

ALBERTA'S

2018 NUTRITION REPORT CARD ON FOOD ENVIRONMENTS FOR CHILDREN & YOUTH SUMMARY



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

SCHOOLS

Support local school boards/districts to:

- R** Implement the Alberta Nutrition Guidelines for Children + Youth for all foods/beverages served in school.
- R** Make Food Prep skills mandatory for junior high students
- R** Monitor healthy eating policy adherence

CONVENIENCE STORE

- R** Establish "healthy zones" around schools by limiting the number of unhealthy food vendors in close proximity.

RECREATION CENTRES

- R** Mandate changes to improve healthfulness of available food using the Alberta Nutrition Guidelines for Children + Youth to inform food policy (e.g. vending contracts)
- R** Allow use of facilities to prep food for school nutrition programs when school infrastructure is lacking.

TRANSPORTATION

- R** Subsidize transport of healthy foods to rural/remote/Northern Communities

TAX UNHEALTHY FOOD

- R** Ask the Federal government to implement a sugar-sweetened beverage tax.

GROCERY

- R** Use municipal zoning to improve proportion of healthy (e.g. grocery stores) to unhealthy (e.g. fast food restaurants) food vendors.

PUBLIC BUILDINGS

- R** Use the Assessment Checklist* to see how supportive your building is towards breastfeeding

*see Indicator 27 in the full NRC report for the checklist

HOSPITALS

- R** Continue to foster a supportive environment for breastfeeding using WHO's 10 Steps to Successful Breastfeeding*

*see Breastfeeding Support in the full NRC report

Healthy foods = Foods that support health, emphasized in Canada's Food Guide, such as fruits & vegetables, whole grains, quality protein foods, and foods low in salt, sugar and saturated fats.

FAST FOOD RESTAURANTS

- R** Work with local dietitians to identify healthy choices on menus.

ADVERTISING

- R** Ensure no marketing of unhealthy food where children live, learn and play.
- R** Partner with local media to promote healthy eating

R Recommended opportunities for action

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 fundraisers 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).



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	$\geq 75\%$ of children's cereals available for sale are 100% whole grