increase the availability of healthy foods, and decrease the availability of unhealthy foods, can positively influence eating behaviours (Micha et al., 2018; Cradock et al. 2011; Taber et al., 2013). For example, a recent COMPASS study indicated that teens in Alberta drink 16% more sugar-sweetened beverages than teens in Ontario (Godin et al., 2018). The authors explain that this may be partly owing to Ontario's mandatory school nutrition policy (as compared to Alberta's voluntary guidelines) (Godin et al., 2018). Encouragingly, youth and young adults in Canada have demonstrated high levels of support for mandatory nutrition policies in schools (Bhawra et al., 2018). That said, adequate resources must be invested to support the implementation, monitoring, and evaluation of these policies (Vine et al., 2017). Potential barriers to improving healthy food availability and decreasing unhealthy food availability in settings like schools or recreation facilities include rigid cultural norms and traditions, individualistic tendencies emphasizing personal choice and responsibility, and the financial costs associated with providing healthy foods (McIsaac et al., 2018).

High Availability Of Healthy Food In School Settings

Benchmark: Approximately 3/4 of foods available in schools are healthy.*

*Healthy foods = 75% of food offered meets the 'Choose Most Often' and 'Choose Sometimes' categories according to the Alberta Nutrition Guidelines for Children and Youth (ANGCY).

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Mandatory (only for schools in the Alberta School Nutrition Program)	C+

Q Key Findings

1. The Alberta School Nutrition Program has been rolled out across Alberta. Students in participating schools receive a daily nutritious meal that follows the Alberta Nutrition Guidelines for Children and Youth (ANGCY) (see: https://education.alberta.ca/school-nutrition-program/school-nutrition-program/?searchMode=3).

ALBERTA SCHOOL NUTRITION PROGRAM DEVELOPMENT YEAR **PARTICIPATING** Investment Reach **SCHOOLS** \$3.5 million Over 5000 students 2016/2017 Pilot 14 school authorities (K-6)Expansion to all 62 \$10 million Approximately 22,000 2017/2018 public, separate, and students in more Francophone school than 215 schools authorities (K-6, with some schools including 7-12 students as well) \$15.5 million All 62 public, separate, Estimating over 2018/2019 and Francophone 30,000 students school authorities (K-6, with some 7-12 students as well)



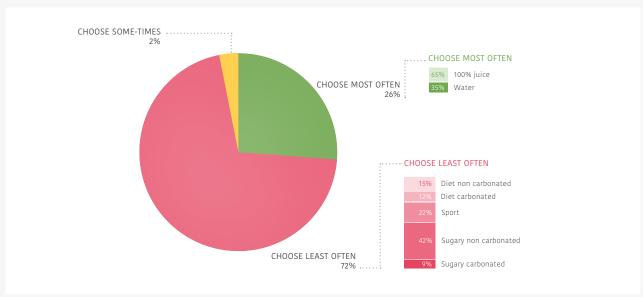
In the 2017/2018 school year, the Alberta School Nutrition Program fed approximately 22,000 of the 717,376 Kindergarten to Grade 12 students in Alberta, or approximately 3% of all Albertan students. If looking strictly at the target population of K-6 students, then 20,000 students fed out of 399,720 means approximately 5.5% benefited from this program (see: https://education.alberta.ca/alberta-education/student-population-overview/).

- 1. PARTICIPATING SCHOOLS ARE REQUIRED TO:
- Provide a daily nutritious meal that adheres to the ANGCY 'Choose Most Often' food choices (funds are not to be used for development of infrastructure or food handling facilities)
- Include a nutrition education component, ensuring connection to the existing curriculum
- Ensure that teachers, parents, caregivers, and community members also learn about food labels, food choice and preparation, and accessing food resources
- Submit a detailed proposal to Alberta Education to show plans for introducing a new or expanding an existing school nutrition program, explain how the nutrition program will adhere to the ANGCY, as well as provide ongoing updates on nutrition program activities and expenditures
- Target K-6 students while the initial high-risk schools are in their third year of the program
- Schools that have found efficiencies in serving healthy meals/snacks have found ways to include students in 7-12. Each school determines the feasibility of feeding beyond the target age group (Government of Alberta, 2018).
- 2. The COMPASS study (Godin et al., 2018) assessed food and beverages offered in nine Alberta schools in the 2016-17 school year and found that the majority of food available is not considered healthy. None of the nine schools had written healthy eating policies in place.

However, six of nine schools with a cafeteria had daily healthy specials. Healthy food choices cost the same as unhealthy food choices in five of eight schools, while healthy food choices cost more in three of the eight schools.

- Chips and chocolate bars were the most common items in snack vending machines, representing 45% and 18% of all snack vending machine products, respectively. One school offered fruits and vegetables in vending machines.
- Figure 2 highlights that 72% of the beverages sold in vending machines were categorized as 'Choose Least Often' by the ANGCY. The bar graphs further break down the type of beverages offered, within the 'Choose Most Often' and 'Choose Least Often' categories.

FIGURE 2. Proportion of Beverages by the ANGCY in School Vending Machines (Godin et al., 2018)



Policies/Systematic Programs

Resources

Alberta Health Services, Nutrition and Food Services Resources:

School Menu Checklist, School Food Vendor Checklist, & Special Lunch Days: helps to determine whether school meals/snacks meet recommendations from the Canada Food Guide and Alberta Nutrition Guidelines for Children and Youth see

https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-sch-menu-checklist.pdf https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-sch-food-vend-checklist.pdf https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-special-lunch-days.pdf

HEALTHY EATING STARTS HERE - HEALTHY FOOD CHECKER: online tool to check nutrient criteria https://www.albertahealthservices.ca/assets/info/nutrition/HealthyEating/m/he/foodchecker.htm

TABLE 1. Examples of Available Mandatory or Voluntary Policies and Systemic Programs

TYPE OF POLICY OR SYSTEMIC PROGRAM	
	MANDATORY/ VOLUNTARY/NEITHER
Alberta School Nutrition Program (Government of Alberta, 2018) Students from Grades K-6 in participating schools receive a nutritious meal or snack each day. The program is aimed at students with the greatest needs.	Voluntary systemic program

TYPE OF POLICY OR SYSTEMIC PROGRAM

	MANDATORY/ VOLUNTARY/NEITHER
Alberta Nutrition Guidelines for Children and Youth (ANGCY) Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food (Government of Alberta, 2012). (see http://www.health.alberta.ca/documents/Nutrition-Guidelines-AB-Children-Youth.pdf)	Voluntary policy across all settings
Communities ChooseWell Capacity-building initiative that promotes and supports the development of community programs, policies, and partnerships that foster wellness through healthy eating and active living (Alberta Recreation and Parks Association, 2014). (see http://arpaonline.ca/program/choosewell/)	Voluntary systemic program
Health Promotion Coordinators (HPCs) Alberta Health Services personnel supporting school jurisdictions in Alberta to build healthy school communities using a Comprehensive School Health approach. (see http://www.albertahealthservices.ca/assets/programs/ps-1050560-hcyd-gen-hpc-info-handout.pdf)	Mandatory program
Alberta Healthy School Communities Wellness Fund Provides financial and facilitated support for school communities to create healthy environments for their students using a Comprehensive School Health approach (School of Public Health, 2015). (see http://www.wellnessfund.ualberta.ca/)	Voluntary systemic program
Framework for Comprehensive School Health (CSH) approach Provides an evidence-based approach for building healthy school communities that Alberta Health Services (AHS) staff can adapt based on local needs, capacity, and levels of readiness (Alberta Health Services, 2012).	Voluntary systemic program



★ Recommendations

Research: Monitor school food policies and the healthfulness of foods offered on an annual basis.

Practice: Implement the Alberta Nutrition Guidelines for Children and Youth (ANGCY) in all school settings.

Policy: Support local school boards and districts in implementing mandatory rather than voluntary healthy eating policies for improved effectiveness (see the 2017 WHO Report of the Commission on Ending Childhood Obesity at http://www.who.int/end-childhood-obesity/en/)



MUNICIPALITY MUSCLE

Collaborate with local school boards and districts to develop and implement healthy food procurement contracts that adhere to nutrition standards. The procurement contracts should encompass all food and beverages served in schools, including those from third-party vendors (e.g. franchising, fundraising).





Implemented in 2002, school staff in Aklavik worked together to develop the no "junk food" policy (Fournier et al., 2018), with community partners engaged in its implementation. For example, the store across the street does not sell junk food to students during school hours. At the beginning of every school year, the policy is re-enforced by the principal and the District Education Authority chair who go to every classroom to remind students of the policy (see http://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/12/aklavik-1-no-junk-food-policy-in-moose-kerr-school.pdf)



On The Horizon

A policy needs to be in place for at least one year in order to see change. Healthy eating policies are proximal (i.e. directly impact children and youth), not distal and as such change takes significant time and money. The changes that we have noted in policy are likely to see improvements over time.

At the national level, Senator Eggleton tabled a motion for a National Nutrition Program for Children and Youth on June 15, 2018 (see: https://foodsecurecanada.org/resources-news/news-media/press-releases/media-releease-senator-art-eggleton-tables-motion-calling).

HIGH AVAILABILITY OF HEALTHY FOOD IN COMMUNITY SETTINGS: RECREATION FACILITIES

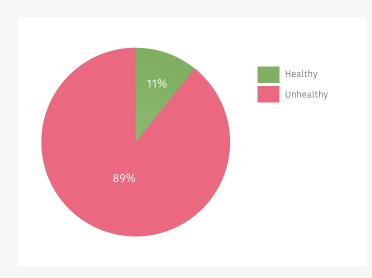
Benchmark: Approximately 3/4 of foods available in recreation facilities are healthy.*

*Healthy foods = 75% of food offered meets the 'Choose Most Often' and 'Choose Sometimes' categories according to the Alberta Nutrition Guidelines for Children and Youth (ANGCY).

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
No	Yes	Voluntary	D

Q Key Findings

FIGURE 3. Healthfulness of Entrées and Main Dish Salads (n=227 foods in 8 facilities)



The Eat Play Live Project (EPL) (see http:// hsf.ca/research/en/eat-play-live-populationintervention-promote-nutrition-quidelineimplementation-recreation) is a multi-site, national research study investigating the impacts of provincial nutrition guidelines and capacity-building on food environments in recreation facilities. EPL aims to integrate healthy food approaches into the day-to-day business of recreation facilities and encourage the sale of healthy food and beverages. From November 2017 to January 2018, the Alberta EPL research team used observational audits to collect data on the types of foods and beverages sold in concessions and vending machines in 11 publicly funded recreation facilities in Alberta.

Researchers recorded entrées and main dish salads available in eight recreation facilities (two of the 11 facilities had 0 concessions, while one facility did not participate in follow-up data collection).

• To be counted as a healthy entrée, it must: (1) be whole grain (if bread, pasta, or rice is part of the dish), (2) have a protein that is baked, broiled, boiled, grilled, or roasted, (3) have one serving of vegetables, and (4) have no added high-fat sauce or ingredients.

FIGURE 4. Vending Machine Beverages Ranked by the ANGCY (n=306)

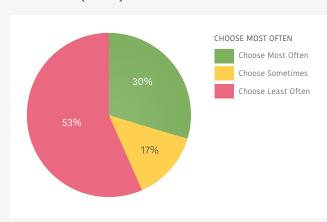


FIGURE 5. Vending Machine Snacks Ranked by the ANGCY (n=465)

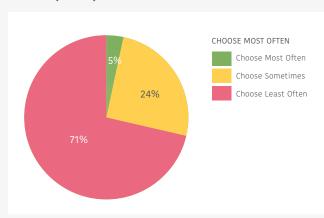
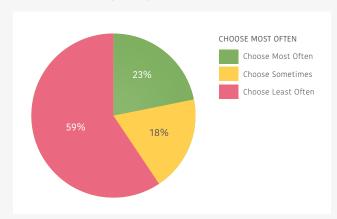


FIGURE 6. Manufacturer-Packaged Beverages Sold at Concessions (n=247)



• To be counted as a healthy main dish salad, it must: (1) have a non-fried protein, (2) be dressed with low-fat/no-fat dressing, or be undressed, with low fat dressing available, and (3) have no more than two high-fat additions (e.g. avocado, bacon). Mayonnaise-based salads, salads with fried meat, or salads in a fried shell did not count. Only 11% of the entrée or main dish salads were rated as healthy.

Vending machine data was collected from 11 recreation facilities. Not all vending machines were audited. The researchers randomly selected up to two beverage machines, two dry snack machines, and one frozen snack machine. Each product was assessed according to the ANGCY using the Brand Name Food List nutrition information database.

Over half (53%) of vending machine beverages and the majority (71%) of snacks were rated as 'Choose Least Often.' the majority of concession stand snacks were also rated as 'Choose Least Often.'

Recreation facilities are recognizing the importance of healthy eating and some are voluntarily opting to bring in contracts that facilitate healthy eating. Various programs are assisting recreation facilities meet this end, including the Eat/Play/Live project, namely Communities Choose Well (see page 19), AHS Registered Dieticians (see page (see page 105, Alberta's 2017 NRC) and CHEERS (see page 105, Alberta's 2017 NRC).

Policies/Systematic Programs

TABLE 2. Examples of Voluntary Programs and Resources

	MANDATORY/ VOLUNTARY/NEITHER
Alberta Nutrition Guidelines for Children and Youth (ANGCY) Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food (Government of Alberta, 2012). (see http://www.health.alberta.ca/documents/Nutrition-Guidelines-AB-Children-Youth.pdf) See page 82 in the ANGCY for an example of a Recreation/Community Centre Policy	Voluntary policy across all settings
The Food Action in Recreation Environments (FARE) project (see http://www.apccprecproject.com/)	Offers policy change resources and tools for recreation facilities

* Recommendations

Research: Explore effective implementation strategies to improve healthfulness of food available in recreation facilities.

Practice: Continue to support and educate facility and concession managers about the ANGCY and provide context-specific strategies for implementation.

Policy: Mandate and provide incentives for implementing the ANGCY in recreation facilities.

Policy Role Models

The Food Action in Recreation Environments (FARE) project has shared several policy stories which highlight the successes of communities across Canada that have taken action to promote healthy food environments within recreation facilities and other public buildings (POWER UP!, 2015) (see http://www.apccprecproject.com/policy-stories).

Montreal passed a motion in December 2017 to phase out the sales of sugar sweetened beverages in all municipal buildings (i.e. arenas, pools, libraries, stadiums, and administrative buildings) (see http://www.cbc.ca/news/canada/montreal/canada-wide-sugar-tax-motion-1.4442849).





MUNICIPALITY MUSCLE

Municipalities have the power to mandate changes to improve the food environment in their recreation facilities. They will see a better return for their efforts if the policies are mandatory as opposed to voluntary.

➤ NEIGHBOURHOOD AVAILABILITY OF RESTAURANTS AND FOOD STORES

Policies and actions that reduce the availability of less healthy types of restaurants and food stores around schools and within communities.

INDICATOR	HIGH AVAILABILITY OF HEALTHY FOOD VENDORS	LIMITED AVAILABILITY OF UNHEALTHY FOOD VENDORS
GRADE	D	D

What Research Suggests

The availability of healthy and unhealthy foods within neighbourhoods can strongly influence children's eating behaviours (Health Canada., 2013; Caraher et al., 2016; Laxer & Janssen, 2014; Virtanen et al., 2015) and health outcomes (Cetateanu & Jones, 2014; Williams et al., 2014). Healthy food is typically harder to find in marginalized neighbourhoods (Luan et al., 2016); with certain racial and ethnic minority groups (e.g. Aboriginal communities) (Black et al., 2014; Canto et al., 2015); low socioeconomic status (SES) neighbourhoods (Bower et al., 2014; Canto et al., 2015); and rural (Olendzki et al., 2015) and urban as compared to suburban neighbourhoods (Zenk et al., 2014). Such social inequities increase the vulnerability of already-marginalized populations to poor diet-related health outcomes. These disparities are often associated with food deserts (areas with low access to affordable healthy foods from grocery stores) (Joyce et al. 2017) and food swamps (areas with an abundance of unhealthy foods from convenience stores and fast-food outlets) (Canto et al., 2015). Research indicates that the availability of healthy foods is greater in grocery stores than in convenience stores (Block & Kouba, 2006; Bodor et al., 2008; Glanz et al., 2007).

Schools are commonly surrounded by unhealthy food outlets (Caraher et al., 2016; Vandevijvere et al., 2016; Virtanen et al., 2015), with limited access to healthy choices, adversely affecting students' dietary choices (Engler-Stringer et al., 2014). For example, a 2016 study in Quebec found that the presence of two or more fast-food outlets within 750m of schools was associated with an increased likelihood of excessive junk food consumption at lunchtime (Cutumisu et al., 2017).

The International Network for Food and Obesity/Non-Communicable Diseases Research, Monitoring and Action Support (INFORMAS) provided the following statement of good practice: "There are policies and programs implemented to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and proximity) and in-store (product density)" (Swinburn et al., 2013, p. 28).

HIGH AVAILABILITY OF HEALTHY FOOD VENDORS

Benchmark: The modified retail food environment index across all census areas is \geq 10.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	No		D

Q Key Findings

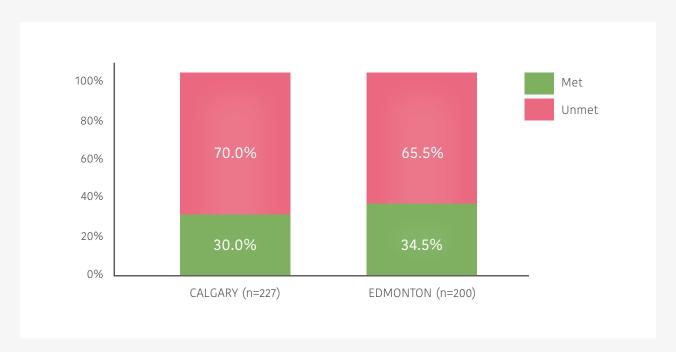
1. Street addresses for all of the food retailers in Edmonton and Calgary were documented. The modified Retail Food Environment Index (mRFEI) (Centers for Disease Control and Prevention (CDC), 2011) formula was calculated according to the proportion of food retailers identified as "healthy" (grocery stores, fruit and vegetable retailers, and food wholesalers, excluding sit-down restaurants as per CDC criteria) versus "unhealthy" (limited-service eating places and convenience stores) for each census tract in either city as defined by boundaries in the 2011 Canadian Census (Statistics Canada, 2011). The mRFEI is the proportion of healthy to unhealthy food retailers, representing "the percentage of retailers that are more likely to sell healthful food" (CDC, 2011). A mRFEI of 10 would mean that 10% of food retailers are more likely to sell "healthful" options. The higher the number the better (100% = all "healthy" retailers; 0% = all "unhealthy" retailers). While a cut-off of 10 is a very low bar, retailers in the North American context are much more likely to sell unhealthy foods than to sell healthful options, so 10 is considered "acceptable."

mRFEI =100 x # Healthy Food Retailers
#Healthy Food Retailers+# Unhealthy Food Retailers



As highlighted in Figure 7, 34.5% of all census tracts in Edmonton and 30% of all census tracts in Calgary met the benchmark mRFEI score of \geq 10.

FIGURE 7. Percentage of Census Tracts that Met the Benchmark Modified Retail Food Environment Index Score of ≥ 10



♣ Policies/Systematic Programs - NONE

* Recommendations

Practice: Use incentives (e.g. tax shelters) and constraints (e.g. zoning by-laws) to influence the location and distribution of food stores, including fast-food outlets and fruit and vegetable suppliers (Raine et al., 2012).

Policy: Use municipal zoning policies to improve retail food environments at the local level.



MUNICIPALITY MUSCLE

- Consider tax incentives for entrepreneurs withinnovative ways of offering healthy foods to neighbourhoods (e.g. mobile markets).
- Consider the healthfulness of products offered when providing licenses to food trucks located at festivals and family-oriented locales where children gather.
- Municipalities use their authority to make changes in zoning policies that improve food environments. For example, when a grocery stores close down, municipalities can prevent covenants that restrict future grocery store potential.

Policy Role Models



See:

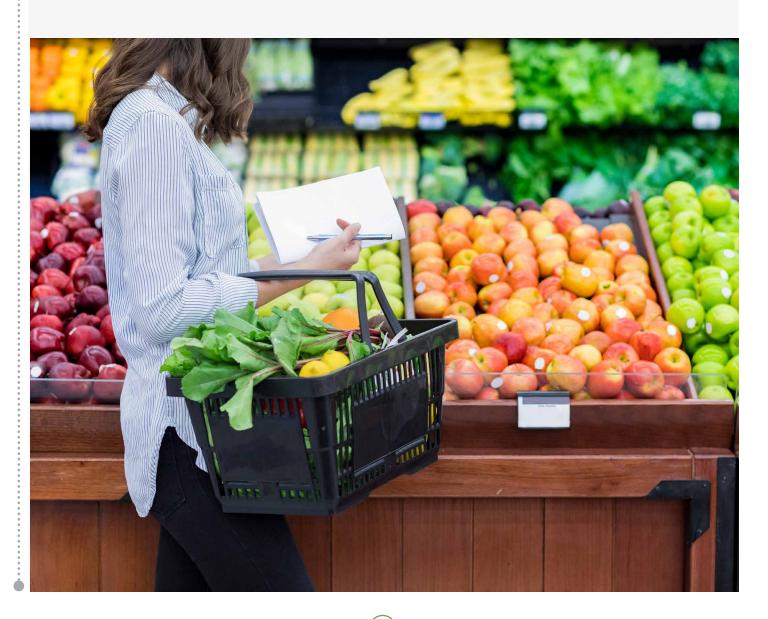
https://www.facebook.com/thecdfreshexpress/

http://www.quebecenforme.org/media/103607/08_research_summary.pdf

https://www.theglobeandmail.com/news/toronto/corner-stores-in-toronto-aregetting-

<u>a-new-kind-of-power-wall-freshfruit/article25419254/</u>

http://ottawa.ca/en/news/newmarketmobile-bus-brings-affordableproduce-ottawa-neighbourhoods



LIMITED AVAILABILITY OF UNHEALTHY FOOD VENDORS

Benchmark: Traditional convenience stores (i.e. not including healthy corner stores) and fast-food outlets are not present within 500m of schools.

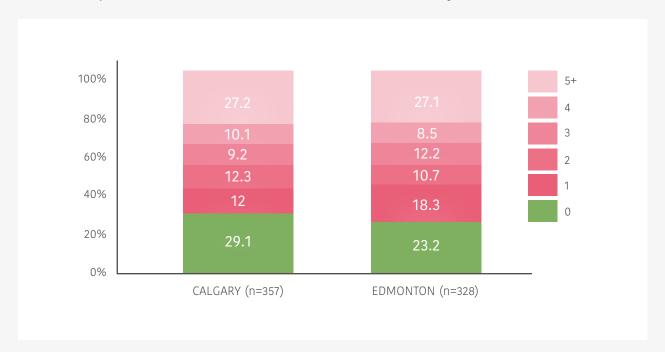
Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	No		D

Q Key Findings

1. Street addresses for all schools and all food retailers in Edmonton, Calgary, High Level, Westlock, and Sundre were documented. We calculated (ArcGIS, 2017) the number of "unhealthy" food vendors (i.e. fast food or take-away eating places and convenience stores) (Centers for Disease Control and Prevention, 2011) within a 500m radius of each school.

Figure 8 highlights the number of convenience stores and fast-food restaurants located within 500m of schools (assumed to sell primarily unhealthy foods). Most schools in Edmonton (77%) and Calgary (71%) have at least one convenience store or restaurant within 500m.

FIGURE 8. Proportion of Schools with 0, 1, 2, 3, 4, Or 5 or More Unhealthy Food Vendors within 500 Metres



2. Similar findings are highlighted in three rural towns from north, central, and southern Alberta. Figures 9, 10, and 11 show that schools typically have unhealthy food vendors within walking distance (500m).

FIGURE 9. Number of Schools in High Level with Unhealthy Food Vendors Within 500 Metres

Unhealthy Food Vendors within 500m of Schools in High Level, Alberta (2018)

Legend

Unhealthy Food Vendors within 500m

No Unhealthy Food Vendors within 500m

School Locations

Unhealthy Food Vendors within 500m

School Locations

Unhealthy Food Vendors within 500m

School Locations

Unhealthy Food Vendors within 500m

School Locations

O 0.5 1 2

Kilometers

Projection: NAD 1983 CSR \$ 10 TM AEP Forest

Scuren: Est HERE. Deletre. Interrep. Increment P Cap. GEBCO, USOS, EAO, NPS. ARCIAN, GeoBare. ICON, Kordon School, N. Cordonane Survey, Est Japan. NET. Text Chies (Vendor Scrop), avistoco. Magnyrindia. © OpenStreetMag contributors, whis the distributors (Community).

FIGURE 10. Number of Schools in Westlock with Unhealthy Food Vendors within 500 Metres

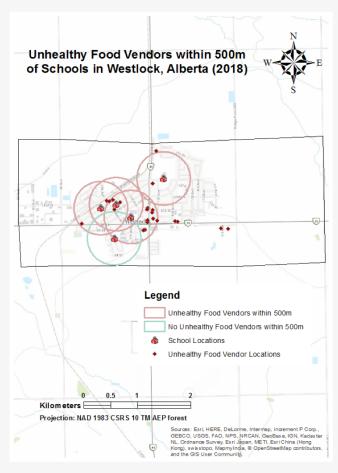
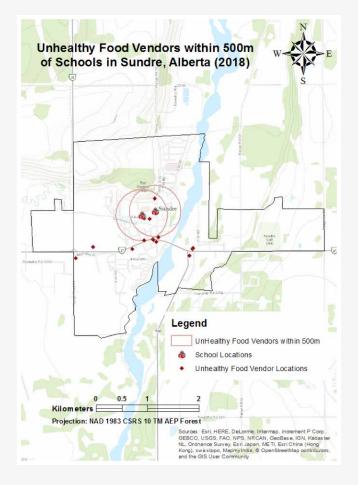


FIGURE 11. Number of schools in Sundre with Unhealthy Food Vendors within 500 Metres







♣ Policies/Systematic Programs NONE

★ Recommendations

Research: Explore facilitators and barriers in decreasing the proximity of unhealthy food stores to schools.

Practice: Continue to work with schools to identify strategies to encourage students to remain on school grounds during breaks, and offer appealing healthy choices at school.

Policy: Encourage municipalities to establish healthy zones around schools through the establishment of appropriate zoning by-laws that limit the number of unhealthy food vendors in close proximity (Heart & Stroke, 2013).



MUNICIPALITY MUSCLE

Municipalities use their authority to make changes in zoning policies to address unhealthy food vendors: (1) When fast food restaurants within 500 metres of schools close down, they can decide what type of food vendor sets up shop next; (2) As new proposals come forward for land use, they can consider a by-law that restricts poor food retailers within 500 metres of schools.

Policy Role Models



For potential data sources and policy options, see the report by L'Association pour la santé publique du Québec, "The School Zone and Nutrition: Courses of action for the municipal sector" (see http://www.aspq.org/documents/file/aspq_gzonage_eng_final(2).pdf).

The City of Detroit prohibits building fast-food outlets within 500 feet of schools (Mair et al., 2005), while South Korea's 'Green Food Zones' restrict sales of unhealthy foods within a 200m radius of schools (Park, 2008).

In 2009, the Waltham Forest Council in East London, UK, banned new fast-food outlets from opening within 400m of schools (see http://www.express.co.uk/news/uk/96145/Takeway-is-shut-tocombat-pupil-obesity).



COMMUNICATION ENVIRONMENT

The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing, as well as the availability of point-of-purchase information in food retail settings, such as nutrition labels and nutrition education.

OVERALL GRADE



CATEGORY	GRADE
Nutrition Information at the Point-of-Purchase	D
Food Marketing	С
Nutrition Education	С

> NUTRITION INFORMATION AT THE POINT-OF-PURCHASE

Policies and actions that ensure nutrition information and/or logos or symbols identifying healthy foods are available at the point-of-purchase in food retail settings (e.g. restaurants, school cafeterias).

INDICATOR	MENU LABELLING IS PRESENT
GRADE	D

Nutrition labelling is a key policy tool for tackling unhealthy diets by providing consumers with the information they need to make healthy choices (Cecchini & Warin, 2015; Cowburn & Stockley, 2005; World Health Organization., 2004). Menu labelling specifically, meaning including nutrition information on restaurant menus, can help consumers make informed food choices when eating outside the home (Hobin et al., 2015).

The first systematic review of menu labelling pertaining to children and youth indicated that menu labelling can be effective in reducing calories purchased for or by children and youth (Sacco et al., 2017). However, this evidence is stronger in artificial, laboratory environments than in real-world studies. The authors note that it is uncertain whether contextual or interpretive menu labelling systems are more effective than calorie information alone. Overall, more research is needed to improve weak study designs (Sacco et al., 2017).

Sacco et al.'s (2017) results mirror the mixed findings of reviews extending to adult populations (Littlewood et al., 2016; Long et al., 2015; VanEpps et al., 2016). A 2018 Cochrane review stated that calorie menu labelling may decrease energy purchased and consumed in restaurants, although again, more rigorous research in real-world settings is required to draw firm conclusions (Crockett et al., 2018).

Other menu labelling reviews cite relatively weak impacts on consumers' eating behaviours and report varied results across population sub-groups and retail food settings (Kiszko et al., 2014; Kreiger & Saelens, 2013; Long et al., 2015). Nevertheless, there is strong public support for menu labelling among Canadian youth and adults (Bhawra et al., 2018; Vanderlee & Hammond, 2013). Menu labelling, which aligns with public values of transparency, can also drive product reformulation, benefiting everyone whether the information is read or not (Bruemmer et al., 2012).

A 2016 Canadian consensus conference with research, practice, and policy experts emphasized the importance of front-of-package (FOP), shelf, and menu labelling as part of a standardized, coordinated, and multi-pronged strategy (Raine et al., 2017).

MENU LABELLING IS PRESENT

Benchmark: A simple and consistent system of menu labelling is mandated in restaurants with ≥20 locations.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Not at all	Yes	Voluntary	D

Q Key Findings

- 1. Alberta does not have menu labelling legislation.
- 2. According to the Canadian Food Inspection Agency, there are no requirements to provide nutrition information for food served in restaurants. Establishments may voluntarily provide nutrition information on their menu or through other formats (Canadian Food Inspection Agency, 2014).

Policies/Systematic Programs

TABLE 3. Examples of Voluntary Programs and Resources

	MANDATORY/ VOLUNTARY/NEITHER
Informed Dining Program Several national chain restaurants (e.g. Tim Hortons, Subway) are rolling out the voluntary Informed Dining program across Canada. Participating restaurants provide information on calories, sodium, and the 13 core nutrients found in a nutrition facts table. This information may be provided in the form of a nutrition menu, brochure, or poster, as well as on an electronic tablet (Healthy Families BC, 2016).	Voluntary Program

* Recommendations

Research: Assess the impact of legislation requiring menu labelling on consumer food choices.

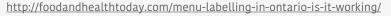
Policy: Require that menu labelling be mandated in restaurants with ≥ 20 locations.



MUNICIPALITY MUSCLE

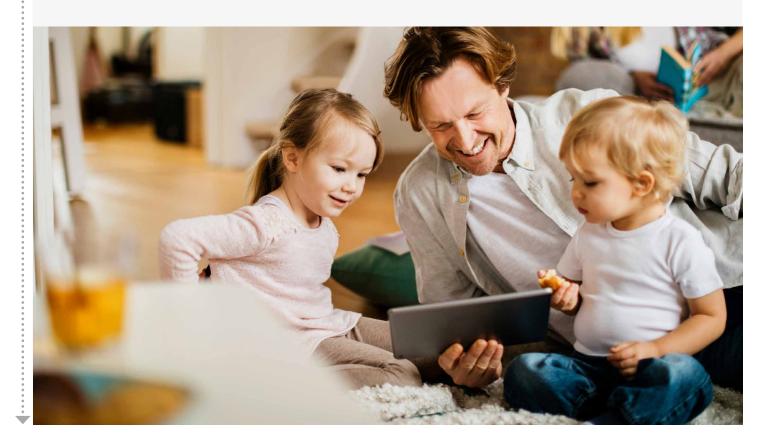
Engage local dietitians in working with local businesses to identify healthy choices on menus (e.g. Bonnyville) (see http://abpolicycoalitionforprevention.ca/wp-content/uploads/2017/04/hac_communityreport_bonville_09.pdf).

Policy Role Models



On January 1, 2017, the Healthy Menu Choices Act was implemented in Ontario—the first province to introduce menu labelling. Food service providers with 20 or more locations were mandated to display nutritional information for standard food items. In a podcast conducted by the Ontario Public Health Association/Nutrition Resource Centre in March 2018, Dr. David Hammond argues that this intervention is having a meaningful impact at the population level:

- People are substituting items for healthier options.
- Public support for menu labelling in Ontario has remained high (over 90%) after its implementation.
- The impact of voluntary initiatives, like Informed Dining in BC, has been undetectable in evaluation efforts, highlighting the importance of mandatory policy.



> FOOD MARKETING

Policies and actions that support marketing of healthy foods and reduce/eliminate all forms of marketing of unhealthy foods to children (<18 years).

INDICATOR	GOVERNMENT-SANCTIONED PUBLIC HEALTH CAMPAIGNS ENCOURAGE CHILDREN TO CONSUME HEALTHY FOODS	RESTRICTIONS ON MARKETING UNHEALTHY FOODS TO CHILDREN
GRADE	C+	D

What Research Suggests

Unhealthy food and beverage marketing contributes to poor eating behaviours in children (Boyland et al., 2016; Kelly et al., 2016). Evidence suggests that unhealthy food marketing negatively affects children's food-related preferences, attitudes, and behaviours (Cairns et al., 2009; Prowse, 2017). The places where children eat, buy, or learn about food (e.g., home, school, grocery stores, restaurants) expose them to powerful unhealthy food marketing through diverse platforms (Prowse, 2017), such as television and movies, radio, online, print, video games, food packaging, billboards, branded clothing and toys, and sports sponsorships (Boyland & Whalen, 2015). A Heart & Stroke (2017) report revealed that in a single year, Canadian children view more than 25 million food and beverage ads online, with more than 90% of these advertising unhealthy choices. Further, the average child watches two hours of television per day, and views four to five food and beverage ads per hour (Heart & Stroke, 2017). A recent American study showed that 76% of foods and 52% of beverages shown in sport-sponsored ads commonly viewed by children and youth (on television, YouTube, and sports organization websites) are unhealthy (Bragg et al., 2018).

While voluntary "self-regulatory" advertising initiatives have emerged as a way to reduce unhealthy food marketing to children (Boyland & Whalen, 2015; Smithers et al., 2016), they have failed to substantially improve the food marketing landscape (Heart & Stroke, 2017; Kunkel et al., 2014). Kent and Pauzé (2018) highlight weaknesses within the voluntary Canadian Children's Food and Beverage Advertising Initiative (CAI), emphasizing the need for mandatory regulations. In an examination of children's preferred websites, the authors found that CAI companies had almost twice as many display ads as non-CAI companies, and the nutritional quality of advertised products was worse (Kent & Pauzé, 2017). Overall, evidence suggests that the current Canadian approaches have not been successful in reducing children's exposure to unhealthy food marketing, aside from the positive effects stemming from Québec's Consumer Protection Act (Government of Quebec, 1980), which prohibits commercial marketing to children under the age of 13 (Prowse, 2017).

Restricting children's exposure to unhealthy food and beverage marketing is an encouraging, cost-effective intervention to improve children's eating behaviours and body weights (World Health Organization, 2012). To counter the prevalence of unhealthy food marketing, public health campaigns (e.g. 5-a-Day) are another promising tool to promote the consumption of healthy foods (World Cancer Research Fund International, 2016;) Afshin et al., 2015; Roberto et al., 2015).

GOVERNMENT-SANCTIONED PUBLIC HEALTH CAMPAIGNS ENCOURAGE CHILDREN TO CONSUME HEALTHY FOODS

Benchmark: Broad-reaching child-directed social marketing campaigns for healthy foods.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Voluntary	C+

Q Key Findings

1. Newly funded Kid Food Nation, a national food skills initiative for kids 7-12 years of age, is being piloted for the next two years, with full implementation expected by 2020. Two areas in Alberta have been chosen as pilots; however, the number of youth involved is unknown at this point.

The initiative has 4 components:

- (1) An in-club programming and food skills curriculum to be be rolled out in ~70 Boys and Girls Clubs across Canada over the next 5 years. The curriculum is eight-weeks in length, with each week focusing on a healthy recipe and specific food skills (e.g. meal planning, safe use of kitchen equipment).
- (2) An online hub (see www.kidfoodnation.ytv.com) and television programming to reach families at home (e.g. cooking videos with kids, celebrity chefs and local talent, grocery shopping lists for nutritious foods, as well as games and guizzes).
- (3) A national recipe challenge for kids across Canada.
- (4) A Kid Food Nation cookbook.

Kid Food Nation is modelled after U.S. Healthy Lunchtime Challenge and Kid's State Dinner programs, and is funded in part by the Public Health Agency of Canada (see: https://www.canada.ca/en/public-health/ news/2017/02/kid food nation.html).

Policies/Systematic Programs

There are no provincially led, broad-reaching, child-directed social marketing campaigns for healthy foods.

* Recommendations

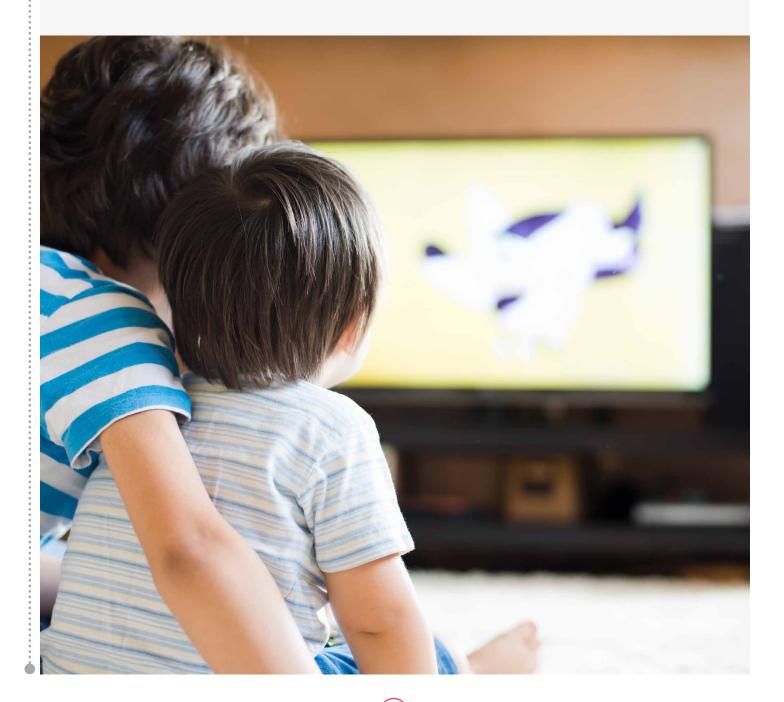
Practice: Develop a provincial, broad-reaching, sustained, and targeted social marketing program to encourage healthy food consumption.



MUNICIPALITY MUSCLE

Use nutrition education resources (available from Alberta Health Services) to promote healthy eating in local settings (public buildings, health centres, recreation centres, etc.)

Partner with local media to promote healthy eating (PSAs, "ask the dietitian" call-ins, etc.)



RESTRICTIONS ON MARKETING UNHEALTHY FOODS TO CHILDREN

Benchmark: All forms of marketing unhealthy foods to children are prohibited.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Not at all	Yes	Voluntary	D

Q Key Findings

1. Back in 2016, Senator Greene Raine introduced Bill S-228 (Parliament of Canada, 2016) in Senate, the Child Health Protection Act, an act to amend the Food and Drugs Act that prohibits food and beverage marketing directed at children. It aims to protect children's health by prohibiting the marketing of unhealthy food and beverages to children. The Bill defines "children" as persons under 13 for the purposes of this Act. Under Bill S-228, Health Canada is developing regulations to implement the proposed prohibition on the advertising of unhealthy food and beverages to children.

The bill was passed in the Senate in June 2017, and Referral to the Health Committee in the House of Commons was completed on February 14, 2018. It passed second reading and is slated for third reading when Parliament resumes in the fall. One limitation is the exemption for sponsorship of children's sporting activities (see https://www.parl.ca/LegisInfo/BillDetails.aspx?billId=8439397&Language=E).

1. National broadcast initiatives and policies are described in Table 4:



IADLL 4.	ADEL 4. Broadcast initiatives, rurpose, and Adherence				
	Canada's Food and Beverage Advertising Initiative (Advertising Standards Canada, 2012)	Broadcast Code for Advertising to Children (Children's Code) (Advertising Standards Canada, 2014a) [except QC]	Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age (Advertising Standards Canada, 2014b) [except QC]		
PURPOSE	As part of this program, Canadian food and beverage companies commit to responsibly marketing their products to children under 12 years and to promoting food and beverages to children consistent with nutrition guidelines. The core principles of the CAI are to: • Market only healthy foods and beverages through television, radio, print, internet, mobile media, and interactive games intended for children under 12 years. • Not place any food or beverage in any program or editorial content directed to children • Not advertise foods or beverages in elementary schools (pre-K to Grade 6).	The purpose of the Children's Code is, "to guide advertisers and agencies in preparing commercial messages that adequately recognize the special characteristics of the children's audience."	The Canadian Broadcasting Corporation (CBC)/Radio-Canada does not accept advertising of any kind in programming and websites designated by the CBC/Radio-Canada as directed to children under 12 years of age. Products that appeal to children and in their normal use require adult supervision may not be advertised in station breaks adjacent to children's programs. The CBC/Radio-Canada may accept advertising directed to children under 12 years of age in other CBC/Radio-Canada programming and websites subject to restrictions" (CBC Radio-Canada, 2014).		

ADHERENCE

Canada's Food and Beverage Advertising Initiative (Advertising Standards Canada, 2012)

Broadcast Code for Advertising to Children (Children's Code) (Advertising Standards Canada, 2014a) [except QC]

Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age (Advertising Standards Canada, 2014b) [except QC]

To date, 18 companies have committed to the initiative, of which 10 have committed to only advertising healthy alternatives to children under 12 years. Nine have committed to not marketing at all to children under 12 years.

In effect across Canada, except in Quebec, where the government prohibits broadcast advertising to children.

In effect in all of Canada, except in Quebec, where advertising to children is not permitted.

Uniform Nutrition Criteria White Paper: The CAI adopted uniform nutrition criteria that came into effect on December 31, 2015. No new information for 2018.

No new information for 2018.

The CAI is a voluntary initiative coming from leading food and beverage companies (the participants).

The current industry standards are not sufficient to protect children from the potential negative impacts of the marketing of unhealthy food (Kunkel et al., 2009; Potvin-Kent et al., 2011, Potvin-Kent & Wanless, 2014) Signatories to the Canadian Children's Food and Beverage Advertising Initiative advertise significantly more foods higher in energy, fat, sugar, and sodium compared to companies that have not signed the pledge (Kunkel et al., 2009). A study on whether children's exposure to television food and beverage advertising has changed since the implementation of the Canadian Children's Food and Beverage Advertising Initiative concluded that although the volume of advertising spots has declined on children's specialty channels, children's exposure to food and beverage advertising has increased (Potvin-Kent & Wanless, 2014).

2. 2016 Compliance Report Findings:

(see: http://www.adstandards.com/en/childrensinitiative/2016ComplianceReport.pdf)

- This public report assesses the performance of 17 participating companies' in implementing and meeting their Children's Food and Beverage Advertising Initiative (CAI) commitments from January 1 to December 31, 2016.
- Ad Standards evaluated each participant's compliance with its individual commitment through an independent audit and a detailed review of the participant's compliance report, completed and certified as complete and accurate by a senior corporate officer.
- The participants reviewed in this report are: Campbell Company of Canada; Coca-Cola Ltd.; Danone Inc.; Ferrero Canada Ltd.; General Mills Canada Corporation; Hershey Canada Inc.; Kellogg Canada Inc.; Kraft Canada Inc.; Mars Canada Inc.; McDonald's Restaurants of Canada Limited; Mondelēz Canada; Nestlé Canada Inc.; Parmalat Canada Inc.; PepsiCo Canada ULC; Post Foods Canada Inc.; Unilever Canada Inc.; and Weston Bakeries Limited.
- Out of the 17 participants, 10 did not engage in advertising directed primarily to children under 12 years of age: Coca-Cola, Ferrero, Hershey's, Kraft Canada, Mars, Mondelēz, Nestlé, PepsiCo, Unilever, and Weston Bakeries. Seven committed to including only products meeting the nutrition criteria outlined in their individual commitments and approved by Advertising Standards Canada in child-directed advertising: Campbell Canada, Danone, General Mills, Kellogg's, McDonald's, Parmalat, and Post.
- 3. 'Let's Stop Marketing Unhealthy Food and Beverages to Kids' Infographic:
- The following is a partial reproduction of Health Canada's 'Let's Stop Marketing Unhealthy Food and Beverages to Kids' infographic as part of Canada's Healthy Eating Strategy. It depicts how kids are targeted by marketing everywhere and highlights how marketing impacts what kids eat and how unhealthy eating can lead to health problems. The full infographic can be found at: http://opha.on.ca/getmedia/c0ee62fa-2ae7-4eac-a2054cee29d5100f/Infographic Let%E2%80%99s-stop-marketing-unhealthy-food-and-beverages-to-kids.pdf.aspx



Policies/Systematic Programs

See Table 4.

* Recommendations

Research: Determine the level of children's exposure to food and beverage marketing in multiple local contexts.

Practice: Encourage adoption of voluntary self-regulatory initiatives following government-approved quidelines subject to independent audits (WHO, 2016; Heart & Stroke, 2017).

Policy: Support development of a national regulatory system prohibiting commercial marketing of foods and beverages to children with minimum standards, compliance monitoring, and penalties for non-compliance (APCCP, 2015; Raine et al. 2013).



MUNICIPALITY MUSCLE

When Bill S-228 comes into force, it will impact local advertising, billboards, etc. within municipalities. However, the federal government is unlikely to have the resources to monitor local settings. Taking a stance to ensure no marketing of unhealthy foods and beverages exists in public buildings, close to schools, and in daycares is a proactive local way to ensure that your community is providing a safe, commercial-free setting for children. Be a trailblazer!



On the Horizon

Restricting Marketing of Unhealthy Food and Beverages to Children: An Update on Proposed Regulations (see: https://www.canada.ca/en/health-canada/programs/consultation-restricting-unhealthy-food-and-beverage-marketing-to-children/update-proposed-regulations.html).



TABLE 5. Proposed Regulations

FOODS WITHOUT MARKETING RESTRICTIONS	FOODS SUBJECT TO MARKETING RESTRICTIONS
Vegetables or fruits (fresh, canned, frozen)	Processed meat
without added ingredients (e.g. sodium, sugars)	Soft drink, regular
Low-sodium french fries	Condiments
Peanut and nut butters, natural	Confectioneries
Plain nuts and seeds	Most vegetables or fruits (fresh, canned, frozen)
Plain fluid milk from skim to 3.25%	with added ingredients (e.g. salt, sugars)
Unsweetened plant-based beverages	Fruit and vegetable juices
Yogurt, plain	Regular french fries
Cereal, ready to eat, wheat, shredded	Peanut and nut butters, fat and sugar added
Cereal, hot, oats, minute/quick, dry	Candied or salted nuts and seeds
Plain whole grains (e.g., barley, quinoa, brown	Flavoured fluid milk
rice, oats)	Sweetened plant-based beverages
Low-sodium crackers	Most sugar-sweetened, ready-to-eat breakfast cereals
Low-sodium breads	Instant sugar-sweetened oatmeal
Snacks (plain popcorn, low-sodium chips)	Most crackers
Plain pasta	Most breads, white and whole wheat
Plain legumes (e.g. beans, lentils)	Snacks (flavoured popcorn, chips)
Lean cuts of meat and poultry	Most muffins, brownies, cookies, cakes

Policy Role Models

Plain fish and seafood



Meat and poultry breaded, coated, with sauces, etc. Fish and seafood breaded, coated, with sauces, etc.

At the national level, the Stop Marketing to Kids (Stop M2K) Coalition was founded in 2014 by the Heart and Stroke Foundation in collaboration with the Childhood Obesity Foundation. The Coalition is made up of 12 non-governmental organizations with written endorsement from dozens of additional organizations and individuals. The Coalition developed the Ottawa Principles, which detail the policy recommendations of restricting all food and beverage marketing to Canadian children ages 16 and younger (see http://stopmarketingtokids.ca/who-are-we/).

In 1980, the Quebec Consumer Protection Act banned the advertising of all goods and services targeted to children under age 13. Out of all the provinces and territories in Canada, children in Quebec have the highest vegetable and fruit intake and the lowest obesity rates (among 6-11 year-olds).

In the United Kingdom, advertisements for foods or drinks high in fat, salt, or sugar were banned in all forms of children's media as of July 1, 2017 (see: https://www.asa.org.uk/news/tougher-new-food-and-drink-rules-come-into-effect-in-children-s-media.html).

On June 4, 2018, Governor Gina Raimondo signed into law Senate Bill 2350A and House Bill 7419A. This was the last step in the legislative process for bills. S. 2350A/H. 7419A prohibiting the advertising and marketing of unhealthy foods and beverages on school property. Rhode Island is third state to enact legislation to protect children and prohibit the marketing of unhealthy foods and sugary drinks in schools (see: https://voicesforhealthykids.org/BREAKING-NEWS-RHODE-ISLAND-ELIMINATES-JUNK-FOOD-MARKETING-SCHOOLS/).

> NUTRITION EDUCATION

Policies and actions that ensure children and those who work in child education and childcare settings receive nutrition education.

INDICATOR	FOOD SKILLS EDUCATION PROVIDED TO CHILDREN IN SCHOOLS
GRADE	D

Over recent decades, food skills (i.e. the skills needed to plan, purchase, and prepare food) have declined in Canada (Chenhall, 2010). This has occurred in tandem with a reduction in children's exposure to food preparation and cooking within home and school environments (Ronto et al., 2016; Slater, 2013). However, research suggests that having better food skills is associated with increased diet quality (Archuleta et al., 2012; Laska et al., 2012; Slater & Mudryj, 2016). Experience with food preparation positively impacts children's food-related preferences, attitudes, and behaviours (Caraher et al., 2013; Hersch et al., 2014; Larson et al., 2006). Receiving food skills education from an early age is therefore critical to promoting lifelong healthy eating behaviours (Utter et al., 2018).

While parental teaching has been recognized as children's primary source for acquiring food skills, cooking classes at school are touted as the second most important source of these skills (Caraher et al., 1999). However, the "optionalization" of food skills in the curriculum has raised public concern, as it may lead to a dependency on convenience foods of poorer nutritional quality than home-cooked meals (Markow et al., 2012; Engler-Stringer, 2010; Stitt, 1996). Food skills education must be prioritized in schools as one of the most effective health promotion strategies that enable individuals to make informed food choices (Stitt, 1996).

Food skills, such as grocery shopping and meal preparation, are particularly important for adolescents in gaining independence (Nelson et al, 2008; Larson et al. 2006), preparing them to eventually move out of their parents' homes (Ronto et al., 2016). Food skills can improve individuals' confidence in the kitchen (Ronto et al., 2016), helping to empower individuals by enhancing their control over their dietary choices (Caraher et al., 1999).

FOOD SKILLS EDUCATION PROVIDED TO CHILDREN IN SCHOOLS

Benchmark: Food skills are a required component of the curriculum at the junior high level.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	No		D

Q Key Findings

1. At the junior high level, food skills education is currently optional. In Grades 5-9, the Career and Technology Foundations program of studies (optional for schools as of fall 2016) allows students to explore their interests, including those related to food and cooking, as they learn about possible occupational areas. Food skills fall under the 'Foods occupational area' located within the 'Human Services' cluster (see http://albertactf.ca/) (Alberta Education, 2017).

Alberta Education offers school jurisdictions the flexibility and support to make local policy decisions and commitments, including programming for food and cooking skills. This flexibility gives school jurisdictions the opportunity to best address the needs of students and the communities they serve, using the resources available to them (J. Bath, personal communication, February 5, 2017).

2. The majority (92%) of districts that completed the 2017 Reporting and Reflection Tool for AHSCWF offered food skills education for Grades 7-9 students, but it was not mandatory. Approximately half of the districts (about 500 schools) offered extracurricular cooking classes or programs for their students. No new data for 2018.

♣ Policies/Systematic Programs

See Key Findings.

* Recommendations

Practice:

- Monitor and advocate for the delivery of food skills education to all students at the junior high level.
- Make food preparation classes available to children, their parents, and child caregivers (Taber et al., 2013).

Policy: Make food skills education mandatory at the junior high level.



MUNICIPALITY MUSCLE

Municipalities working with school boards may suggest that Home Economics be made mandatory for junior high students. Making use of facilities in close proximity to schools, such as recreation centres, to provide cooking classes, community kitchens, and gardens can facilitate hands-on food handling experience when school infrastructure is lacking.



Looking Back

Our Recommendation (2017 Alberta's 2017 Nutrition Report Card on Food Environments for Children and Youth) to make food skills available to students and their parents and child caregivers is echoed in Alberta's School Nutrition Program, as it states that the program "...ensure students, teachers, caregivers and community members have to opportunity to learn more about the importance of reading food labels, choice, and preparation of food...." (Government of Alberta, 2018).





ECONOMIC ENVIRONMENT

The economic environment refers to financial influences, such as manufacturing, distribution, and retailing, which primarily relate to cost of food. Costs are often determined by market forces; however public health interventions such as monetary incentives and disincentives in the form of taxes, pricing policies and subsidies, and healthy food purchasing policies and practices through sponsorship can affect food choice.

OVERALL GRADE



CATEGORY	GRADE
Financial incentives for consumers	С
Government assistance programs	С

> FINANCIAL INCENTIVES FOR CONSUMERS

Policies and actions increase sales of healthy foods and reduce sales of unhealthy foods in retail settings through price modification.

INDICATOR	HIGHER PRICES FOR UNHEALTHY FOODS	AFFORDABLE PRICES FOR HEALTHY FOODS IN RURAL, REMOTE, OR NORTHERN AREAS
GRADE	F	D+

WHAT RESEARCH SUGGESTS

Food prices are important determinants of food choices (Epstein et al., 2012) as difference in price of healthy and less healthy foods can contribute to obesity and chronic disease (Drewnowski & Darmon, 2005). A recent WHO report highlighted a growing body of research on pricing policies and cited food taxes and subsidies as an effective and economical intervention to promote healthier food purchases and consumption (World Health Organization, 2016).

Food Taxes

Financial disincentives for consumers (taxing less healthy foods and beverages) is a public policy strategy that could improve the diets of Canadians (Public Health Agency of Canada, 2011). The WHO Report of the Commission on Ending Childhood Obesity recommended taxation on sugar-sweetened beverages as a feasible strategy to reduce consumption (World Health Organization, 2016). Sugar-sweetened beverages (SSBs) such as energy drinks and pop have been found to be a significant source of added sugar that is associated with obesity and chronic diseases (Jones et al., 2017). Even with extensive evidence on the negative health impacts, SSBs continue be available in Alberta at low prices and widely marketed by industry (Jones et al., 2017). Research has found that a 20% levy on SSBs, which is equivalent to 50 cents per litre, could delay 1,201 deaths in Alberta over 25 years (Jones et al., 2017). Further, 61,324 cases of individuals being overweight or obese, and 21,661 cases of type 2 diabetes could be prevented (Jones et al., 2017). This preventative approach is anticipated to generate approximately \$1.1 billion in health care savings and \$3.5 billion in additional tax revenue over the span of 25 years (Jones et al., 2017).

Cumulative evidence suggests a subsidy on healthy foods and beverages and/or a tax of 10-15% on unhealthy foods and beverages would maximize the success and impact on population dietary behaviours (Niebylski et al., 2015). The preference would be for both economical interventions to be used in tandem (Niebylski et al., 2015). A growing number of countries are either in the process, or have implemented a levy or tax on SSBs including France, the United Kingdom, Ireland, Chile, Mexico, and Finland (Jones et al, 2017). Research, specifically from Mexico, France, and Berkeley and Philadelphia in the United States, has documented a decrease in consumption of SSBs as a result (Falbe et al., 2016; Silver et al., 2017).

Experimental studies have shown that higher SSB prices can reduce consumption, and that in some cases, consumers are more likely to be sensitive to the price if there is an unhealthful signposting attached to the product (Hillier-Brown et al., 2016; Le Bodo et al., 2016). Specifically in Canada, for example, researchers consider an excise duty on pop to be a feasible option, similar to tobacco and alcohol excise duties under the Excise Tax Act (Le Bodo et al., 2016). Excise taxes are preferable to sales taxes from a public health lens because excise taxes can be specific to a particular product and are generally reflected in the shelf price, which may discourage the consumer from choosing the unhealthy product (Le Bodo et al., 2016).

Growing public support for an SSB tax has led to certain municipalities, such as Montreal, taking the initiative to implement related bylaws (Banerjee, 2017). Recent research has found that approximately 40.8% of Canadians between the ages of 16-30 years of age are in support of a tax on sugary drinks (Bhawra et al., 2018). This level of support increased to 59.2% if the money earned from the sugary drink tax was directed towards subsidizing the cost of healthy foods (Bhawra et al., 2018). Food subsidization is an approach that certain evidence has found may be more effective than taxation (Ries, 2012).

Food Subsidies

Research has shown that approximately 83.0% of young Canadians support subsidizing the price of fresh fruits and vegetables (Bhawra et al., 2018). One study found that a 10% price decrease in healthy foods resulted in a 12% consumption increase (Afshin et al., 2017). These findings align with previous evidence that found the same reduction contributed to a 5-7% increase in consumption (Alberta Health Services, 2017). In comparison, it was found that a 10% price increase in unhealthy foods resulted in only 6% decreased consumption (Afshin et al., 2017). Therefore, it can be stated that subsidizing healthier foods can be an effective means of modifying eating behaviours (Liberato et al., 2014; Revenu Québec, Canada Revenue Agency, 2013). Coupons, vouchers, cash rebates, and price reductions are specific examples of financial incentives found to be effective in increasing the purchase and consumption of healthy foods (Purnell et al., 2014; Thow et al., 2014). A recent systematic review and meta-analysis found that subsidies increased fruit and vegetable intake by 14% and other healthful foods by 16% (Afshin et al., 2017). Similarly, a 20% reduction in the price of produce was found to be associated with a 15% per household increase in vegetable purchases and a 35% increase in fruit purchases (Ball et al., 2015).

Lower prices for fruit and vegetables also favourably affect body weight, particularly among low-income families (Powell et al., 2013) and remote Indigenous communities (Magnus et al., 2016). It has been found that combining discounts on fruits, vegetables, diet drinks, and water had the largest reduction in calories per person in remote Indigenous communities (Magnus et al., 2016).

HIGHER PRICES FOR UNHEALTHY FOODS

Benchmark: A minimum excise tax of \$0.05/100mL is applied to sugar-sweetened beverages sold in any form.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Not at all	No		F

Q Key Findings

1. All provinces and territories in Canada have tax credits and incentives (e.g. PST/GST exemptions). However, in Alberta, there are no formal policies to promote healthy eating using tax credits and incentives (Alberta Health Services, 2010). The GST dictates that single-serving foods are taxed based on packaging, not contents. Thus, a 500mL bottle of water is taxed the same as a 500mL soda pop (Government of Canada 1985). Additionally, prepared restaurant foods are taxed at 5%, and healthy food choices are not exempt from this tax (Restaurants Canada, 2016).

In fall 2017, the Finance Department of the Federal Liberal Government quietly tested Canadians' thoughts on the idea of a sugar-sweetened beverage tax. It was reported that many involved in the focus groups were in favour of the tax due to the recognition of the current obesity epidemic and the potential to reduce costs on the health care system. However, other participants were concerned it was simply another tax grab and would not discourage consumption. In conclusion, many participants also agreed that whether or not a sugar-sweetened beverage tax was introduced, other efforts should be targeted towards Canadians, and especially youth, to reduce consumption. Additional suggestions included: removing vending machines from schools and hospitals, and more physical activity and educational programs (Finance Canada, 2017).

On February 10, 2018, City Councilors in St. Albert, Alberta unanimously took a stand in asking the federal government to implement a sugar-sweetened beverage tax. The motion was put forward by City Councilor Wes Brodhead who cited the March 2017 report from the University of Waterloo titled the 'Health and Economic Impacts of Sugary Drinks in Canada' in his argument. Other Canadian municipalities who are also advocating for the implementation of a SSB tax include Montreal and Toronto (Dalhousie University & University of Guelph, 2018).

₹ Policies/Systematic Programs

Currently, no formal policies exist in Alberta to promote healthy eating using tax credits and incentives. Alberta's 2017-2020 Fiscal Plan states that there will be no new tax increases (Government of Alberta, 2017).

* Recommendations

Practice: Promote public and policy-maker understanding and support of a sugar-sweetened beverages tax.

Policy: Implement a minimum excise tax of \$0.05/100mL on sugar-sweetened beverages. Dedicate a portion of this revenue to health promotion programs.



MUNICIPALITY MUSCLE

Similar to St. Albert, municipalities can ask the federal government to implement a sugar-sweetened beverage tax.

Policy Role Models



Finance Minister Robert C. McLeod of the Northwest Territories states that there are plans to introduce a sugary drink tax in the 2018-19 fiscal year (Government of Northwest Territories, 2017-2018).

The Hungarian 'Public Health Product Tax' adopted in 2011 and Mexican 'Special Tax on Production and Services' adopted in 2014 tax energy-dense products, including sugar-sweetened beverages (World Health Organization, 2016). Both of these taxes are levied on the manufacturer or importer, but in the Canadian context would likely have to be imposed at the federal level (Le Bodo et al., 2016)). Current countries that have a SSB tax in place include: Mexico, the United Kingdom, Ireland, France, South Africa, Chile, and certain cities in the United States. To date, the international evidence has found an exercise tax will reduce consumption of SSBs and also generate additional government revenue (Le Bodo et al., 2016).



AFFORDABLE PRICES FOR HEALTHY FOODS IN RURAL, REMOTE, OR NORTHERN AREAS

Benchmark: Subsidies to improve access to healthy food in rural, remote, or northern communities to enhance affordability for local consumers.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	No		D+

Q Key Findings

- 1. High costs associated with the transportation, storage, and distribution of food in isolated Northern communities negatively impact the availability and accessibility of perishable healthy foods (Council of Canadian Academies, 2014). In Northern Canada, feeding a family costs twice as much as it does further south (Veeraraghavan et al., 2016). At the provincial level, Alberta has no initiatives to increase the availability and affordability of nutritious foods in remote and northern areas, or for vulnerable communities (PanCanadian Public Health Network, 2013). Considering the most recently available rate of household food insecurity is 16.7% (Tarasuk, 2018), the province is clearly failing to provide universal access to healthy food.
- 2. To help address this problem, the Government of Canada's subsidy program, Nutrition North Canada (NNC), was launched in 2011 (First Nations and Inuit Health, Health Canada, 2016) with the aim of bringing healthy perishable food to isolated Northern communities (Government of Canada, 2016a). The subsidies are transferred directly to retailers and suppliers registered with the program, who are accountable for passing the subsidy on to consumers. Northerners benefit from the subsidy when they buy subsidized items from retailers in their community. The program subsidizes a variety of perishable healthy foods including items that are fresh, frozen, or refrigerated; have a shelf life of less than one year; or must be shipped by air. A higher subsidy level applies to the most nutritious perishable foods (e.g. fresh fruit, frozen vegetables, bread, meat, milk, and eggs), while a lower subsidy level applies to other eligible foods (e.g., crackers, ice cream, and combination foods such as pizza and lasagna) (Government of Canada, 2016a).

Fort Chipewyan is the only Alberta community currently eligible for the Nutrition North Canada Program. To be eligible for NNC, a community must (Government of Canada, 2016b):

- 1. Lack year-round surface transportation (no permanent road, rail, or marine access), excluding isolation caused by freeze-up and/or break-up that normally lasts less than four weeks at a time
- 2. Meet the territorial or provincial definition of a northern community
- 3. Have an airport, post office, or grocery store
- 4. Have a year-round population according to the national census

A recent report on Aboriginal food security in northern Canada highlighted the subsidization of regionally imported and locally harvested foods as a promising strategy to build food security and increase the amount of healthy food available and consumed in isolated northern regions (Council of Canadian Academies, 2014). Although NNC provides a transportation subsidy, it will not lower costs to make food affordable in the North (Verraraghavan et al, 2016; Government of Canada, 2016b). In northern First Nations communities specifically, food prices are still higher than in non-Indigenous communities who live in nearby northern cities and towns.

NNC has not added any additional communities and the eligibility criteria has remained the same (Government of Canada, 2017). Although the 2018 federal budget had a strong focus on Indigenous and Northern communities, no specific allocation of funds was provided to address food insecurity in Northern communities or expand/alter the NNC program (Government of Canada, 2017).

In Alberta, Fort Chipewyan became one of the first Alberta Indigenous communities to receive an Indigenous Energy Efficiency grant under the province's carbon tax and climate leadership plan. An allocation of \$636,460 was provided to the Athabasca Chipewyan First Nation, which is planning on opening a new grocery store in the spring. It is anticipated this will create competition between it and the community grocery store that is owned by the North West Company and hopefully lower the cost of food (Thurton, 2018).

3. The Amazon Effect: Rural, remote and Northern communities have seen a rise in Amazon prime memberships in an effort to find more affordable prices for a range of goods including non-perishable foods. In 2017, Minister of Crown-Indigenous Relations and Northern Affairs Carolyn Bennett acknowledged that a high reliance on Amazon products amongst Northern communities proves that Nutrition North Canada is not effective (Government of Canada, 2017). Moreover, individuals who rely on Amazon and consider it a life saver, acknowledge it is not a long-term solution. To receive the shipping, you must be an Amazon Prime member which requires a credit card. In addition, in 2015, Iqaluit was the only community in the Northwest territories where free shipping was available. However, if Amazon continues to defy the current food purchasing environment and compete with local grocery stores, it is anticipated more families in remote and northern communities may rely on the online distributor as their main source of food. Perishable food is not yet included (Government of Canada, 2017).

Policies/Systematic Programs

There are no provincially led policies or programs in place in Alberta.

* Recommendations

Practice

- Create provincial initiatives to increase the availability and accessibility of nutritious foods in remote and Northern areas.
- Expand and revise the Nutrition North Canada program to include more remote Alberta communities.

Policy:

Provide subsidies directly to consumers to increase the affordability of healthy food in rural, remote, and Northern communities.



MUNICIPALITY MUSCLE

Municipalities can use transportation dollars to subsidize the transport of healthy food into rural/remote/Northern communities. Municipalities can also liaise with local agricultural producers and local retailers to find cost-effective ways of subsidizing healthy foods.

Policy Role Models



Manitoba's Northern Healthy Food Initiative (see: http://www.gov.mb.ca/imr/ir/major-initiatives/nhfi/) supports local and regional projects to increase access to food. The initiative works with communities to strengthen partnerships with NGOs to support local food production and access, build on community development efforts, facilitate the sharing of knowledge, and enhance support for local efforts that reflect cultural values (Glanz et al., 2007). Projects include support for horticulture activities, greenhouse operations, fishing, and community scale poultry operations (Glanz et al., 2007). In addition, they have a program called Affordable Food in Remote Manitoba (AFFIRM), which "reduces the price of milk, fresh vegetables and fresh fruits in eligible remote northern communities through a subsidy. The subsidy is provided to participating stores and each store is required to pass on the full subsidy to the customer by reducing the sale price of milk, fresh vegetables, and fresh fruit" (see http://www.gov.mb.ca/healthyliving/hlp/nutrition/affirm/index.html) (Glanz et al., 2007).

On The Horizon



The Standing Committee on Agriculture and Agri-Food's Report on a Food Policy for Canada, Recommendation 3, states: "The committee recommends that the Government support the implementation of initiatives to combat food insecurity in Indigenous and northern communities by reviewing the Nutrition North Canada program." This recommendation was not well received by Food Secure Canada (2018) and organizations across the North as consultations have been completed. Instead, what they believe is needed is, "a complete overhaul and reinvention of existing programs to enhance Northern and Indigenous food sovereignty by building the resilience of regional food systems in the North, including support for harvesting and hunting of traditional and country foods".

➤ GOVERNMENT ASSISTANCE PROGRAMS

Policies and actions that ensure low-income families can afford to purchase a nutritious diet.

INDICATOR	SUBSIDIZED FRUIT AND VEGETABLE SUBSCRIPTION PROGRAM IN SCHOOLS
GRADE	C+

What Research Suggests

A Canada-wide study of food intake among children and youth showed consumption of nutrients such as vitamins A, D, and B12, and calcium was lower during school hours than out-of-school hours (Tugault-Lafleur, 2017). Emerging evidence suggests that the provision of free or subsidized fruit and vegetables in schools can increase their intake (Brennan et al., 2014). Subsidized programs that provide free fruit and vegetables can also be more effective than paid programs (Bere et al., 2010). Subsidized programs in the United Kingdom, Netherlands, United States, Denmark, New Zealand, Greece, and Norway all have resulted in an increase of children's fruit and vegetable intake (Bere et al., 2015; Cullen et al., 2015; Olsho et al., 2015; Petralias et al., 2016).

Recent research has found that subsidized fruit and vegetable programs can also be effective when targeting socioeconomically disadvantaged children (Olstad et al., 2017). The United States Department of Agriculture's Fresh FV Program found that providing free daily fruits and vegetables reduced disadvantaged children's risk of obesity and increased their overall daily intake (Olsho et al., 2015). In comparison, a similar program that is part of New Zealand's Healthy Eating Action Strategic Plan, did not see an increase in primary-school children's total daily intake of fruit (Ashfield-Watt et al., 2009). However, an increase in fruit intake during school hours was documented (Ashfield-Watt et al., 2009). Therefore, research has shown that free fruit and vegetable programs can assist in maintaining, or even reducing, dietary inequities amongst children (Olstad et al., 2016). Further research is required to identify effective interventions aimed at very young children, youth, and adults (Olstad et al., 2017).

Food-centered responses to food insecurity such as food banks, free meal services, and community and school food programs continue to provide limited impact on household food insecurity (Alberta Health Services, 2017). This is due to these services perpetuating health inequities, generating no long-term reprieve, and not becoming a viable option until a household faces severe food insecurity (Alberta Health Services, 2017).

SUBSIDIZED FRUIT AND VEGETABLE SUBSCRIPTION PROGRAM IN SCHOOLS

Benchmark: Children in elementary school receive a free or subsidized fruit or vegetable each day.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Mandatory (only for schools in the Alberta School Nutrition Program)	C+

Q Key Findings

1. In November 2016, Alberta Education began piloting a School Nutrition Program that provides approximately 5.5% (22,000) students from K-6 with a daily nutritious meal that adheres to the ANGCY 'Choose Most Often' food choices (see Indicator #1, on page 16 for further details).

A summary of the program was released and some of the key findings included improved student attendance, decrease in negative student behaviour incidents, improved student understanding of healthy food choices, and an increased sense of community and belonging in the school (Alberta Education, 2017).

While a universal (e.g. for all K-12 students) fruit and vegetable subscription program does not exist in Alberta, there are many programs and initiatives to ensure that food is available for students if/when needed.

TABLE 6. Government-Funded Programs (or Partially Supported by Government)

ORGANIZATION	DESCRIPTION	REACH
Alberta School Nutrition Program* https://education.alberta. ca/school-nutrition- program/?searchMode=3	K-6 students from participating schools receive a nutritious meal or snack each day. The program is aimed at students with the greatest needs.	Serves approximately 22,000 K-6 students in more than 215 schools (some schools include 7-12 students as well).

ORGANIZATION	DESCRIPTION	REACH
Northland School Division Hot Lunch and Morning Nutrition Program https://nsd61.ca/departments/ school-food-services	All children received a hot lunch and morning snack at no charge. In addition, nutrition education is targeted by ensuring up to half of the children's daily nutritional requirements are met.	Serves the Northland School Division, which includes 26 schools.
APPLE schools http://www.appleschools.ca/	For the first time in December 2016, APPLE Schools received a \$250,000 grant from the Government of Alberta in order to support their existing schools until the end of 2017 The grant was used to continue the Comprehensive School Health program which provides healthy meals or snacks to supported schools.	Currently serves 63 schools in the province after expanding to 12 vulnerable schools in rural Northern Alberta in 2016-2017. In 2018, APPLE Schools will be expanding beyond the province with two schools in both Manitoba and the Northwest Territories. As a result of the expansion, the full form of APPLE now stands for A Project Promoting Healthy Living for Everyone in schools. By 2023, APPLE Schools hopes to be supporting 100 schools.
E4C* https://e4calberta.org/focus- areas/	This snack program provides a healthy mid-morning snack to all students. The lunch program provides a healthy lunch, including at least one serving of fruit or vegetables to all students whose parents have subscribed. The summer snack program ensures children have access to regular meals over the summer months.	Serves 15 public and 9 Catholic elementary schools in highneeds locations in Alberta. Serves 10 public and Catholic schools in high-needs locations in Alberta. See above.

ORGANIZATION	DESCRIPTION	REACH
Student-run breakfast and lunch program in Ermineskin School, Maskwacis http:// abpolicycoalitionforprevention. ca/expansion-of-student- nutrition-pilot-a-step-in-the- right-direction-but-more- government-action-needed	Students are provided breakfast, lunch, and snacks. High school students are responsible for preparing the meals and local grocers and producers support the program to help lower costs. Although elementary students do not prepare the meals, they do learn about nutrition and how food is grown.	Serves K-12 students at Ermineskin School in Maskwacis.

Note: *Organizations that specifically target individuals or groups experiencing food security issues.

TABLE 7. Privately Funded Programs.

ORGANIZATION	DESCRIPTION	REACH
Brown Bagging for Calgary's Kids (Brown Bagging for Calgary Street Kids Society, 2015) http://bb4ck.org/our-story/our- work/	Free, healthy lunches are delivered to students identified by their teacher as having limited food to eat for the day.	The program now supports 4,200 children each day with the support of 625 volunteers.
Food for Thought* https://www. foodforthoughtedmonton.com/	Healthy meals and snacks are provided to children in participating schools.	Serves 500 students in 13 schools in high-needs locations in Edmonton.
Fuel for School https://www.cbe.ab.ca/get- involved/partners/Pages/Fuel- for-School.aspx	This breakfast program is for all students of participating schools.	Serves 19 Fuel for School programs in Calgary. In 2016, there were 20 elementary schools involved in the Fuel for School program. Each school served between 20-60 breakfasts each day.

ORGANIZATION	DESCRIPTION	REACH
Meals on Wheels, Calgary https://mealsonwheels.com/ meals-programs/hot-soup- program/	Food support is provided to vulnerable students twice a week through the Hot Soup Program.	15 elementary schools in Calgary are supported.
Local school lunch/ breakfast programs in school divisions	Some schools offer daily breakfast, lunch, and/or snack programs; however, the majority offer healthy meals or snacks a few times a week pending donation and community support. Many schools also receive grants from Breakfast for Learning or Breakfast Clubs of Canada to support their meal program.	*e.g. Grande Prairie Catholic School District runs a Snack Program for three schools to provide a healthy morning breakfast, fresh fruit for a mid- morning snack, and nutritious lunch to all students. http://www.gpcsd.ca/ Grande%20Prairie%20 Schools%20Snack%20Program. php e.g. Whitecourt Central School provides approximately 145 servings of breakfast per day for free. http:// whitecourtcentral.ca/clubs e.g. Community Lunch Box Program in Northern Gateway and Living Waters School Divisions offers breakfast, lunch, and snacks to all students. http://www.ngps.ca/ download/14129

Note: *Organizations that specifically target individuals or groups experiencing food security issues.

Policies/Systematic Programs

School Nutrition Programs (see above).

* Recommendations

Research: Assess the impact of existing programs providing subsidized fruit and vegetable in schools in Alberta.

Practice: Develop province-wide strategies for providing subsidized fruit and vegetables to elementary students.

Policy: Commit sustainable government funding to existing fruit and vegetable subscription programs and designate funding for new programs to increase reach across Alberta.



Looking Back

The 2016 Nutrition Report Card Recommendations called for strategies for providing subsidized fruit and vegetables, focusing on at-risk schools in Alberta. The government has responded with a pilot nutrition program which targets K-6 students in at-risk schools (see Recommendations page 67, Alberta's 2016 Nutrition Report Card).



MUNICIPALITY MUSCLE

Municipalities working with school boards may suggest making use of facilities in close proximity to schools, such as recreation centres to prepare food for nutrition programs, when school infrastructure is lacking.

Municipalities may encourage local farmers' markets to provide school children with weekly vouchers for free fruit and vegetables (e.g. combine the free fruit/veg voucher with school reading programs etc.)



Policy Role Models

The BC School Fruit & Vegetable Nutritional Program (BCSFVNP) has grown from 10 schools in 2005 to 1,464 K-12 public schools and K-12 First Nations schools in the 2015-2016 school year. Fresh fruit and vegetable snacks are provided every other week and served during class time, reaching 549,000 students. Schools enrolled in BCSFVNP are also eligible for the pilot BCSFVNP+Milk program. The BCSFVNP+Milk program is offered to K-5 and provides a small portion of milk to students along with their fruit or vegetable snack. These programs are funded by the BC Ministry of Health. (see https://www.bcaitc.ca/bc-school-fruitvegetable-nutritional-program).



On the Horizon

Senator Eggleton tabled a motion to launch a National Nutrition Program for Children and Youth June 15, 2018 (OTTAWA) - The Coalition for Healthy School Food issued the following statement in support of Senate Motion no. 358:

Senator Art Eggleton's motion will enrich an important national conversation about children's health. Specifically, this motion will help focus the Government's attention on the unanimous 2015 recommendation of the Standing Committee on Social Affairs Science and Technology (#17) that the Minister of Health "Advocate for childcare facility and school programs related to breakfast and lunch programs...and nutrition literacy courses." A 1997 recommendation made by the House of Commons Standing Committee on Finance "to create a national school nutrition program" was never followed-up (See: https://www.healthyschoolfood. ca/blog/senator-eggleton-tables-motion-to-launch-a-national-nutrition-program-for-children-and-youth).



SOCIAL ENVIRONMENT

OVERALL GRADE

The social environment refers to the attitudes, beliefs, and values of a community or society. It also refers to the culture, ethos, or climate of a setting. This environment includes the health-promoting behaviours of role models, values placed on nutrition in an organization or by individuals, and the relationships between members of a shared setting.

CATEGORY	GRADE
Breastfeeding Support	В

➤ BREASTFEEDING SUPPORT

Policies and actions to encourage breastfeeding in community settings.

INDICATOR	BREASTFEEDING IS SUPPORTED IN PUBLIC BUILDINGS	BREASTFEEDING IS SUPPORTED IN HOSPITALS
GRADE	В	С

What Research Suggests

Breastfeeding infants has been found to have numerous short- and long-term benefits (Binns et al., 2016). These benefits include improved cognitive development, protection from infectious diseases, and a reduced risk of chronic diseases such as diabetes, and cardiovascular disease (Binns et al., 2016; Lorena et al., 2018). Recent meta-analyses have also suggested that breast milk may serve as a protective factor against obesity in children (Horta et al., 2015; Kim et al., 2018; Yan et al., 2014). Breastfeeding has been acknowledged as an important public health intervention around the globe; WHO (World Health Organization & UNICEF, 2003), World Cancer Research Fund (World Cancer Research Fund & Research, 2007), and national health bodies such as the Canadian Pediatric Society (Health Canada, Canadian Paediatric Society, Dietitians of Canada, & Breastfeeding Committee for Canada, 2012, 2014), Dietitians of Canada (Health Canada et al., 2012, 2014), and Health Canada (Health Canada et al., 2012, 2014). These stakeholders all recommend exclusive breastfeeding for the first six months of life, and continued breastfeeding, with nutritionally adequate and safe complementary foods, for up to two years or beyond (World Cancer Research Fund & Research, 2007; Health Canada et al., 2012, 2014; World Health Organization & UNICEF, 2003). Exclusive breastfeeding refers to no food or drink, including water, except for breastmilk (World Cancer Research Fund & Research, 2007). Nevertheless, Canadian breastfeeding rates have consistently fallen below these strong recommendations (Abbass-Dick & Dennis, 2018). Improving breastfeeding rates remains a public health priority due to the wide variation amongst different Canadian communities and cultures (Alberta Health Services, 2012).

Recent research has found that a particularly vulnerable group for reduced breastfeeding rates is food-insecure families with newborns (Orr et al., 2018). Canadian health policies and public health programs consistently promote breastfeeding as a secure, low cost food supply for infants living in food insecure households (Frank, 2015). It was shown by Sarah Orr and colleagues (2018) that mothers of infants living in food-insecure households attempt to follow breastfeeding recommendations. However, they were less able to implement the recommendations compared to mothers who were food secure (Orr et al., 2018). This finding was confirmed with 50% of food-insecure mothers ceasing breastfeeding by two months whereas a majority of food-secure mothers continued breastfeeding for four or more months (Orr et al., 2018). As a result, research suggests that further initiatives are required to specifically target breastfeeding rates and support mothers in food-insecure households (Orr et al., 2018). Additional vulnerable populations for reduced rates of breastfeeding include mothers with a lower income and education (Lorena et al., 2018).

Social and cultural attitudes influence the structural context for breastfeeding (Rollins et al., 2016). In 2011-12, the national exclusive breastfeeding rate at six months or more was 26%, and the breastfeeding initiation rate was 89% (Statistics Canada, 2012). An Alberta Health Services literature review (2012) found that a range of factors affect breastfeeding rates, including discomfort with breastfeeding in public and receiving conflicting information from health care providers (Avery & Magnus, 2011; Burns et al., 2010; Goldade et al., 2008). Breastfeeding exclusivity and duration can be improved when health care providers are trained appropriately in addressing breastfeeding challenges and can offer sufficient support and education to mothers (Shealy et al., 2005; Wambach et al., 2005).

The Baby-Friendly Hospital Initiative (BFHI) was launched by WHO and UNICEF in 1991 as a global effort to implement practices that protect, promote, and support breastfeeding (World Health Organization., 2016). Evidence suggests the initiative has helped improve both breastfeeding initiation and duration (Cleminson et al., 2015; Jeffery et al., 1994; Kim et al., 2018; Munn et al., 2016). A recent study found that exclusive breastfeeding in hospitals is associated with longer breastfeeding duration (Lorena et al., 2018). Infants who were exclusively breastfeed in hospital were 63% more likely to meet WHO's breastfeeding recommendations (Lorena et al., 2018). Therefore, it can be stated that programs such as the BFHI that promote exclusive breastfeeding in hospitals may have long-term influences on breastfeeding duration (Lorena et al., 2018). To be designated as a WHO Baby-Friendly Hospital, following the Ten Steps to Successful Breastfeeding is required (World Health Organization, 1989):

- 1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
- 2. Train all healthcare staff in the skills necessary to implement this policy.
- 3. Inform all pregnant women about the benefits and management of breastfeeding.
- 4. Help mothers to initiate breastfeeding within a half-hour of birth.
- 5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
- 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
- 7. Practice rooming in—allow mothers and infants to remain together—24 hours a day.
- 8. Encourage breastfeeding on demand.
- Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
- 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Benchmark: All public buildings are required to permit and facilitate breastfeeding

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Mandatory	В

Q Key Findings

1. The Alberta Human Rights Act protects women from discrimination while breastfeeding in public places (Breastfeeding Alberta, 2012). There is evidence that some municipalities have publicized that breastfeeding is permitted in public buildings.

For example, the City of Edmonton website indicates that, "breastfeeding is acceptable in all City of Edmonton recreation facilities. Women may breastfeed where they feel most comfortable. If a woman wishes to breastfeed in private, staff will assist her in finding space" (City of Edmonton, 2016). Also, the City of Calgary (2018) provides similar public announcements stating that, "The City of Calgary supports mothers who wish to breastfeed at our facilities. Breastfeeding is an acceptable practice in our recreation centres, including in swimming pool basins."

Although breastfeeding is permitted, there is a lack of data on whether or not public buildings in Alberta actively facilitate breastfeeding.

2. In 2017, the Breastfeeding Action Committee of Edmonton spearheaded the campaign 'Yes, You Can Breastfeed Here' in support of women breastfeeding in public places aimed at educating the public, including those who operate public facilities/spaces (Kornik, 2017).



Policies/Systematic Programs

Mandatory policy

Alberta Human Rights Act

TABLE 8. Examples of Voluntary Programs and Resources

ORGANIZATION	DESCRIPTION
The Alberta Breastfeeding Committee: made up of a team of healthcare professionals, breastfeeding experts, and consumers. Provides leadership and resources to advocate for breastfeeding and Baby-Friendly Initiatives in Alberta hospitals and public health centres	(http://breastfeedingalberta.ca/) This committee includes representation from: Alberta Health and Wellness Alberta Health Services Young Family Wellness Alberta Perinatal Health Program Provincial professional associations University and community college educators Regional breastfeeding coalitions Independent experts Consumers
RESOURCES	DESCRIPTION
Model Breastfeeding Resolution	http://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/10/ resolution_making-your-municipality-more-breastfeeding-friendly.pdf

ORGANIZATION

Sustainability Project at University of Alberta,

Availability of Breastfeeding Support at University of Alberta: An Analysis of Physical Facilities, Policies, and Environment

DESCRIPTION

Hirani (2018) provides the Assessment Checklist for Undertaking Environmental **Scan**, a checklist for those wanting to evaluate breastfeeding support within buildings (see Appendix A, p. 26: https://cloudfront.ualberta.ca/https://cloudfront. ualberta.ca/-/media/sustainability/3-experiential/scholars-reports/2016/ sustainability scholars 2016 final report - shela hirani.pdf Appendix A was developed based on Hirani and Olson (2016) and other previous work done by Hirani, S.A.

Assessment Checklist for Undertaking Environmental Scan (Breastfeeding Support)

Physical facilities
☐ Private space/breastfeeding room in campus
lacktriangle Breastfeeding room has comfortable chair, desk, sink to wash supplies
☐ Breastfeeding room is safe and secure
☐ Breastfeeding room is free from distraction
lacktriangle Breastfeeding room has adequate lighting and ventilation
$\hfill \square$ Breastfeeding room is accessible to every female faculty member, staff and students
☐ Permission is required to avail the facility
☐ Breast milk storage facilities
☐ Breast milk pumping device
☐ Childcare facilities (radius)
Policies
 □ Maternity leave (duration for faculty member, staff, and students, any conditions) □ Parental leave (duration for faculty member, staff, and students, any conditions) □ Written breastfeeding policy □ Flexible work schedule for breastfeeding mothers (faculty member, staff, and students)
Environment
☐ Publicity of support policies or campus facilities
☐ University posts poster/flyer to promote the culture of breastfeeding in campus
☐ Mother-friendly status of the setting
☐ Uniformity in breastfeeding accommodation across the faculty/department
☐ Efforts for celebration of breastfeeding week
☐ Publicity of baby formula milk/baby food at university or in campus food bank
☐ Healthcare facilities/services address the lactation needs of mothers
☐ Service charges
☐ Coverage by insurance package
lacktriangle Health messages for lactating mothers and associated people
☐ Maintenance of follow up with new mothers (faculty, staff or student)
lacktriangle Alerts for breastfeeding mothers who are smokers, use caffeine, drink
alcohol or using any medication

* Recommendations

Research: Understand ways to reduce stigma and barriers to breastfeeding in public places

Practice:

- Create a culture where breastfeeding is normalized.
- Create awareness of and display the international symbol for breastfeeding as a step toward supporting mothers breastfeeding anywhere in response to their hungry infant.



- The 'Availability of Breastfeeding Support at University of Alberta: An Analysis of Physical Facilities, Policies, and Environment' report recommends:
 - "Clearly stated breastfeeding policy
 - Well-equipped and safe breastfeeding spaces in all buildings
 - Rental breast pumps
 - Separate refrigerators to store milk
 - Availability of lactation consultants
 - · Breastfeeding week and brochures to promote breastfeeding"

Policy

• All public buildings have a mandate to promote and facilitate breastfeeding, in order that women wanting to breastfeed can do so comfortably.



MUNICIPALITY MUSCLE

Working closely with recreation facilities, municipalities can ensure that they facilitate breastfeeding in all public buildings by going through the Assessment Checklist for Undertaking Environmental Scan (Breastfeeding Support), as well as acting on recommendations that facilitate breastfeeding.



BREASTFEEDING IS SUPPORTED IN HOSPITALS

Benchmark: All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Voluntary	С

Q Key Findings

- 1. An AHS strategy has been developed that aligns with many elements of the Baby-Friendly Initiative's (BFI) Ten Steps to Successful Breastfeeding. The AHS Breastfeeding Initiative has four components:
- 1) Policy initiatives (under development)
- 2) Online healthcare provider education component and parent education component (see below)
- 3) Health/social marketing (under development)
- 4) Peer support ('Breastfeeding Peer Support: A Review of Systematic Reviews' has been completed to inform the development of a peer support toolkit.)



Current social marketing efforts to support breastfeeding occur as part of the parent education strategy with the Healthy Parents, Healthy Children (HPHC) initiative using the Facebook and Twitter platforms (see picture). The message was focus tested from a former campaign and validated by a recent literature review along with feedback from key stakeholders. This ad was used in the last paid social media campaign on Facebook and Instagram. Breastfeeding posts are also regularly included on the HPHC (see: http://www.

healthyparentshealthychildren.ca) Facebook and Twitter accounts (Image below is from stock photos).

Currently, two provincial staff education eLearning modules (Breastfeeding Foundations and Managing Breastfeeding Challenges and Supplementation), which provide standardized breastfeeding education across AHS, are available to healthcare providers. Each module has been reviewed by the Breastfeeding Committee of Canada, meets BFI requirements, and is available on two platforms: AHS MyLearningLink and AHS Alberta Perinatal Health Program (APHP). The Breastfeeding Foundations module has a section on

informed feeding decisions to help staff support women who have challenges with breastfeeding. As part of the provincial breastfeeding 20-hour course in development, a module on informed feeding decision is in development. This information will expand current content on informed feeding decisions and will place emphasis on patient- and family-centered care. A new nutrition guideline, 'Nutrition for the Breastfeeding Mother,' is also being developed to support healthcare professionals. It will be posted on the AHS website and available to all healthcare professionals.

As part of the AHS Breastfeeding Initiative, a Provincial Breastfeeding Committee has been established to guide the development and implementation of the AHS Breastfeeding Strategy, which includes development of a provincial Breastfeeding Policy. Staff education is a key component of the policy elements. The policy includes all components and all AHS staff across different facilities/practice areas. Health practitioners outside of AHS (e.g. mid-wives) are also encouraged to follow the policies.

A large, multi-stakeholder steering committee has been formed regarding this policy. AHS senior leadership will ultimately decide the amount of resources required to implement the policy and which parts of it will be mandatory (S. Tyminski, personal communication, May 25, 2018).

In addition, parent breastfeeding education is available in the HPHC provincial resource (see: http://www.healthyparentshealthychildren.ca), both in print and online. The HPHC 2nd edition is in its final stages of completion, and includes comprehensive breastfeeding information for parents. The website redesign project, also in its final stages, will offer improved navigation and search functions (to make the breastfeeding content easier and more intuitive to find). Content edits will move towards BFI requirements (similar to the staff education). (M. Devolin, P. Martz, A.M. McInnis, & S. Tyminski, personal communication, April 6, 2017).

2. In 2017, the Bonnyville Health Center, the Grey Nuns Community Hospital, and the High River General Hospital achieved WHO Baby-Friendly designation. Two public health centres in Fort McMurray (Wood Buffalo) and Calgary, as well as one hospital in Edmonton (Misericordia), are undergoing the process of achieving WHO BFI designation (see: http://www.health.alberta.ca/documents/HISCA-Perinatal-Breastfeeding.pdf).

♣ Policies/Systematic Programs

Systemic programs/policies

ALBERTA BREASTFEEDING COMMITTEE (see http://www.breastfeedingalberta.ca/)

Focuses on engaging and adopting Baby-Friendly Initiatives in Alberta hospitals and public health centres, and supporting Baby-Friendly Initiatives in Alberta facilities (Government of Alberta, 2009).

The Data Collection sub-committee aims to improve and standardize the collection of data related to breastfeeding in Alberta.

The committee provides oversight and guidance to facilitate the development and implementation of a comprehensive provincial breastfeeding strategy for AHS and Covenant Health. One of the current deliverables is the AHS Provincial Breastfeeding Policy.

TABLE 9. Examples of Voluntary Organizational Programs to Support and Monitor BFI in Alberta and Nationally.

ORGANIZATION	DESCRIPTION
Breastfeeding Action Committee of Edmonton (see http://www.breastfeedingaction.ca/)	Registered non-profit society working on "a range of issues that impact breastfeeding families and building a network of passionate, effective and engaged breastfeeding supporters."
Breastfeeding Committee of Canada (See http://www.breastfeedingcanada.ca/)	A support body for any facility wishing to pursue BFI designation in Alberta (Breastfeeding Committee for Canada, 2015; J. Splaine, personal communication, 2014). Monitors implementation of Baby-Friendly Initiatives in Canadian hospitals and health centres (except Quebec) by: 1. Coordinating BFI Assessments in Canada in collaboration with Provincial and Territorial BFI Committees 2. Tracking facilities in progress towards BFI designation 3. Maintaining a database of designated facilities 4. Managing BFI assessments (pre-, external, and reassessments)
Canadian Perinatal Surveillance System	Completes the Canadian Hospitals Maternity Policies and Practices survey to collect information on breastfeeding policies, Baby-Friendly facilities, and support for breastfeeding initiation and maintenance (Public Health Agency of Canada, 2012; Canadian Perinatal Surveillance System, 2004).
RESOURCE	
Healthy Parents, Healthy Children (HPHC) (see http://www.healthyparentshealthychildren.ca/)	Parent breastfeeding education includes breastfeeding education for expectant mothers and parents of children up to 6 years of age.

28

* Recommendations

Research: Assess barriers to pursuing WHO Baby-Friendly designation in Alberta's hospitals.

Practice: Continue to foster a supportive breastfeeding culture in hospitals.

Policy: Mandate a province-wide policy that requires hospitals to support breastfeeding, including monitoring and evaluating adherence.



MUNICIPALITY MUSCLE

Working closely with hospitals, municipalities can ensure that they foster a supportive breastfeeding culture in hospitals and a community culture where breastfeeding is normalized.





➤ LEADERSHIP & COORDINATION

Governments provide clear, comprehensive, transparent goals and action plans to improve children's eating behaviours and body weights.

INDICATOR	HEALTH-IN-ALL POLICIES
GRADE	C

What Research Suggests

The World Health Organization (WHO) recommends a whole-of-government approach to preventing and treating childhood obesity (World Health Organization, 2016). The concept of Health In All Policies (HiAP) was first introduced in 2006 and aims to systematically consider potential health implications, seek synergies, and avoid harmful health impacts with public policies across sectors (World Health Organization, 2014). It is anticipated this approach may enhance population health and health equity (Vliet-Brown et al., 2017). WHO recognizes the HiAP approach as an integral part of effective and coherent governance at the local, national, and international level (World Health Organization, 2017). Finland has reportedly reduced the proportion of five-year-olds who are overweight or obese by integrating HiAP into its national policies (World Health Organization, 2015).

In Canada, municipal governments have been identified as an effective level of governance to implement HiAP policies (Vliet-Brown et al., 2017). This is due to municipal governments being more in tune to citizen needs, having close access to intersectoral action and a significant role in the day-to-day health and well-being of their community members (Hendriks et al., 2013; Vliet-Brown et al., 2017). Specific municipal sectors that have been encouraged to adopt a HiAP approach include community planning, environment and infrastructure, schools, and transportation (Vliet-Brown et al., 2017). Further research is needed on effective implementation approaches and evaluation of HiAP policies at the municipal level in Canada (Vliet-Brown et al., 2017).

Health Impact Assessment (HIA) continues to be considered an essential tool to support HiAP by providing a process to identify potential health impacts resulting from projects or policy initiatives (McCallum et al., 2015). However, HIA is not yet an established practice in Canada (McCallum et al., 2015). To promote the practice of HIA throughout Canada, one review suggested integrating HIA into existing regulatory frameworks, such as federal and provincial environmental assessments and human health risk assessments, among other recommendations (McCallum et al., 2015).

HEALTH-IN-ALL POLICIES

Benchmark: Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Voluntary	С

Q Key Findings

- 1. At this time, Alberta has not incorporated Health Impact Assessments in all government departments with policies that have the potential to impact child health.
- 2. In the 2013 interprovincial-territorial meeting of Canadian experiences in institutionalizing Health Impact Assessment, Alberta developed a process referred to as the Health Lens for Public Policy (HLPP) (National Collaborating Centre for Healthy Public Policy, 2013). The HLPP process aimed to support the Government of Alberta's policy-makers by taking into account the health impacts of their policies using evidence and health expertise (National Collaborating Centre for Healthy Public Policy, 2013). Phase one consisted of applying the HLPP process to the Ministry of Health; the second phase was to expand it to all government bodies. Further, the report noted that in contrast to Quebec's approach, Alberta's HLPP adherence was voluntary and did not have legal ground (National Collaborating Centre for Healthy Public Policy, 2013).
- 3. Alberta's 2015-2016 Annual Health Report states that a Health-in-All policy (HiAP) analysis process and toolkit were developed to encourage policy-makers of the Government of Alberta to consider the social determinants of health when developing and/or evaluating public policy (Government of Alberta, 2016). "Alberta Health developed a Health in All Policies (HiAP) analysis process and toolkit, designed to support Government of Alberta policy practitioners in considering the social, physical and economic environments and conditions (collectively known as the social determinants of health) when developing and/or evaluating public policy. As many of the social determinants of health are influenced by the policies, strategies, and legislation across different government departments, the HiAP approach will help identify how a proposed policy may impact the health and well-being of Albertans, including specific population groups, such as children and youth. The toolkit has been piloted and introduced to policy practitioners through awareness sessions, and is now available upon request to support government employees." (K. Schmidt, personal communication, April 16, 2018).

Policies/Systematic Programs

No policy in place, but there is a voluntary program/resource (see Key Findings).

The National Collaborating Centre for Public Policy and Health, based in Quebec, provides resources to support Health Impact Assessments on broad health policy topics.

* Recommendations

Practice: Include Health Impact Assessments in all government policies with potential to impact child health.

Policy: Require Alberta government departments and agencies to conduct Health Impact Assessments before proposing laws or regulations.



MUNICIPALITY MUSCLE

Municipalities can choose to add a health "lens" to municipal policy decision-making by utilizing the Health in All Policies (HiAP) analysis process and toolkit developed by Alberta Health

Policy Role Models



In Quebec, the institutionalization of HIA has a legal basis. Under section 54 of Quebec's Public Health Act, all government departments and agencies must ensure that their laws and regulations do not have a significant negative impact on the health of the population. At a more local level, Vancouver, BC, and Simcoe/Muskoka, ON, have imposed a health lens to municipal policy making (Simcoe Muskoka District Health Unit, 2017; City of Vancouver, 2015).

Established in 2007, the South Australian HiAP model seeks to build strong inter-sectoral relationships across government to better address the social determinants of health in a systematic manner (Government of South Australia, 2017). Success of the South Australian HiAP initiative includes individually tailored policy documents to demonstrate how healthy weight evidence is relevant and beneficial to departments working with the Health sector (Newman et al., 2016).

Launched in 2015, the New Zealand Childhood Obesity Plan has three focus areas made up of 22 initiatives. The Plan provides targeted interventions for those who have obesity, increased support for those at risk of developing obesity, and broad approaches to make healthier choices easier for all New Zealanders (New Zealand Ministry of Health, 2017). The Plan focuses on food, the environment, and being active at each life stage, starting during pregnancy and early childhood. A new target introduced in 2016, 'Raising Healthy Kids,' was that, "by December 2017, 95% of children with obesity identified in the 'Before School Check' program will be offered a referral to a health professional for a clinical assessment and family based nutrition, activity and lifestyle interventions" (New Zealand Ministry of Health, 2017).

Ireland's 2016-2025 Obesity and Action Plan is a cross-sectoral, whole-of-government approach that highlights the interdependencies between the Health department and other government departments to curb the overweight and obesity epidemic (Department of Health, 2016). The Department of Health will provide stewardship for the Policy, work collaboratively with international organizations, assess and target high-risk groups, and implement a National Physical Activity Plan for Ireland. Priority actions in the plan include a levy on sugar-sweetened beverages, legislation for calorie signposting, and food reformulation targets with the food industry (Department of Health, 2016)

► MONITORING & EVALUATION

Progress toward achieving population-level dietary and body weight targets is regularly monitored, along with the policies and programs enacted in support of these.

INDICATOR	COMPLIANCE MONITORING OF POLICIES AND ACTIONS TO IMPROVE CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHTS
GRADE	С

What Research Suggests

It is well recognized that healthy diets and nutritional well-being are key contributors to a healthy population (Health Canada, 2017). Monitoring, surveillance, and evaluation systems continue to be essential components to implementing programs and policies that address preventable health risks such as healthy population-level eating behaviours (World Health Organization, 2004). These systems provide data and feedback to guide policy development, improve program and intervention quality, and keep policy implementers accountable to ensure targets are met (Farrell et al., 2014; Hawkeset al., 2014; World Health Organization, 2016).

Policy implementers, and the populations targeted by the policies, face a variety of barriers to achieve established policies (Weaver, 2009). Identified barriers include insufficient resources and lack of clarification and understanding of the policy itself (Vine et al., 2017). Research has found that evaluation provides the opportunity to analyze and interpret data that may inform adaptation of the implemented programs and policies to enhance compliance (Health Canada, 2017; Health Canada, 2013; Vine et al., 2017).

The assessment and evaluation of policy implementation is increasingly being recognized as a key mechanism to enhance government accountability and improve rates of policy compliance (Phulkerd et al., 2016; Vine et al., 2017).

COMPLIANCE MONITORING OF POLICIES AND ACTIONS TO IMPROVE CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHTS

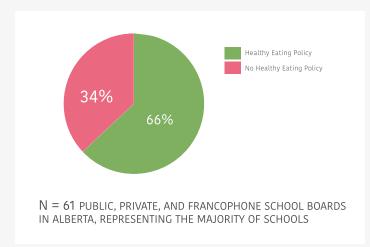
Benchmark: Mechanisms are in place to monitor adherence to mandated nutrition policies.

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Somewhat	Yes	Voluntary (only schools in the Alberta School Nutrition Program report)	С

Q Key Findings

- 1. At this time, Alberta does not have mandatory school nutrition policies or a provincial monitoring system in place to track adherence; however, there are steps being taken toward monitoring. The Alberta School Nutrition Program requires participating schools (i.e. 215 participating schools out of 2,253, see: https://education.alberta.ca/alberta-education/student-population/everyone/school-authority-enrolment-data/) to submit a detailed proposal to Alberta Education to show plans for introducing or expanding existing school nutrition program, how the nutrition program will adhere to the ANGCY, as well as ongoing updates regarding nutrition program activities and expenditures, twice a year. It is unclear what is done with the collected information in terms of monitoring.
- 2. According to our Policy Scan in Feb-July 2017, 66% (40 out of 61) public, private, and Francophone school boards in Alberta, representing the majority of schools in the province, had designated nutrition/healthy eating policies in place; however, it is unclear if policies have been implemented in schools and to what degree.

FIGURE 12. Percent of School Boards in Alberta With/Without a Healthy Eating Policy



The Alberta Healthy School Community Wellness Fund was the only way of collecting data on adherence to healthy eating policies. In addition to the loss of substantial funding there was a delay until recently, meaning the Reporting and Reflection Tool was not possible this year.

30

Policies/Systematic Programs

Voluntary evaluation exists, see 2.

* Recommendations

Practice: Engage key stakeholders to participate in reporting on the healthfulness of food available within settings where children eat

Policy: Establish a system-wide monitoring of adherence to mandated nutrition policies.



MUNICIPALITY MUSCLE

Municipalities working closely with local school boards can monitor policy adherence by monitoring collected data on food available in schools in relation to the ANGCY.



Acknowledgements

We would like to thank all of the individuals that contributed toward the development of the 2018 Nutrition Report Card by facilitating access to relevant data and information:

Kate Battista

COMPASS Data Manager/Biostatistician

Chad Bredin

COMPASS Project Manager

Patricia Lirette, PhD

Assistant Professor, Grant MacEwan University

Sheila W. McDonald, PhD

Acting Director, Research and Innovation, Population, Public and Indigenous Health, Alberta Health Services

Kerri Murray

Director of Projects, Ever Active Schools

Phi Phan, MPH, CPHI(C)

Provincial Manager, Safe Healthy Environments, Alberta Health Services

Shelly Russell-Mayhew, PhD

Associate Professor, University of Calgary

Kim Schmidt

Program Manager, Health and Wellness Promotion Branch, Alberta Health, Government of Alberta

Cathy Smey Carston, PhD

Associate Professor, Mount Royal University

Kate Storey, PhD, RD

Assistant Professor, University of Alberta

Maxine Wilkes

Alberta Breastfeeding Committee Chair

A special thank you to our wonderful nutrition student volunteers:

Elise Leong-Sit, Elsa Wong, and Tianna Rusnak.



The School of Public Health at the University of Alberta is committed to advancing health through interdisciplinary inquiry and by working with our partners in promoting health and wellness, protecting health, preventing disease and injury, and reducing health inequities locally, nationally, and globally. As agents of change, our responsibility is to contribute to environmental, social, and economic sustainability for the welfare of future generations.

www.uofa.ualberta.ca/public-health



The Alberta Policy Coalition for Chronic Disease Prevention (APCCP) is a coalition of 17 prominent organizations in Alberta. Since 2009, the APCCP has leveraged the partnerships, skills, and expertise of its members in the areas of research, policy, and practice to increase knowledge about and support for policies to address risk factors for chronic disease, including poor nutrition, physical inactivity, and alcohol misuse.

www.abpolicycoalitionforprevention.ca

UNIVERSITY OF ALBERTA CENTRE FOR HEALTH AND NUTRITION

The Centre for Health and Nutrition (CHaN) is an Institute of the University of Alberta housed in School of Public Health. The Centre envisions optimal health for Canadians through the integration of research, practice and health promotion in nutrition. We create and use evidence to influence food systems, nutrition policy and practice. We also support and connect researchers to user communities through outreach and advocacy.

www.uab.ca/chan



Funding for the production of Alberta's 2018 Nutrition Report Card on Food Environments for Children and Youth has been made possible through Alberta Innovates. The views expressed herein represent the views of the authors and do not necessarily represent the views of Alberta Innovates.

Referencing this report

Please use the following citation when referencing the Nutrition Report Card:

Alberta's 2018 Nutrition Report Card on Food Environments for Children and Youth. University of Alberta, Edmonton, Alberta.

A summary of Alberta's 2018 Nutrition Report Card on Food Environments for Children and Youth is also available online at: uab.ca/nrc

If you are interested in contributing to next year's Nutrition Report Card or would like to connect with us:

KRISTA MILFORD

Project Coordinator, Benchmarking Food Environments

School of Public Health, University of Alberta 3-300 Edmonton Clinic Health Academy 11405 – 87 Avenue, Edmonton, AB T6G 1C9 krista.milford@ualberta.ca (780) 492-5911

2018 Report Card Development Team

Publication Date: September 2018

CORE REPORT CARD DEVELOPMENT TEAM

Kim D. Raine, PhD, RD, FCAHS*

Lead, Professor

School of Public Health, University of Alberta

Candace I.J. Nykiforuk, PhD*

Co-Lead, Associate Professor School of Public Health, University of Alberta

Katerina Maximova, PhD*

Co-Lead, Assistant Professor School of Public Health, University of Alberta

Dana Lee Olstad, PhD, RD*

Assistant Professor

Department of Community Health Sciences, University of Calgary

Krista Milford, MSc

Project Coordinator, Benchmarking Food Environments, School of Public Health, University of Alberta

*also part of the Expert Working Group

CONTENT & MATERIALS PRODUCTION

Alexa Ferdinands, RD, PhD student

School of Public Health, University of Alberta

Shelby Johnson, BSc, MSc student

School of Public Health, University of Alberta

Jennifer-Ann McGetrick, MSc, PhD student

School of Public Health, University of Alberta

Jessica Kalmar

Contract Copy Editor

Lianne Mah

Lianne Charlene Creative

EXPERT WORKING GROUP

Karen Boyd, MSc, RD

Regional Executive Director, Alberta and the Territories, Dietitians of Canada

Laurie Drozdowski, PhD

Coordinator, Centre for Health and Nutrition, University of Alberta

Lisa McLaughlin, BA, MPH student

Communities ChooseWell, Alberta Recreation and Parks Association

Leia Minaker, PhD

Assistant Professor

School of Planning, University of Waterloo

Marie-Claude Paquette, PhD, RD

Institut national de santé publique du Québec

Rachel Prowse, PhD Candidate, RD

School of Public Health, University of Alberta

Jacob Shelley, LLM, S.J.D.

Assistant Professor

Faculty of Law and School of Health Studies, Western University

Sheila Tyminski, MEd, RD

Director, Nutrition Services, Population & Public Health Strategy, Alberta Health Services

Colleen Wright, MA

The Alberta Healthy School Community Wellness Fund, University of Alberta



PHYSICAL ENVIRONMENT



Food Availability Within Settings

INDICATOR:	GRADE:	RECOMMENDATIONS
1. High availability of healthy food in school settings BENCHMARK: Approximately 3/4 of foods available in schools are healthy. KEY FINDINGS: The Alberta School Nutrition Program provided approximately 22,000 K-6 students (5.5%) with a daily healthy meal/snack in 2017-2018. The COMPASS study assessed food and beverages offered in nine Alberta schools in the 2016-17 school year and found that the majority of food available is not healthy. None of the nine schools had healthy eating policies in place.	C+	RESEARCH Monitor school food policies and the healthfulness of foods offered on an annual basis. PRACTICE Implement the Alberta Nutrition Guidelines for Children and Youth (ANGCY) in all school settings. POLICY Support local school boards and districts in implementing mandatory rather than voluntary healthy eating policies. MUNICIPALITIES Collaborate with local school boards and districts to develop and implement healthy food procurement contracts that adhere to nutrition standards, encompassing all food and beverages served in school (e.g. third-party vendors, fundraising).
3. High availability of healthy food in community settings BENCHMARK: Approximately 3/4 of foods available in public buildings are healthy. KEY FINDINGS: The Eat Play Live (EPL) Project collects data on the types of foods and beverages sold in concessions and vending machines in 11 publicly funded recreation facilities in Alberta. Only 11% of entrées or main dish salads were rated as healthy. More than half (53%) of vending machine beverages and 71% of vending machine snacks, as well as the majority of concession stand snacks were rated as unhealthy.	D	RESEARCH Explore effective implementation strategies to improve the healthfulness of food available in recreation facilities. PRACTICE Continue to support and educate facility and concession managers about the ANGCY and provide context-specific strategies for implementation. POLICY Mandate and provide incentives for implementing the ANGCY in recreation facilities. MUNICIPALITIES Municipalities have the power to mandate changes to improve the food environment in their recreation facilities.

COMMUNICATION ENVIRONMENT



Nutrition Information At The Point-Of-Purchase

INDICATOR:	GRADE:	RECOMMENDATIONS
7. Menu labelling is present BENCHMARK: A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations. KEY FINDINGS: While some restaurants have voluntarily provided nutrition information for consumers, menu labelling is not mandatory in Alberta.	D	RESEARCH Assess the impact of legislation requiring menu labelling on consumer food choices. POLICY Require that menu labelling be mandated in restaurants with ≥ 20 locations. MUNICIPALITIES Engage local dietitians in working with local businesses to identify healthy choices on menus.
11. Government-sanctioned public health campaigns encourage children to consume healthy foods BENCHMARK: Broad-reaching child-directed social marketing campaigns for healthy foods. KEY FINDINGS: Newly funded Kid Food Nation, a national food skills initiative for children aged 7-12, is currently being piloted for the next two years. Four components of this initiative include: food skills education, television programming to reach families, a national recipe challenge, and a cookbook.	C+	PRACTICE Develop a provincial, broad-reaching, sustained, and targeted social marketing program to encourage healthy food consumption. MUNICIPALITIES Use nutrition education resources (available from Alberta Health Services) to promote healthy eating in local settings (public buildings, health centres, recreation sentres, etc.). Partner with local media to promote healthy eating (PSAs, "ask the dietitian" call-ins, etc.)

INDICATOR:	GRADE:	RECOMMENDATIONS
12. Restrictions on marketing unhealthy foods to children BENCHMARK: All forms of marketing unhealthy foods to children are prohibited. KEY FINDINGS: Alberta does not have official policies in place that prohibit advertising of unhealthy food to children. At the federal level, Bill S-228 aims to prohibit advertising of unhealthy food and beverages to children younger than13 years of age. It is slated for third reading when Parliament resumes in the fall.	D	RESEARCH Determine the level of children's exposure to food and beverage marketing in multiple local contexts. PRACTICE Encourage adoption of voluntary self-regulatory initiatives following government-approved guidelines subject to independent audits. POLICY Support development of a national regulatory system prohibiting commercial marketing of foods and beverages to children with minimum standards, compliance monitoring, and penalties for non-compliance. MUNICIPALITIES When Bill S-228 comes into force, it will impact local advertising, billboards, etc. However, the federal government is unlikely to have resources to monitor local settings. Taking a stance to ensure that no marketing of unhealthy foods and beverages exists in public buildings, close to schools, and in daycares, is a proactive way to ensure that your local community is providing a safe, commercial-free setting for children. Be a trail blazer!
14. Food skills education provided to children in schools BENCHMARK: Food skills are a required component in the curriculum at the junior high level. KEY FINDINGS: Many schools offer Home Economics (food skills education), but it is not mandatory for Grade 7-9 students.	D	PRACTICE Monitor and advocate for the delivery of food skills education to all students at the junior high level. Make food preparation classes available to children, their parents, and child caregivers. POLICY Make food skills education mandatory at the junior high level. MUNICIPALITIES Municipalities working with school boards may suggest that Home Economics be made mandatory for junior high students. Make use of facilities in close proximity to schools, such as recreation centres, to provide cooking classes, community kitchens, and gardens to provide hands-on food handling experience when school infrastructure is lacking.



ECONOMIC ENVIRONMENT



Financial Incentives For Consumers

INDICATOR:	GRADE:	RECOMMENDATIONS
18. Higher prices for unhealthy foods BENCHMARK: A minimum excise tax of \$0.05/100mL is applied to sugar-sweetened beverages sold in any form. KEY FINDINGS: Despite support from policy influencers, Alberta has no formal policies to promote healthy eating using tax credits and incentives. City Councilors in St. Albert, Alberta unanimously took a stand in asking the federal government to implement a sugar-sweetened beverage tax.	F	PRACTICE Promote public and policy-maker understanding and support of a sugar-sweetened beverages tax. POLICY Implement a minimum excise tax of \$0.05/100mL on sugar-sweetened beverages. Dedicate a portion of this revenue to health promotion programs. MUNICIPALITIES Similar to St. Albert, municipalities can ask the federal government to implement a sugar-sweetened beverage tax.
19. Affordable prices for healthy foods in rural, remote, or northern Areas BENCHMARK: Subsidies to improve access to healthy food in rural, remote, or Northern communities to enhance affordability for local consumers. KEY FINDINGS: There are no provincial initiatives to increase the availability and affordability of nutritious foods in rural, remote and northern areas.	D+	PRACTICE Create provincial initiatives to increase the availability and accessibility of nutritious foods in remote and northern areas. Expand and revise the Nutrition North Canada program to include more remote Alberta communities. POLICY Provide subsidies directly to consumers to increase the affordability of healthy food in rural, remote, and Northern communities. MUNICIPALITIES Municipalities can use transportation dollars to subsidize the transport of healthy food into rural/remote/Northern communities. Municipalities can also liaise with local agricultural producers and local retailers to find cost-effective ways of subsidizing healthy foods.

INDICATOR:	GRADE:	RECOMMENDATIONS
24. Subsidized fruit and vegetable subscription program in schools BENCHMARK: Children in elementary school receive a free or subsidized fruit or vegetable each day. KEY FINDINGS: A universal (i.e. for all K-12 students) fruit and vegetable subscription program does not exist in Alberta; however, the Alberta School Nutrition Program provides healthy meals/snacks to approximately 5.5% of the K-6 student population. Furthermore, many initiatives (government and non-government funded) provide healthy food to students in high-needs schools.	C+	RESEARCH Assess the impact of existing programs providing subsidized fruits and vegetables in schools in Alberta. PRACTICE Develop province-wide strategies for providing subsidized fruit and vegetables to elementary students. POLICY Commit sustainable government funding to existing fruit and vegetable subscription programs and designate funding to increase reach across Alberta. MUNICIPALITIES Municipalities working with school boards may suggest making use of facilities in close proximity to schools, such as recreation centres, to prepare foods for nutrition programs when school infrastructure is lacking. Municipalities can encourage local farmers' markets to provide school children with weekly vouchers for free fruits and vegetables (e.g. combine the free fruit/veg voucher with school reading programs).



† SOCIAL ENVIRONMENT



Weight Bias

INDICATOR:	GRADE:	RECOMMENDATIONS
27. Breastfeeding is supported in public buildings BENCHMARK: All public buildings are required to permit and facilitate breastfeeding. KEY FINDINGS: While breastfeeding is a basic human right and there is some evidence that certain municipalities have publicized that breastfeeding is permitted in public buildings, there remains a need to facilitate breastfeeding.	В	RESEARCH Understand ways to reduce stigma and barriers to breastfeeding in public places. PRACTICE Use the Assessment Checklist for Undertaking Environmental Scan (Breastfeeding Support) (see page 67, Alberta's 2018 NRC) to determine the current level of support for breastfeeding in public buildings. Adopt a breastfeeding resolution, see Model Breastfeeding Resolution https://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/10/resolution_making-your-municipality-more-breastfeeding-friendly.pdf POLICY All public buildings have a mandate to promote and facilitate breastfeeding, so that women wanting to breastfeed can do so comfortably. MUNICIPALITIES Working closely with recreation facilities, municipalities can ensure that they facilitate breastfeeding in all public buildings by going through the Assessment Checklist for Undertaking Environmental Scan (Breastfeeding Support) (see page 67, Alberta's 2018 NRC), as well as acting on recommendations that facilitate breastfeeding.
28. Breastfeeding is supported in hospitals BENCHMARK: All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards. KEY FINDINGS: In 2017, one health centre and two hospitals in Alberta achieved WHO Baby-Friendly designation. Current professional education strategies align with elements of the WHO Baby-Friendly Initiative.	С	RESEARCH Assess barriers to pursuing WHO Baby-Friendly designation in Alberta's hospitals. PRACTICE Continue to foster a supportive breastfeeding culture in hospitals. POLICY Mandate a province-wide policy that requires hospitals to support breastfeeding, including monitoring and evaluating adherence. MUNICIPALITIES Working closely with hospitals, municipalities can ensure that they foster a supportive breastfeeding culture in hospitals and a community culture where breastfeeding is normalized.



POLITICAL ENVIRONMENT



Leadership & Coordination

INDICATOR:	GRADE:	RECOMMENDATIONS
30. Health In All policies BENCHMARK: Health Impact Assessments are conducted in all government departments on policies with potential to impact child health. KEY FINDINGS: Alberta Health developed and piloted a Health-in-All Policies (HiAP) analysis process and toolkit. Awareness sessions were provided and the HiAP is available upon request.	С	PRACTICE Include Health Impact Assessments in all government policies with potential to impact child health. POLICY Require Alberta government departments and agencie to conduct Health Impact Assessments before proposing laws or regulations. MUNICIPALITIES Municipalities can choose to add a health "lens" to municipal policy decision-making by utilizing the Health In All Policies (HiAP) analysis process and toolkit developed by Alberta Health.
32. Compliance monitoring of policies and actions to improve children's eating behaviours and body weights BENCHMARK: Mechanisms are in place to monitor adherence to mandated nutrition policies. KEY FINDINGS: More than half (40 out of 61) of public, private, and Francophone school boards in Alberta, representing the majority of schools in the province, had designated nutrition/healthy eating policies in place; however, it is unclear if policies have been implemented in schools and to what degree.	С	PRACTICE Engage key stakeholders to participate in reporting on the healthfulness of food available within settings where children eat. POLICY Establish system-wide monitoring of adherence to mandated nutrition policies. MUNICIPALITIES Municipalities working closely with local school boards can monitor policy adherence by monitoring collected data on food available in schools in relation to the ANGCY.
The Alberta School Nutrition Program requires participating schools (i.e. 215 participating schools out of 2,253 schools in Alberta) to submit a detailed proposal to Alberta Education to show plans for introducing or expanding existing school nutrition programs, including how the nutrition program will adhere to the ANGCY.		

Abbass-Dick, J., & Dennis, C.-L. (2018). Maternal and paternal experiences and satisfaction with a co-parenting breastfeeding support intervention in Canada. Midwifery, 56, 135-141.

Advertising Standards Canada. (2012). The Canadian Children's Food and Beverage Advertising Initiative - 2012 Compliance Report. Retrieved from http://www.adstandards.com/en/childrensinitiative/2012ComplianceReport.pdf

Advertising Standards Canada. (2014a). Canadian Children's Food and Beverage Initiative: Uniform Nutrition Criteria White Paper. Retrieved fromhttp://www.adstandards.com/en/childrensInitiative/CAIUniformNutritionCriteriaWhitePaper.pdf

Advertising Standards Canada. (2014b). Broadcast Code for Advertising to Children - The Code. Retrieved from http://www. adstandards. com/en/clearance/childrens/broadcastC odeForAdvertisingToChildren-TheCode.aspx

Advertising Standards Canada. (2016). The Canadian Children's Food and Beverage Advertising Initiative - 2015 Compliance Report. Retrieved from http://www.adstandards.com/en/childrensinitiative/2016ComplianceReport.pdf

Afshin, A., Penalvo, J., Del Gobbo L., et al. (2015). CVD prevention through policy: a review of mass media, food/menu labeling, taxation/subsidies, built environment, school procurement, worksite wellness, and marketing standards to improve diet. Current Cardiology Reports, 17(11), 1-12. doi:10.1007/s11886-015-0658-9

Afshin, A., Penalvo, J., Del Gobbo, L., Silva, J., Michaelson, M., O'Flaherty, M., et al. (2017). The prospective impact of food pricing on improving dietary consumption: A systematic review and meta-analysis. . PLOS One, 12(3), 1-18.

Alberta Education. (2017). Programs of Study. Reterieved from https://education.alberta.ca/programs-of-study/?searchMode=3

Alberta Health Services. (2010). Nutrition and Physical Activity Situational Analysis: A Resource to Guide Chronic Disease Prevention in Alberta. Retrieved from http://www.albertahealthservices.ca/poph/hi-poph-surv-phids-nutrition-physical-activity-2010.pdf

Alberta Health Services. (2012). AHS Framework for the Comprehensive School Health (CSH) Approach. Retrieved from http://www.albertahealthservices.ca/assets/info/school/csh/if-sch-csh-ahs-framework.pdf

Alberta Health Services. (2012). The Challenges of Breastfeeding in a Complex World: A critical review of the qualitative literature on women and their partners'/supporters' perceptions about breastfeeding. Retrieved from http://www.albertahealthservices.ca/ps-1029951-pregnancy-2012-breastfeeding-lit-review.pdf

Alberta Health Services. (2017). Household Food Insecurity in Alberta: A Backgrounder. Retrieved from http://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-household-food-insecurity-in-alberta.pdf

Alberta Health Services. (2017). The Affordability of Healthy Eating in Alberta 2015. Retrieved from http://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-affordability-of-healthy-eating.pdf

Alberta Policy Coalition for Chronic Disease Prevention. (2015). Restricting the Marketing of Unhealthy Foods and Beverages to Children and Youth. Retrieved from http://abpolicycoalitionforprevention.ca/our-focus/apccp-priorities/healthy-eating-ibs.html

Alberta Policy Coalition for Chronic Disease Prevention (APCCP). (2017). "FARE Policy Stories." Retrieved June 16, 2017, from http://www.apccprecproject.com/policy-stories

Alberta Recreation and Parks Association. (2014). Programs: Communities Choosewell. Retrieved from http://arpaonline.ca/program/choosewell/

Alberta's 2017 Nutrition Report Card on Food Environments for Children and Youth. University of Alberta, Edmonton, Alberta.

Alberta's 2016 Nutrition Report Card on Food Environments for Children and Youth. University of Alberta, Edmonton, Alberta.

ArcGIS version 10.5 [computer program]. (2017). ESRI.

Archuleta, M., VanLeeuwen, D., Halderson, K., Bock, M. A., Eastman, W., Powell, J., et al. (2012). Cooking schools improve nutrient intake patterns of people with type 2 diabetes. Journal of nutrition education and behavior, 44(4), 319-325.

Ashfield-Watt, P. A., Stewart, E. A., & Scheffer, J. A. (2009). A pilot study of the effect of providing daily free fruit to primary-school children in Auckland, New Zealand. Public Health Nutrition, 12(5), 693-701.

Avery, A. B., & Magnus, J. H. (2011). Expectant fathers' and mothers' perceptions of breastfeeding and formula feeding: a focus group study in three US cities. Journal of Human Lactation, 27(2), 147-154.

Ball, S. C., Benjamin, S.E., & Ward, D.S.. (2008). Dietary intakes in North Carolina child-care centers: are children meeting current recommendations? Journal of the American Dietetic Association, 108(4), 718-721.

Ball, K., McNaughton, S., Le, H., Gold, L., Mhurchu, C., Abbott, G., et al. (2015). Influence of price discounts and skill-building strategies on purchase and consumption of healthy food and beverages: Outcomes of the Supermarket Healthy Eating for Life randomized controlled trial. American Journal of Clinical Nutrition, 101, 1055-1064.

Banerjee, S. (2017, December 13). Montreal moves to ban sale of sugary drinks inside city buildings. The Globe and Mail. Retrieved from https://www.theglobeandmail.com/news/national/montreal-moves-to-ban-sale-of-sugary-drinks-inside-city-buildings/article37319903/

Bartholomew, J. B., & Jowers, E. M. (2006). Increasing frequency of lower-fat entrees offered at school lunch: an environmental change strategy to increase healthful selections. Journal of the American Dietetic Association, 106(2), 248-252.

Basu, S., McKee, M., Galea, G., & Stuckler, D. (2013). Relationship of soft drink consumption to global overweight, obesity, and diabetes: a cross-national analysis of 75 countries. American Journal of Public Health, 103(11), 2071-2077.

Bere, E., Hilsen, M., & Klepp, K. I. (2010). Effect of the nationwide free school fruit scheme in Norway. British Journal of Nutrition, 104(4), 589-594. doi:10.1017/S0007114510000814

Bere, E., te Velde, S. J., Småstuen, M. C., Twisk, J., & Klepp, K.-I. (2015). One year of free school fruit in Norway - 7 years of follow-up. International Journal of Behavioral Nutrition and Physical Activity, 12(1), 1-7. doi:10.1186/s12966-015-0301-6

Bhawra, J., Reid, J. L., White, C. M., Vanderlee, L., Raine, K., & Hammond, D. (2018). Are young Canadians supportive of proposed nutrition policies and regulations? An overview of policy support and the impact of socio-demographic factors on public opinion. Canadian Journal of Public Health, 1-8.

Binns, C., Lee, M., & Low, W. Y. (2016). The Long-Term Public Health Benefits of Breastfeeding. Asia-Pacific Journal Of Public Health, 28(1), 7-14. doi:10.1177/1010539515624964

Black, C., Moon, G., & Baird, J. (2014). Dietary inequalities: What is the evidence for the effect of the neighbourhood food environment? Health & Place, 27, 229-242.

Block, D., & Kouba, J. (2006). A comparison of the availability and affordability of a market basket in two communities in the Chicago area. Public Health Nutrition, 9(7), 837-845. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/17010248

Bodor, J. N., Rose, D., Farley, T. A., Swalm, C., & Scott, S. K. (2008). Neighbourhood fruit and vegetable availability and consumption: the role of small food stores in an urban environment. Public Health Nutr, 11(4), 413-420. doi:10.1017/S1368980007000493

Booth, M. L. & Samdal, O. (1997). Health-promoting schools in Australia: models and measurement. Australian and New Zealand Journal of Public Health, 21(4 Spec No):365-370.

Bower, K. M., Thorpe, R. J., Rohde, C., & Gaskin, D. J. (2014). The intersection of neighborhood racial segregation, poverty, and urbanicity and its impact on food store availability in the United States. Preventive medicine, 58, 33-39.

Boyland, E. J., & Whalen, R. (2015). Food advertising to children and its effects on diet: Review of recent prevalence and impact data. Pediatric Diabetes, 16(5), 331-337. doi:10.1111/pedi.12278

Boyland, E. J., Nolan, S., Kelly, B., Tudur-Smith, C., Jones, A., Halford, J. C. G., et al. (2016). Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults. American Journal of Clinical Nutrition, 103(2), 519-533 515p. doi:10.3945/ajcn.115.120022

Bragg, M. A., Miller, A. N., Roberto, C. A., Sam, R., Sarda, V., Harris, J. L., et al. (2018). Sports Sponsorships of Food and Nonalcoholic Beverages. Pediatrics, 141(4), e20172822.

Breastfeeding Alberta. (2012). Breastfeeding Protection in Alberta. Retrieved from http://www.breastfeedingalberta.ca/images/pdf%20 files/Protecting_Breastfeeding_in_Alberta_July_2012.pdf

Brennan, L., Castro, S., Brownson, R.C., Claus, J., & Orleans, C.T. (2011). Accelerating evidence reviews and broadening evidence standards to identify effective, promising, and emerging policy and environmental strategies for prevention of childhood obesity. Annual Review of Public Health, 32: 199-223.

Brennan, L. K., Brownson, R. C., & Orleans, C. T. (2014). Childhood obesity policy research and practice: evidence for policy and environmental strategies. American Journal of Preventive Medicine, 46(1), e1-e16. doi:10.1016/j.amepre.2013.08.022

Briefel, R. R., Crepinsek, M.K., Cabili, C., Wilson, A., & Gleason, P.M. (2009). School food environments and practices affect dietary behaviors of US public school children. Journal of the American Dietetic Association, 109(2), S91-S107.

Britten, P., & Lai, M. K. (1998). Structural analysis of the relationships among elementary teachers' training, self-efficacy, and time spent teaching nutrition. Journal of nutrition education and behavior, 30(4), 218-224. doi:10.1016/s0022-3182(98)70322-x

Bruemmer, B., Krieger, J., Saelens, B. E., & Chan, N. (2012). Energy, saturated fat, and sodium were lower in entrees at chain restaurants at 18 months compared with 6 months following the implementation of mandatory menu labeling regulation in King County, Washington. Journal of the Academy of Nutrition and Dietetics, 112(8), 1169-1176. doi:10.1016/j.jand.2012.04.019

Burgoine, T., Forouhi, N.G., Griffin, S.J., Wareham, N.J., & Monsivais, P. (2014). Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: population based, cross sectional study. BMJ, 348, g1464.

Burns, E., Schmied, V., Sheehan, A., & Fenwick, J. (2010). A meta ethnographic synthesis of women's experience of breastfeeding. Maternal & Child Nutrition, 6(3), 201-219.

Cairns, G., Angus, K., & Hastings, G. (2009). The extent, nature and effects of food promotion to children: a review of the evidence to December 2008. United Kingdom: Institute for Social Marketing, University of Stirling.

Cameron, H. (1991). Effect of inservice training on implementation of a health curriculum in Nova Scotia, Canada. Journal of School Health. 61, 131-135.

Campos, S., Doxey, J., & Hammond, D. (2011). Nutrition labels on pre-packaged foods: a systematic review. Public Health Nutrition, 14(8), 1496-1506. doi:10.1017/S1368980010003290

Canadian Food Inspection Agency. (2014). Nutrition Labelling Regulations for Foods Sold in Restaurants and Food Service Establishments. . 2014; http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/nutrition-labelling/additional-information/restaurants-and-food-serviceestablishments/eng/1409850385603/1409850437890.

Canto, S. d., Engler-Stringer, R., & Muhajarine, N. (2015). Characterizing Saskatoon's Food Environment: A Neighbourhood-level Analysis of In-store Fruit and Vegetable Access. Canadian Journal of Urban Research, 62-77. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=110270018&site=eds-live&scope=site

CAP News. (2017, June 30). Tougher new food and drink rules come into effect in children's media. Advertising Standards Authority. Retrieved from https://www.asa.orq.uk/news/tougher-new-food-and-drink-rules-come-into-effect-in-children-s-media.html

Caraher, M., Dixon, P., Lang, T., & Carr-Hill, R. (1999). The state of cooking in England: the relationship of cooking skills to food choice. British Food Journal, 101(8), 590-609.

Caraher, M., Seeley, A., Wu, M., & Lloyd, S. (2013). When chefs adopt a school? An evaluation of a cooking intervention in English primary schools. Appetite, 62, 50-59.

Caraher, M., Lloyd, S., Mansfield, M., Alp, C., Brewster, Z., & Gresham, J. (2016). Secondary school pupils' food choices around schools in a London borough: Fast food and walls of crisps. Appetite, 103(6), 208-220. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=medp&NEWS=N&AN=27105582

Cavanaugh, E., Green, S., Mallya, G., Tierney, A., Brensinger, C., & Glanz, K. (2014). Changes in food and beverage environments after an urban corner store intervention. Preventive medicine, 65, 7-12.

CBC Radio-Canada. (2014). Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age. Retrieved from http://www.cbc.radio-canada.ca/en/reporting-to-canadians/acts-and-policies/programming/advertising-standards/1-3-8/

Cecchini, M., & Warin, L. (2015). Impact of food labelling systems on food choices and eating behaviours: a systematic review and meta analysis of randomized studies. Obesity Reviews, 17(3):201-10.

Centers for Disease Control and Prevention. (1997). Guidelines for school health programs to promote lifelong healthy eating. Journal of School Health, 67(1), 9-26.

Centers for Disease Control and Prevention. (2011). Children's Food Environment State Indicator Report. Retrieved from http://www.cdc.gov/obesity/downloads/ChildrensFoodEnvironment.pdf.

Cetateanu, A., & Jones, A. (2014). Understanding the relationship between food environments, deprivation and childhood overweight and obesity: evidence from a cross sectional England-wide study. Health & Place, 27, 68-76.

Chenhall, C. (2010). Improving Cooking and Food Preparation Skills: A Synthesis of the Evidence to Inform Program and Policy Development. Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/children/improving-cooking-food-preparation-skills-synthesis-evidence-inform-program-policy-development-government-canada-2010.html

Chu, C., Driscoll. T., & Dwyer, S. (1997). The health-promoting workplace: an integrative perspective. Australian and New Zealand Journal of Public Health, 21(4 Spec No):377-385.

Chriqui, J. F., Pickel, M., & Story, M. (2014). Influence of school competitive food and beverage policies on obesity, consumption, and availability: a systematic review" JAMA Pediatrics, 168(3):279-86.

City of Calgary (2018). Aquatic Facitlites Guide. Retrieved from http://www.calgary.ca/CSPS/Recreation/Documents/Pools/Aquatic-facility-quidelines.pdf?noredirect=1

City of Edmonton. (2016). Recreation Facility Safety & Use Guidelines. Retrieved from http://www.edmonton.ca/activities_parks_recreation/rec-use-safety-guidelines.aspx

City of Ottawa. (2014). New MarketMobile bus brings affordable produce to Ottawa neighbourhoods. Retrieved July 28, 2014, from http://ottawa.ca/en/news/new-marketmobile-bus-brings-affordable-produce-ottawa-neighbourhoods

Cleminson, J., Oddie, S., Renfrew, M. J., & McGuire, W. (2015). Being baby friendly: evidence-based breastfeeding support. Archives of Disease in Childhood. Fetal and Neonatal Edition, 100(2), F173-F178. doi:10.1136/archdischild-2013-304873

Cohen, J. F., Kraak, V.I., Choumenkovitch, S.F., Hyatt, R.R., & Economos, C.D. (2014). The CHANGE study: a healthy-lifestyles intervention to improve rural children's diet quality" Journal of the Academy of Nutrition and Dietetics, 114(1), 48-53.

Congress of the United States of America. (2010). Nutrition labelling of standard menu items at chain restaurants. HR 3590, Sec 4205. Retrieved from http://www.gpo.gov/fdsys/pkg/BILLS-111hr3590enr/pdf/BILLS-111hr3590enr.pdf

Corti, B., Holman, C.D.J., Donovan, R.J., Frizzell, S.K., & Carroll, A.M. (1997). Warning: attending a sport, racing or arts venue may be beneficial to your health. Australian and New Zealand Journal of Public Health, 21(4):371-376.

Cowburn, G., & Stockley, L. (2005). Consumer understanding and use of nutrition labelling: a systematic review. Public Health Nutrition, 8(01), 21-28.

Council of Canadian Academies. (2014). Aboriginal food security in Northern Canada: An assessment of the state of knowledge. Ottawa, ON: The Expert Panel on the State of Knowledge of Food Security in Northern Canada, Council of Canadian Academies.

Cradock, A. L., McHugh, A., & Mont-Ferguson, H. (2011). Effect of school district policy change on consumption of sugar-sweetened beverages among high school students, Boston, Massachusetts, 2004-2006. Preventing Chronic Disease, 8(4), A74.

Crockett, R. A., King, S. E., Marteau, T. M., Prevost, A. T., Bignardi, G., Roberts, N. W., et al. (2018). Nutritional labelling for healthier food or non alcoholic drink purchasing and consumption. The Cochrane Library, 1-125.

Cullen, K. W., Eagan, J., Baranowski, T., Owens, E., & de Moor, C. (2000). Effect of a la carte and snack bar foods at school on children's lunchtime intake of fruits and vegetables. Journal of the American Dietetic Association, 100(12), 1482-1486.

Cullen, K. W., & Zakeri, I. (2004). Fruits, vegetables, milk, and sweetened beverages consumption and access to a la carte/snack bar meals at school. American Journal of Public Health, 94(3), 463-467.

Cullen, K. W., Watson, K., & Zakeri, I. (2008). Improvements in middle school student dietary intake after implementation of the Texas Public School Nutrition Policy. American Journal of Public Health, 98(1), 111-117.

Cullen, K. W., Chen, T.-A., Dave, J. M., & Jensen, H. (2015). Differential improvements in student fruit and vegetable selection and consumption in response to the new National School Lunch Program Regulations: A pilot study. Journal of the Academy of Nutrition & Dietetics, 115(5), 743-750 748p. doi:10.1016/j.jand.2014.10.021

Cutumisu, N., Traoré, I., Paquette, M.-C., Cazale, L., Camirand, H., Lalonde, B., & Robitaille, E. (2017). Association between junk food consumption and fast-food outlet access near school among Quebec secondary-school children: findings from the Quebec Health Survey of High School Students (QHSHSS) 2010–11. Public health nutrition, 20(5), 927-937.

Dalhousie University & University of Guelph (2018). Canada's Food Price Report 2018. Retrieved from https://cdn.dal.ca/content/dam/dalhousie/pdf/management/News/News%20&%20Events/Canada_Food_Price_Report_Eng_2018_.pdf

D'Angelo, H., Ammerman, A., Gordon-Larsen, P., Linnan, L., Lytle, L., & Ribisl, K. M. (2016). Sociodemographic Disparities in Proximity of Schools to Tobacco Outlets and Fast-Food Restaurants. American Journal of Public Health, 106(9), 1556-1562. doi:10.2105/ajph.2016.303259

Drewnowski, A., & Darmon, N. (2005). The economics of obesity: dietary energy density and energy cost. The American Journal of Clinical Nutrition, 82(1 Suppl), 265S-273S.

Driessen, C. E., Cameron, A.J., Thornton, L.E., Lai, S.K., Barnett, L.M. (2014). Effect of changes to the school food environment on eating behaviours and/or body weight in children: a systematic review. Obesity Reviews, 15(12), 968-982.

Duffey, K. J., Gordon-Larsen, P., Jacobs, D.R., Jr., Williams, O.D., Popkin, B.M.. (2007). Differential associations of fast food and restaurant food consumption with 3-y change in body mass index: the Coronary Artery Risk Development in Young Adults Study. The American Journal of Clinical Nutrition, 85(1), 201-208.

Engler-Stringer, R. (2010). Food, cooking skills, and health: a literature review. Canadian journal of Dietetic practice and research, 71(3), 141-145.

Engler-Stringer, R., Shah, T., Bell, S., & Muhajarine, N. (2014). Original Research: Geographic access to healthy and unhealthy food sources for children in neighbourhoods and from elementary schools in a mid-sized Canadian city. Spatial and Spatio-temporal Epidemiology, 11, 23-32. doi:10.1016/j.sste.2014.07.001

Epstein, L. H., Jankowiak, N., Nederkoorn, C., Raynor, H. A., French, S. A., & Finkelstein, E. (2012). Experimental research on the relation between food price changes and food-purchasing patterns: a targeted review. The American Journal of Clinical Nutrition, 95(4), 789-809. doi:10.3945/ajcn.111.024380

Escaron, A. L., Martinez-Donate, A. P., Riggall, A. J., Meinen, A., Hall, B., Nieto, F. J., & Nitzke, S. (2016). Developing and Implementing "Waupaca Eating Smart": A Restaurant and Supermarket Intervention to Promote Healthy Eating Through Changes in the Food Environment. Health promotion practice, 17(2), 265-277. Retrieved from http://ovidsp.ovid.com/ovidweb.cqi?T=JS&PAGE=reference&D=prem&NEWS=N&AN=26546508

Estrade, M., Dick, S., Crawford, F., Jepson, R., Ellaway, A., & McNeill, G. (2014). A qualitative study of independent fast food vendors near secondary schools in disadvantaged Scottish neighbourhoods. BMC Public Health, 14, 793. Retrieved from http://ovidsp.ovid.com/ovidweb.cqi?T=JS&PAGE=reference&D=medl&NEWS=N&AN=25092257

Falbe, J., Thompson, H. R., Becker, C. M., Rojas, N., McCulloch, C. E., & Madsen, K. A. (2016). Impact of the Berkeley excise tax on sugar-sweetened beverage consumption. American journal of public health, 106(10), 1865-1871.

Farmer, A. P., Nikolopoulos, H., McCargar, L., Berry, T., & Mager, D. (2015). Organizational characteristics and processes are important in the adoption of the Alberta Nutrition Guidelines for Children and Youth in child-care centres. Public health nutrition, 18(09), 1593-1601.

Farrell, L., Lloyd, B., Matthews, R., Bravo, A., Wiggers, J., & Rissel, C. (2014). Applying a performance monitoring framework to increase reach and adoption of children's healthy eating and physical activity programs. Public Health Research & Practice, 25(1). Retrieved from http://dx.doi.org/10.17061/phrp2511408

Fawkes, S. A. (1997). Aren't health services already promoting health? Australian and New Zealand Journal of Public Health, 21(4 Spec No):391-397.

Finance Canada. (2017). Summer 2017 - Survey and focus groups on the economy, final report. Prepared for the Department of Finance by Quorus Consulting Group Inc. Finance Canada. http://www.bac-lac.qc.ca/eng/Pages/home.aspx

First Nations and Inuit Health (Health Canada), Northern Affairs Organization (Indigenous and Northern Affairs Canada). (2016). Performance measurement strategy: (4.1.2) Nutrition North Canada.

Fitzpatrick, C., Datta, G. D., Henderson, M., Gray-Donald, K., Kestens, Y., & Barnett, T. A. (2017). School food environments associated with adiposity in Canadian children. International Journal of Obesity, 41(7), 1005-1010.

Food Secure Canada. (2018). New Parliamentary Report on Food Policy Echoes Many FSC Ideas. Retrieved from https://foodsecurecanada.org/.

Fournier, B., Illasiak, V., Eastlick Kushner, K., & Raine, K. (2018). The adoption, implementation, and maintenance of a school food policy in the Canadian Arctic: A retrospective case study. Health Promotion International, 1-10.

Fortin, N., & Perrault, M. (2011). The School Zone and Nutrition: Courses of Action for the Municipal Sector. Retrieved from http://www.aspq.org/documents/file/guide-zonage-version-finale-anglaise.pdf

Frank, L. (2015). Exploring infant feeding pratices in food insecure households: What is the real issue? Food and Foodways, 23(3), 186-209.

Ganann, R., Fitzpatrick-Lewis, D., Ciliska, D., et al. (2014). Enhancing nutritional environments through access to fruit and vegetables in schools and homes among children and youth: a systematic review. BMC Research Notes, 7(422), 1-13.

Glanz, K., Hewitt, A.M., & Rudd, J. (1992). Consumer behavior and nutrition education: an integrative review. Journal of Nutrition Education, 24(5):267-277.

Glanz, K., & Mullis, R.M. (1988). Environmental interventions to promote healthy eating: a review of models, programs, and evidence. Health Education & Behavior,15 (4): 395-415.

Glanz, K., Lankenau, B., Foerster, S., Temple, S., Mullis, R., & Schmid, T. (1995). Environmental and policy approaches to cardiovascular disease prevention through nutrition: opportunities for state and local action. Health Education & Behavior, 22 (4): 512-527.

Glanz, K., Sallis, J. F., Saelens, B. E., & Frank, L. D. (2007). Nutrition Environment Measures Survey in stores (NEMS-S): development and evaluation. American Journal of Preventive Medicine, 32(4), 282-289. doi:S0749-3797(06)00569-1 [pii]

Godin, K. M., Chaurasia, A., Hammond, D., & Leatherdale, S. T. (2018). Food Purchasing Behaviors and Sugar-Sweetened Beverage Consumption among Canadian Secondary School Students in the COMPASS Study. Journal of nutrition education and behavior, pii: S1499-4046(17)31078-3.

Goldade, K., Nichter, M., Nichter, M., Adrian, S., Tesler, L., & Muramoto, M. (2008). Breastfeeding and smoking among low-income women: results of a longitudinal qualitative study. Birth, 35(3), 230-240.

Government of Alberta. (2012). Alberta Nutrition Guidelines for Children and Youth: A Childcare, School and Recreation/Community Centre Resource Manual.; Retrieved from http://www.health.alberta.ca/documents/Nutrition-Guidelines-AB-Children-Youth.pdf

Government of Alberta. (2016). Health Annual Report 2015-2016. Retrieved from http://www.health.alberta.ca/documents/Annual-Report-16.pdf

Government of Alberta. (2017) Fiscal Plan 2017-20. Retrieved from http://finance.alberta.ca/publications/budget/budget2017/fiscal-plan-complete.pdf

Government of Alberta. (2018). Alberta Education School Nutrition Program: Operational Requirements for 2018/19, Alberta Education. Retrieved from https://education.alberta.ca/school-nutrition-program/school-nutrition-program/everyone/school-nutrition-program-contact-information/

Government of Canada. (1985). Excise Tax Act. [Legislation]. Retrieved from http://laws-lois.justice.gc.ca/PDF/E-15.pdf

Government of Canada. (2016). How Nutrition North Canada works. Retrieved from http://www.nutritionnorthcanada.gc.ca/eng /1415538638170/1415538670874

Government of Canada. (2016). Nutrition North Canada: Eligible Communities. Retrieved from http://www.nutritionnorthcanada.gc.ca/eng/1415540731169/1415540791407

Government of Canada. (2017). Food and Nutrition Surveillance. Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance.html

Government of Northwest Territories (2017). Budget Address, 2017-2018, Finance, Editor.

Government of Ontario. (2015). Healthy Menu Choices Act, 2015. Retrieved from https://www.ontario.ca/laws/statute/15h07

Government of Quebec. (1980, March 1). P-40.1 Consumer Protection Act. Retrieved from http://legisquebec.gouv.qc.ca/en/showdoc/cs/P-40.1

Hall, E., Chai, W., & Albrecht, J. A. (2016). A qualitative phenomenological exploration of teachers' experience with nutrition education. American Journal of Health Education, 47(3), 136-148. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=115010532&site=ehost-live&scope=site

Harnack, L., Block, G., & Lane, S. (1997). Influence of selected environmental and personal factors on dietary behavior for chronic disease prevention: a review of the literature. Journal of nutrition education and behavior, 29(6), 306-312.

Hawkes, C. (2012). Food policies for healthy populations and healthy economies. British Medical Journal, 334 (e2801).

Hawkes, C., Ahern, A. L., & Jebb, S. A. (2014). A stakeholder analysis of the perceived outcomes of developing and implementing England's obesity strategy 2008-2011. BMC Public Health, 14, 441. Retrieved from http://dx.doi.org/10.1186/1471-2458-14-441

Hawley, K. L., Roberto, C. A., Bragg, M. A., Liu, P. J., Schwartz, M. B., & Brownell, K. D. (2013). The science on front-of-package food labels. Public Health Nutrition, 16(3), 430-439. doi:10.1017/S1368980012000754

Health Canada, Canadian Paediatric Society, Dietitians of Canada, & Breastfeeding Committee for Canada. (2012). Nutrition for Healthy Term Infants: Recommendations from Birth to Six Months. Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months.html

Health Canada. (2013). Measuring the food environment in Canada. Retrieved from http://www.foodsecuritynews.com/resource-documents/MeasureFoodEnvironm_EN.pdf

Health Canada. (2013, December 10). Healthy eating toolbox. Health Canada. Retrieved from http://www.hc-sc.gc.ca/fn-an/nutrition/part/tb-bo/index-eng.php

Health Canada, Canadian Paediatric Society, Dietitians of Canada, & Breastfeeding Committee for Canada. (2014). Nutrition for healthy term infants: Recommendations from six to 24 months. Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months/6-24-months.html

Health Canada. (2015). Nutrition labeling.

Health Canada. (2017). Food and Nutrition Surveillance Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance.html

Healthy Families BC. (2016). Informed Dining. Retrieved from https://www.healthyfamiliesbc.ca/home/informed-dining

Heart & Stroke. (2013). Position Statement: Schools and Nutrition. Retrieved June 16, 2017, from http://www.heartandstroke.ca/-/media/pdf-files/canada/2017-position-statements/schoolsand-nutrition-ps-eng.ashx?la=en&hash=1B234AA1609177F004C85A4AE19B2175DD6557B4

Heart & Stroke. (2017). Report on the Health of Canadians. Retrieved from http://www.heartandstroke.ca/what-we-do/media-centre/report-on-health

Hendriks, A.-M., Kremers, S. P., Gubbels, J. S., Raat, H., de Vries, N. K., & Jansen, M. W. (2013). Towards health in all policies for childhood obesity prevention. Journal of Obesity, 2013, 1-12.

Herman, K.M., Craig, C.L., Gauvin. L., & Katzmarzyk, P.T. (2009). Tracking of obesity and physical activity from childhood to adulthood: the Physical Activity Longitudinal Study. International Journal of Pediatric Obesity, 4: 281-288.

Hersch, D., Perdue, L., Ambroz, T., & Boucher, J. L. (2014). Peer reviewed: the impact of cooking classes on food-related preferences, attitudes, and behaviors of school-aged children: a systematic review of the evidence, 2003–2014. Preventing Chronic Disease, 11, 1-9.

Hillier-Brown, F., Summerbell, C., Moore, H., Routen, A., Lake, A., Adams, J., et al. (2016). The impact of interventions to promote healthier ready-to-eat meals (to eat in, to take away or to be delivered) sold by specific food outlets open to the general public: a systematic review. Obesity Reviews, 18(2), 227-246.

Hirani, S. A. (2018). Sustainability Project at U of A Availability of Breastfeeding Support at University of Alberta: An Analysis of Physical Facilities, Policies, and Environment. Retrieved from https://www.ualberta.ca/sustainability/EducationResearch/SustainabilityScholars/~/media/sustainability/EducationResearch/Documents/SustainabilityScholars/2016/Sustainability_Scholars_2016_final_report_-Shela_Hirani.pdf

Hirani, S.A. & Olson, J. (2016). Concept analysis of maternal autonomy in the context of breastfeeding. Journal of Nursing Scholarship, 48 (3), 276-284.

Horta, B. L., Loret de Mola, C., & Victora, C. G. (2015). Long term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure and type 2 diabetes: a systematic review and meta analysis. Acta Paediatrica, 104(S467), 30-37.

Hobin, E., Lebenbaum, M., Rosella, L., & Hammond, D. (2015). Availability, location, and format of nutrition information in fast-food chain restaurants in Ontario, Canada. Canadian Journal of Dietetic Practice and Research, 76(1), 44-48. doi:10.3148/cjdpr-2014-026

Institute of Medicine. (2012). Front-of-package nutrition rating systems and symbols: promoting healthier choices. Washington, DC.

Izumi, B. T., Findholt, N. E., & Pickus, H. A. (2015). Formative Evaluation to Increase Availability of Healthy Snacks and Beverages in Stores Near Schools in Two Rural Oregon Counties, 2013. Preventing Chronic Disease, 12, E215-E215. doi:10.5888/pcd12.150252

Jaime, P. C., & Lock, K. (2009). Do school based food and nutrition policies improve diet and reduce obesity? Preventive Medicine, 48(1), 45-53.

James, P., Arcaya, M. C., Parker, D. M., Tucker-Seeley, R. D., & Subramanian, S. V. (2014). Do minority and poor neighborhoods have higher access to fast-food restaurants in the United States? Health and Place, 29, 10-17. doi:10.1016/j.healthplace.2014.04.011

Jaworowska, A., Blackham, T., Davies, I.G., & Stevenson, L. (2013). Nutritional challenges and health implications of takeaway and fast food. Nutrition Reviews, 71(5), 310-318.

Jeffery, R. W., French, S. A., Raether, C., & Baxter, J. E. (1994). An environmental intervention to increase fruit and salad purchases in a cafeteria. Preventive Medicine, 23(6), 788-792.

Jones, A. C., Veerman, J. L. & Hammond, D. (2017). The health and economic impact of a tax on sugary drinks in Alberta. Retrieved from https://www.diabetes.ca/getattachment/Newsroom/Latest-News/Will-a-sugary-drinks-levy-benefit-Canadians/The-Health-and-Economic-Impact-of-a-Sugary-Drinks-Tax.pdf.aspx

Joyce, S., Stefan, E. K., & Megan, J. (2017). Food deserts in Winnipeg, Canada: a novel method for measuring a complex and contested construct. Health promotion and chronic disease prevention in Canada: research, policy and practice, 37(10), 350.

Just, D., Mancino, L., & Wansink, B. (2007). Could behavioral economics help improve diet quality for nutrition assistance program participants? U.S. Dept. of Agriculture, ERR-43.

Katz, D. L., Njike, V. Y., Rhee, L. Q., Reingold, A., & Ayoob, K. T. (2010). Performance characteristics of NuVal and the Overall Nutritional Quality Index (ONQI). The American Journal of Clinical Nutrition, 91(4), 1102S-1108S. doi:10.3945/ajcn.2010.28450E

Kealey, K. A., Perterson, A. V. J., Gaul, M. A., & Dinh, K. T. (2000). Teacher training as a behavior change process: principles and results from a longitudinal study. Health Education Behaviour, 27(1), 64-81.

Kelder, S.H., Perry, C.L., Klepp, K.I., Lytle, L.L. (1994). Longitudinal tracking of adolescent smoking, physical activity, and food choice behaviors. American Journal of Public Health, 84: 1121-1126.

Kelly, B., Freeman, B., King, L., Chapman, K., Baur, L. A., & Gill, T. (2016). Television advertising, not viewing, is associated with negative dietary patterns in children. Pediatric obesity, 11(2), 158-160. doi:10.1111/ijpo.12057

Kent, M. P., & Pauzé, E. (2018). The effectiveness of self-regulation in limiting the advertising of unhealthy foods and beverages on children's preferred websites in Canada. Public health nutrition, 1-10.

Kim, S. K., Park, S., Oh, J., Kim, J., & Ahn, S. (2018). Interventions promoting exclusive breastfeeding up to six months after birth: A systematic review and meta-analysis of randomized controlled trials. International Journal of Nursing Studies, 80, 94-105. Retrieved from https://doi.org/10.1016/j.ijnurstu.2018.01.004

Kiszko, K., Martinez, O., Abrams, C., & Elbel, B. (2014). The Influence of Calorie Labeling on Food Orders and Consumption: A Review of the Literature. Journal of Community Health, 39(6), 1248-1269. doi:10.1007/s10900-014-9876-0

Klesges, R. C., Stein, R.J., Eck, L.H., Isbell, T.R., & Klesges, L.M. (1991). Parental influence on food selection in young children and its relationships to childhood obesity" The American Journal of Clinical Nutrition, 53(4), 859-864.

Kornik S. (2017, July 8). 'You Can Breastfeed Here' campaign launched in Edmonton. [Newspaper]. Global News. Retrieved September 2, 2017, from http://qlobalnews.ca/news/3584975/you-can-breastfeed-here-campaign-launched-in-edmonton/

Kreiger, J., & Saelens, B. E. (2013). Impact of Menu Labeling on Consumer Behavior: A 2008-2012 Update. A Research Review, in Healthy Eating Research: Research Reviews. Retrieved from http://healthyeatingresearch.org/wp-content/uploads/2013/12/HER-RR-Menu-Labeling-FINAL-6-2013.pdf.

Kubik, M. Y., Lytle, L.A., Hannan, P.J., Perry, C.L., & Story, M. (2003). The association of the school food environment with dietary behaviors of young adolescents. American Journal of Public Health, 93(7), 1168-1173.

Kunkel, D., McKinley, C., & Wright, P. (2009). The impact of industry self-regulation on the nutritional quality of foods advertised on television to children. Retrieved from www.childrennow.org/uploads/documents/adstudy_2009.pdf

Kunkel, D., Castonguay, J., Wright, P. J., & McKinley, C. J. (2014). Solution or Smokescreen? Evaluating Industry Self-Regulation of Televised Food Marketing to Children. Communication Law & Policy, 19(3), 263-292. doi:10.1080/10811680.2014.919797

Kwan, A. (2015). Corner stores in Toronto are getting a new kind of power wall: Fresh fruit. Retrieved July 10, 2015, from https://www.theqlobeandmail.com/news/toronto/corner-stores-in-toronto-are-getting-a-new-kind-of-power-wall-fresh-fruit/article25419254/

Langford, R., Bonell, C., Jones, H., & Campbell, R. (2015). Obesity prevention and the health promoting schools framework: essential components and barriers to success. International Journal of Behavioral Nutrition and Physical Activity, 12(1), 15.

Larson, N. I., Story, M., Eisenberg, M. E., & Neumark-Sztainer, D. (2006). Food preparation and purchasing roles among adolescents: associations with sociodemographic characteristics and diet quality. Journal of the American Dietetic Association, 106(2), 211-218.

Laska, M. N., Larson, N. I., Neumark-Sztainer, D., & Story, M. (2012). Does involvement in food preparation track from adolescence to young adulthood and is it associated with better dietary quality? Findings from a 10-year longitudinal study. Public health nutrition, 15(7), 1150-1158.

Laxer, R. E., & Janssen, I. (2014). The proportion of excessive fast-food consumption attributable to the neighbourhood food environment among youth living within 1 km of their school. Applied Physiology, Nutrition, and Metabolism, 39(4), 480-486. doi:10.1139/apnm-2013-0208

Le Bodo, Y., Paquette, M., & De Wals, P. (2016). Taxing Soda for Public Health: A Canadian Perspective. 2016: Springer.

Lewallen, T. C., Hunt, H., Potts-Datema, W., Zaza, S., & Giles, W. (2015). The whole school, whole community, whole child model: A new approach for improving educational attainment and healthy development for students. Journal of School Health, 85(11), 729-739. doi:10.1111/josh.12310

Liberato, S., Bailie, R., & Brimblecombe, J. (2014). Nutrition interventions at point-of-sale to encourage healthier food purchasing: A systematic review. BMC Public Health, 14(919), 1-14.

Lien, N., Lytle, L.A., & Klepp, K.I. (2001). Stability in consumption of fruit, vegetables, and sugary foods in a cohort from age 14 to age 21. Preventative Medicine, 33: 217-226.

Littlewood, J. A., Lourenço, S., Iversen, C. L., & Hansen, G. L. (2016). Menu labelling is effective in reducing energy ordered and consumed: a systematic review and meta-analysis of recent studies. Public Health Nutrition, 19(12), 2106-2121. doi:10.1017/s1368980015003468

Litwin, N. S., Bradley, B.H.R., & Miller, G.D. (2015). Dairy Proteins in Nutrition and Food Science: Functional Ingredients in the Current Global Marketplace. Journal of Food Science, 80, A1-A1.

Long, M. W., Tobias, D. K., Cradock, A. L., Batchelder, H., & Gortmaker, S. L. (2015). Systematic review and meta-analysis of the impact of restaurant menu calorie labeling. American Journal of Public Health, 105(5), e11-e24. doi:10.2105/AJPH.2015.302570

Lorena, V., Deborah, C., Jon, M., B., B. A., Padmaja, S., J., M. T., et al. (2018). Exclusive breastfeeding in hospital predicts longer breastfeeding duration in Canada: Implications for health equity. Birth, 0(0). doi:doi:10.1111/birt.12345

Luan, H., Minaker, L. M., & Law, J. (2016). Do marginalized neighbourhoods have less healthy retail food environments? An analysis using Bayesian spatial latent factor and hurdle models. International Journal of Health Geographics, 15(1), 29.

Ludwig, D. S., Peterson, K.E., & Gortmaker, S.L. (2001). Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. Lancet, 357(9255), 505-508.

Magnus, A., Moodie, M., Ferguson, M., Cobiac, L., Liberato, S., & Brimblecombe, J. (2016). The economic feasibility of price discounts to improve diet in Australian Aboriginal remote communities. . Australian and New Zealand Journal of Public Health, 40, S36-S41.

Mah, C., Cook, B., Rideout, K., & Minaker, L. M. (2016). Policy options for healthier retail food environments in city-regions. Canadian Journal of Public Health, 107 (Suppl. 1), eS64-eS67.

Mair J, Pierce M, & Teret S. (2005). The use of zoning to restrict fast food outlets: a potential strategy to combat obesity. Retrieved from Baltimore: The Centers for Law and the Public's Health at Johns Hopkins & Georgetown Universities.

Malik, V. S., Pan, A., Willett, W.C., Hu, F.B. (2013). Sugar-sweetened beverages and weight gain in children and adults: a systematic review and meta-analysis. The American Journal of Clinical Nutrition, 98(4), 1084-1102.

Markow, K., Coveney, J., & Booth, S. (2012). Enhancing food literacy through school-based cooking programs-What's working and what's not? Journal of the Home Economics Institute of Australia, 19(2), 2-11.

Mâsse, L. C., de Niet-Fitzgerald, J.E., Watts, A.W., Naylor, P.-J., & Saewyc, E.M. (2014). Associations between the school food environment, student consumption and body mass index of Canadian adolescents. International Journal of Behavioral Nutrition and Physical Activity, 11(1), 29.

Mayne, S. FDA Statement on Menu Labeling Enforcement. Retrieved from https://www.fda.gov/food/newsevents/constituentupdates/ucm531538.htm

McCallum, L. C., Ollson, C. A., & Stefanovic, I. L. (2015). Advancing the practice of health impact assessment in Canada: Obstacles and opportunities. Environmental Impact Assessment Review, 55, 98-109.

McIsaac, J-L.D., Jarvis, S.L., Spencer, R. & Kirk, S.F.L. (2018). At-a-glance-"A tough sell": findings from a qualitative analysis on the provision of healthy foods in recreation and sports settings. Health promotion and chronic disease prevention in Canada: research, policy and practice, 38(1), 18.

Micha, R., Karageorgou, D., Bakogianni, I., Trichia, E., Whitsel, L.P., Story, M., et al. (2018). Effectiveness of school food environment policies on children's dietary behaviors: A systematic review and meta-analysis. PLOS One, 13(3), e0194555. Retrieved from https://doi.org/10.1371/journal.pone.0194555

Mikkelsen, M. V., Husby, S., Skov, L.R., & Perez-Cueto, F.J. (2014). A systematic review of types of healthy eating interventions in preschools. Nutrition journal, 13, 56.

Mikkila, V., Rasanen, L., Raitakari, O.T., Pietinen, P., &Viikari, J. (2004). Longitudinal changes in diet from childhood into adulthoodwith respect to risk of cardiovascular diseases: the Cardiovascular Risk in Young Finns Study. European Journal of Clinical Nutrition, 58: 1038-1045.

Moore, L. & Tapper, K. (2008). The impact of school fruit tuck shops and school food policies on children's fruit consumption: a cluster randomised trial of schools in deprived areas. Journal of Epidemiology and Community Health, 62(10), 926-931.

Morestin F, H. M.-C., Jacques M, & Benoit F. (2011). Public Policies on Nutrition Labelling: Effects and Implementation Issues - A Knowledge Synthesis. Retrieved from http://www.ncchpp.ca/docs/Synthesis_nutrition_labelling_EN.pdf

Munn, A. C., Newman, S. D., Mueller, M., Phillips, S. M., & Taylor, S. N. (2016). The Impact in the United States of the Baby-Friendly Hospital Initiative on Early Infant Health and Breastfeeding Outcomes. Breastfeeding Med, 11(5):222-230.

National Collaborating Centre for Healthy Public Policy. (2013) Canadian Experience in Institutionalizing Health Impact Assessment (HIA): 2013 Interprovincial-territorial Meeting. Retrieved from http://www.ncchpp.ca/133/publications.ccnpps?id_ article=975

Nelson, M. C., Story, M., Larson, N. I., Neumark Sztainer, D., & Lytle, L. A. (2008). Emerging adulthood and college aged youth: an overlooked age for weight related behavior change. Obesity, 16(10), 2205-2211.

Neumark-Sztainer, D., French, S.A., Hannan, P.J., Story, M., Fulkerson, J.A. (2005). School lunch and snacking patterns among high school students: associations with school food environment and policies. International Journal of Behavioral Nutrition and Physical Activity, 2(1), 14.

Niebylski, M. L., Lu, T., Campbell, N.R., et al. (2014). Healthy food procurement policies and their impact. International Journal of Environmental Research and Public Health, 11(3), 2608-2627.

Niebylski, M. L., Redburn, K. A., Duhaney, T., & Campbell, N. R. (2015). Healthy food subsidies and unhealthy food taxation: A systematic review of the evidence. Nutrition, 31(6), 787-795.

Ni Mhurchu, C., Vandevijvere, S., Waterlander, W., Thornton, L. E., Kelly, B., Cameron, A. J., et al. (2013). Monitoring the availability of healthy and unhealthy foods and non-alcoholic beverages in community and consumer retail food environments globally. Obesity Reviews, 14 Suppl 1, 108-119. doi:10.1111/obr.12080

Office de la protection du consommateur, Gouvernement du Québec. (2012). Advertising directed at children under 13 years of age: guide to the application of Sections 248 and 249 Consumer Protection Act. Retrieved May 24, 2018, from https://www.opc.gouv.qc.ca/fileadmin/media/documents/consommateur/sujet/publicite-pratique-illegale/EN_Guide_publicite_moins_de_13_ans_vf.pdf

Olendzki, B. C., Procter-Gray, E., Wedick, N. M., Patil, V., Zheng, H., Kane, K., et al. (2015). Disparities in access to healthy and unhealthy foods in central Massachusetts: implications for public health policy. Journal of the American College of Nutrition, 34(2), 150-158 159p. doi:10.1080/07315724.2014.917058

Olsho, L. E., Klerman, J. A., Ritchie, L., Wakimoto, P., Webb, K. L., & Bartlett, S. (2015). Increasing child fruit and vegetable intake: findings from the US Department of Agriculture Fresh Fruit and Vegetable Program. Journal of the Academy of Nutrition and Dietetics, 115(8), 1283-1290.

Olstad, D.L., Raine, K.D., & Nykiforuk, C.I. (2014). Development of a Report Card on Healthy Food Environments and Nutrition for Children in Canada. Preventative Medicine, 69: 287-295.

Olstad, D.L., Teychenne, M., Minaker, L., Taber, D., Raine, K., Nykiforuk, C., et al. (2016). Can policy ameliorate socioeconomic inequities in obesity and obesity related behaviours? A systematic review of the impact of universal policies on adults and children. Obesity Reviews, 17(12), 1198-1217.

Olstad, D. L., Ancilotto, R., Teychenne, M., Minaker, L., Taber, D., Raine, K., et al. (2017). Can targeted policies reduce obesity and improve obesity related behaviours in socioeconomically disadvantaged populations? A systematic review. Obesity Reviews, 18(7), 791-807.

Orr, S. K., Dachner, N., Frank, L., & Tarasuk, V. (2018). Relation between household food insecurity and breastfeeding in Canada. Canadian Medical Association Journal, 190(11), E312-E319. doi:10.1503/cmaj.170880

Paeratakul, S., Ferdinand, D.P., Champagne, C.M., Ryan, D.H., & Bray, G.A. (2003). Fast-food consumption among US adults and children: dietary and nutrient intake profile. Journal of the American Dietetic Association, 103(10), 1332-1338.

Pan-Canadian Public Health Network. (2013). Towards a healthier Canada: compilation of initiatives. 2013; http://www.phn-rsp.ca/thcpr-vcpsre-2013/images/Compilation-of-Initiatives-EN.pdf.

Park, H. K. (2008). Nutrition policy in South Korea. Asia Pacific Journal of Clinical Nutrition, 17 Suppl 1, 343-345. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/18296374

Parliament of Canada. (2016). Bill S-228: An Act to amend the Food and Drugs Act (prohibiting food and beverage marketing directed at children). Retrieved from http://www.parl.ca/DocumentViewer/en/42-1/bill/S-228/first-reading

Perera, T., Frei, S., Frei, B., Wong, S. S., & Bobe, G. (2015). Improving nutrition education in U.S. elementary schools: Challenges and opportunities. Journal of Education and Practice, 6(30), 41-50. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1081364&site=ehost-live&scope=site

Pérez-Rodrigo, C., & Aranceta, J. (2001). School-based nutrition education: lessons learned and new perspectives. Public Health Nutr, 4(1a), 131-139. Retrieved from http://www.researchgate.net/profile/Carmen_Perez-Rodrigo/publication/12076119_School-based_nutrition_education_lessons_learned_and_new_perspectives/links/0a85e52de7ef99cc1e000000.pdf

Perikkou, A., Kokkinou, E., Panagiotakos, D. B., & Yannakoulia, M. (2015). Teachers' readiness to implement nutrition education programs: Beliefs, attitudes, and barriers. Journal of Research in Childhood Education, 29(2), 202-211. Retrieved from http://dx.doi.org/1 0.1080/02568543.2015.1009202

Perry, C., Murray, D. M., & Griffin, G. (1990). Evaluating the statewide dissemination of smoking prevention curricula: factors in teacher compliance. Journal of School Health, 60, 501-504.

Petralias, A., Papadimitriou, E., Riza, E., Karagas, M., Zagouras, A., & Linos, A. (2016). The impact of a school food aid program on household food insecurity. European Journal of Public Health, 26(2), 290-296.

Phulkerd, S., Lawrence, M., Vandevijvere, S., Sacks, G., Worsley, A., & Tangcharoensathien, V. (2016). A review of methods and tools to assess the implementation of government policies to create healthy food environments for preventing obesity and diet-related non-communicable diseases. Implementation Science, 11, 1-13.

Potvin Kent, M., Dubois, L., & Wanless, A. (2011). Self-regulation by industry of food marketing is having little impact during children's preferred television. International Journal of Pediatric Obesity, 6(5-6), 401-408.

Potvin Kent, M., & Wanless, A. (2014). The influence of the Children's Food and Beverage Advertising Initiative: change in children's exposure to food advertising on television in Canada between 2006-2009. International Journal of Obesity, 38(4):558-562.

Powell, L. M., Chriqui, J. F., Khan, T., Wada, R., & Chaloupka, F. J. (2013). Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes. Obesity Reviews, 14(2), 110-128. doi:10.1111/obr.12002

POWER UP! (2015). The City of Hamilton's Corporate Food and Beverage Policy. Retrieved July 4, 2017, from https://powerupforhealth.files.wordpress.com/2015/10/city-of-hamiltons-corporate-food-and-beverage-policy.pdf

POWER UP! (2016). Evidence Synthesis: Impact of healthy food procurement policies/programs and nutrition standards on sales, intake and availability of healthier food, and body weight status. Retrieved June 16, 2017, from http://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/10/Evidence-synthesis-food-procurement.pdf

POWER UP! (2016). Policy Recommendations for a Healthier Canada: Healthy food procurement and nutrition standards in public facilities. Retrieved June 16, 2017, from http://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/10/Consensus-conference-recommendations-statement.pdf

Prowse, R. (2017). Food marketing to children in Canada: a settings-based scoping review on exposure, power and impact. Health promotion and chronic disease prevention in Canada: research, policy and practice, 37(9), 274.

Public Health Agency of Canada (PHAC). (2011). Obesity in Canada - Opportunities for Intervention. Retrieved from http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/oic-oac/interv-eng.php

Public Health Agency of Canada. (2016). How healthy are Canadians: A trend analysis of the health of Canadians from a healthy living and chronic disease perspective. Ottawa: Public Health Agency of Canada; 2016.

Purnell, J. Q., Gernes, R., Stein, R., Sherraden, M. S., & Knoblock-Hahn, A. (2014). A systematic review of financial incentives for dietary behavior change. Journal of the Academy of Nutrition and Dietetics, 114(7), 1023-1035. doi:10.1016/j.jand.2014.03.011

Quebec en Forme. (2012). Modifying the built environment to promote healthy eating among youth. Retrieved from http://www.quebecenforme.org/media/103607/08_research_summary.pdf

Raine, K.D., Muhajarine, N., Spence, J.C., Neary, N.E., & Nykiforuk, C.I.J. (2012). Coming to consensus on policy to create supportive built environments and community design. Canadian Journal of Public Health, 103(6), S5-8.

Raine, K.D., Lobstein, T., Landon, J., et al. (2013). Restricting marketing to children: consensus on policy interventions to address obesity. Journal of Public Health Policy, 34(2), 239-253. doi:10.1057/jphp.2013.9

Raine, K., Ferdinands, A., Atkey, K., Hobin, E., Jeffery, B., Nykiforuk, C., et al. (2017). Policy recommendations for front-of-package, shelf, and menu labelling in Canada: Moving towards consensus. Canadian Journal of Public Health, 108(4), e409-e413.

Rangan, A. M., Randall, D., Hector, D.J., Gill, T.P., & Webb, K.L. (2008). Consumption of 'extra' foods by Australian children: types, quantities and contribution to energy and nutrient intakes. European Journal of Clinical Nutrition, 62(3), 356-364.

Restaurants Canada. (2016). Sales Taxes on Foods & Beverages. Retrieved from https://www.restaurantscanada.org/sales-taxes-on-food-beverages/

Revenu Québec, Canada Revenue Agency. (2013). Products and Services Tax and Québec Sales Tax. Retrieved from http://www.revenuquebec.ca/documents/fr/publications/in/in-216%282013-05%29.pdf

Ries, N. M. (2012). Legal and policy measures to promote healthy behaviour: using incentives and disincentives to control obesity. McGill Journal of Law and Health, 6(1), 1-40.

Ritson, M. (2009, April 21). Takeway is shut 'to combat pupil obesity'. Express. Retrieved from http://www.express.co.uk/news/uk/96145/ Takeway-is-shut-to-combat-pupil-obesity

Roberto, C. A., Swinburn, B., Hawkes, C., Huang, T. T. K., Costa, S. A., Ashe, M., et al. (2015). Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. The Lancet, 385(9985), 2400-2409. Retrieved from http://dx.doi.org/10.1016/S0140-6736(14)61744-X

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., et al. (2016). Why invest, and what it will take to improve breastfeeding practices? The Lancet, 387(10017), 491-504.

Ronto, R., Ball, L., Pendergast, D., & Harris, N. (2016). The role of home economics teachers in enhancing adolescents' food literacy to develop healthy dietary behaviours. Journal of the Home Economics Institute of Australia, 23(1), 11-19.

Rudd Center. (2014). Older but still vulnerable: All children need protection from unhealthy food marketing. Retrieved from http://www.yaleruddcenter.org/resources/upload/docs/what/reports/Protecting_Older_Children_3.14.pdf

Rudelt, A., French, S., & Harnack, L. (2014). Fourteen-year trends in sodium content of menu offerings at eight leading fast-food restaurants in the USA. Public health nutrition, 17(8), 1682-1688 1687p.

Sacco, J., Lillico, H. G., Chen, E., & Hobin, E. (2017). The influence of menu labelling on food choices among children and adolescents: a systematic review of the literature. Perspectives in public health, 137(3), 173-181.

Sadler, R.C., Clark, A.F., Wilk, P., O'Connor, C., & Gilliland, J.A. (2016). Using GPS and activity tracking to reveal the influence of adolescents' food environment exposure on junk food purchasing. Canadian Journal of Public Health, 107:14-20.

Schermel, A., Emrich, T. E., Arcand, J., Wong, C. L., & L'abbé, M. R. (2013). Nutrition marketing on processed food packages in Canada: 2010 Food Label Information Program. Applied Physiology, Nutrition, and Metabolism, 38(6), 666-672.

School of Public Health. (2015). Alberta Healthy School Community Wellness Fund. Retrieved from http://www.wellnessfund.ualberta.ca/

Schwartz, M. B., Novak, S.A., & Fiore, S.S. (2009). The impact of removing snacks of low nutritional value from middle schools. Health Education & Behavior, 36(6), 999-1011.

Shealy L. R., Benton-Davis, S., Grummer-Strawn, L.M. (2005). The CDC Guide to Breastfeeding Interventions. Retrieved from https://www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf

Silver, L. D., Ng, S. W., Ryan-Ibarra, S., Taillie, L. S., Induni, M., Miles, D. R., et al. (2017). Changes in prices, sales, consumer spending, and beverage consumption one year after a tax on sugar-sweetened beverages in Berkeley, California, US: A before-and-after study. PLOS Medicine, 14(4), e1002283.

Slater, J. (2013). Is cooking dead? The state of home economics food and nutrition education in a Canadian province. International Journal of Consumer Studies, 37(6), 617-624.

Slater, J. J., & Mudryj, A. N. (2016). Self-perceived eating habits and food skills of Canadians. Journal of nutrition education and behavior, 48(7), 486-495. e481.

Smithers, L. G., Lynch, J. W., & Merlin, T. (2016). Television marketing of unhealthy food and beverages to children in Australia: a review of published evidence from 2009 (1465-1858). John Wiley &

Sons, Ltd. Chichester, UK. Division: ST, 1465-1858.

Smoyer-Tomic, K., Spence, J.C., Raine, K.D., Amrhein, C., Cameron, N., Yasenovskiy, V., Cutumisu, N., Hemphill, E., Healy, J. (2008.). The association between neighborhood socioeconomic status

and exposure to supermarkets and fast food outlets. Health & Place, 14, 740-754.

Statistics Canada 2011. (2015). Census-Boundary files. Retrieved from https://www12.statcan.gc.ca/census-recensement/2011/geo/bound-limit/bound-limit-2011-eng.cfm

Statistics Canada. (2012). Health at a glance: Breastfeeding trends in Canada, Statistics Canada Catalogue no. 82-624-X. Retrieved from http://www.statcan.gc.ca/pub/82-624-X/2013001/article/11879-eng.htm

Stitt, S. (1996). An international perspective on food and cooking skills in education. British Food Journal, 98(10), 27-34.

Story, M., Kaphingst, K.M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: policy and environmental approaches. Annual Review of Public Health, 29: 253-272.

Sutherland, L. A., Kaley, L. A., & Fischer, L. (2010). Guiding stars: the effect of a nutrition navigation program on consumer purchases at the supermarket. The American Journal of Clinical Nutrition, 91(4), 1090S-1094S. doi:10.3945/ajcn.2010.28450C

Swinburn, B., Egger, G., & Raza, F. (1999). Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. Preventative Medicine, 29(6): 563-570.

Swinburn, B., Vandevijvere, S., Kraak, V., Sacks, G., Snowdon, W., Hawkes, C., et al. (2013). Monitoring and benchmarking government policies and actions to improve the healthiness of food environments: a proposed Government Healthy Food Environment Policy Index. Obesity Reviews, 14 Suppl 1, 24-37. doi:10.1111/obr.12073

Taber, D. R., Chriqui, J.F., & Chaloupka, F.J. (2012). Differences in nutrient intake associated with state laws regarding fat, sugar, and caloric content of competitive foods. Archives of Pediatrics & Adolescent Medicine, 166(5), 452-458.

Taber, D. R., Chriqui, J.F., & Chaloupka, F.J. (2013). State laws governing school meals and disparities in fruit/vegetable intake. American Journal of Preventive Medicine, 44(4), 365-372.

Tarasuk, V. (2018). Latest household food insecurity data now available. Proportion of children under 18 in food insecure households, 2015-2016. PROOF: Food Insecurity Policy Research. Retrieved from http://proof.utoronto.ca/new-data-available/

The Standing Senate Committee on Social Affairs Science and Technology. (2016). Obesity in Canada: a whole-of-society approach for a healthier Canada. Retrieved from Ottawa, ON: http://www.parl.gc.ca/content/sen/committee/421/SOCI/Reports/2016-02-25_Revised_report Obesity in Canada e.pdf

Terry-McElrath, Y. M., O'Malley, P.M., & Johnston, L.D. (2014). Accessibility over availability: associations between the school food environment and student fruit and green vegetable consumption. Childhood Obesity, 10(3), 241-250.

Thow, A. M., Downs, S., & Jan, S. (2014). A systematic review of the effectiveness of food taxes and subsidies to improve diets: Understanding the recent evidence. Nutrition Reviews, 72(9), 551-565.

Thurton, D. (2018). Northern Alberta community receives grant to fight high energy bills, food costs. CBC News 2018; Edmonton.

Tortu, S., & Botvin, G. J. (1989). School-based smoking prevention: the teacher training process. Preventive Medicine, 18, 280-289.

Tugault-Lafleur, C. N., Black, J.L, & Barr., S.I. (2017). Examining school-day dietary intakes among Canadian children. Applied Physiology, Nutrition, and Metabolism. doi:DOI: 10.1139/apnm-2017-0125.

Utter, J., Larson, N., Laska, M.N., Winkler, M., & Neumark-Sztainer, D. (2018). Self-Perceived Cooking Skills in Emerging Adulthood Predict Better Dietary Behaviors and Intake 10 Years Later: A Longitudinal Study. Journal of nutrition education and behavior, 50(5):494-500.

Vanderlee, L., & Hammond, D. (2013). Does nutrition information on menus impact food choice? Comparisons across two hospital cafeterias. Public Health Nutrition, 1-11. doi:10.1017/S136898001300164X

Vandevijvere, S., Sushil, Z., Exeter, D. J., & Swinburn, B. (2016). Obesogenic Retail Food Environments Around New Zealand Schools: A National Study. American Journal of Preventive Medicine. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=medp&NEWS=N&AN=27130865

VanEpps, E. M., Roberto, C. A., Park, S., Economos, C. D., & Bleich, S. N. (2016). Restaurant Menu Labeling Policy: Review of Evidence and Controversies. Current Obesity Reports, 5(1), 72-80. Retrieved from http://www.springer.com/medicine/internal/journal/13679

van Kleef, E., Otten, K., van Trijp, H.C. (2012). Healthy snacks at the checkout counter: a lab and field study on the impact of shelf arrangement and assortment structure on consumer choices. BMC Public Health, 12(1), 1072.

Veeraraghavan, G., Burnett, K., Skinner, K., et al. (2016). Paying for Nutrition: A Report on Food Costing in the North. Retrieved from https://foodsecurecanada.org/sites/foodsecurecanada.org/files/201609_paying_for_nutrition_fsc_report_final_ wt_erratum.pdf

Vine, M. M., & Elliott, S. J. (2014). Exploring the school nutrition policy environment in Canada using the ANGELO framework. Health Promotion Practice, 15(3), 331-339. doi:10.1177/1524839913498087

Vine, M. M., Harrington, D.W., Butler, A., Patte, K., Godin, K., Leatherdale, S.T. (2017). Compliance with school nutrition policies in Ontario and Alberta: An assessment of secondary school vending machine data from the COMPASS study. Canadian Journal of Public Health, 108(1), 1-11.

Virtanen, M., Kivimäki, H., Ervasti, J., Oksanen, T., Pentti, J., Kouvonen, A., et al. (2015). Fast-food outlets and grocery stores near school and adolescents' eating habits and overweight in Finland. European Journal of Public Health, 25(4), 650-655. doi:10.1093/eurpub/ckv045

Vliet-Brown, V., Cheryl, E., Shahram, S., & Oelke, N. D. (2017). Health in All Policies utilization by municipal governments: scoping review. Health Promotion International, 1-10. https://doi.org/10.1093/heapro/dax008

Wambach, K., Campbell, S. H., Gill, S. L., Dodgson, J. E., Abiona, T. C., & Heinig, M. J. (2005). Clinical lactation practice: 20 years of evidence. Journal of Human Lactation, 21(3), 245-258.

Wang, Y. & Lobstein, T. (2006). Worldwide trends in childhood overweight and obesity. International Journal of Pediatric Obesity, 1:11-25.

Weaver, R. K. (2009). Target compliance: The final frontier of policy implementation: Governance Studies at Brookings.

Williams, J., Scarborough, P., Matthews, A., Cowburn, G., Foster, C., Roberts, N., et al. (2014). A systematic review of the influence of the retail food environment around schools on obesity-related outcomes. Obesity Reviews, 15(5), 359-374. Retrieved from http://ovidsp. ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=medl&NEWS=N&AN=24417984

World Cancer Research Fund & Research. (2007). Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective. Retrieved from Washington, DC: http://www.aicr.org/assets/docs/pdf/reports/Second_Expert_Report.pdf

World Cancer Research Fund International. (2016, March 7). NOURISHING framework. Retrieved from http://www.wcrf.org/int/policy/nourishing-framework

World Health Organization. (1989). Protecting, promoting and supporting breast-feeding: the special role of maternity services (92 4 156130 0). Retrieved from Geneva: http://apps.who.int/iris/bitstream/10665/39679/1/9241561300.pdf?ua=1&ua=1

World Health Organization. (2003). Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation. Geneva: World Health Organization.

World Health Organization. (2004). Global strategy on diet, physical activity and health. Retrieved from Geneva, Switzerland: http://apps.who.int/iris/bitstream/10665/43035/1/9241592222_eng.pdf?ua=1

World Health Organization. (2012). Population-based approaches to childhood obesity prevention. Retrieved from Geneva, Switzerland: http://apps.who.int/iris/bitstream/10665/80149/1/9789241504782_eng.pdf?ua=1

World Health Organization. (2014). Health in all policies: Helsinki statement. Framework for country action. Geneva, Switzerland, World Health Organization.

World Health Organization. (2015, February). Finland curbs childhood obesity by integrating health in all policies. World Health Organization. Retrieved from http://www.who.int/features/2015/finland-health-in-all-policies/en/

World Health Organization. (2016). Report of the commission on ending childhood obesity. Retrieved from Geneva, Switzerland: http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf?ua=1

World Health Organization. (2016). Baby-Friendly Hospital Initiative. Retrieved from http://www.who.int/nutrition/topics/bfhi/en/

World Health Organization. (2017). Report of the Commission on Ending Childhood Obesity: implementation plan. Geneva, Switzerland, World Health Organization.

World Health Organization. (2017). Health in All Policies: Progressing the Sustainable Development Goals. Retrieved from http://www.who.int/phe/events/HiAP-conference-March2017/en/

World Health Organization & UNICEF. (2003). Global strategy for infant and young child feeding. Retrieved from http://apps.who.int/iris/bitstream/10665/42590/1/9241562218.pdf?ua=1&ua=1

Yan, J., Liu, L., Zhu, Y., Huang, G., & Wang, P. P. (2014). The association between breastfeeding and childhood obesity: a meta-analysis. BMC Public Health, 14(1), 1267.

Zenk, S. N., Powell, L. M., Rimkus, L., Isgor, Z., Barker, D. C., Ohri-Vachaspati, P., et al. (2014). Relative and Absolute Availability of Healthier Food and Beverage Alternatives Across Communities in the United States. American Journal of Public Health, 104(11), 2170-2178. doi:10.2105/ajph.2014-302113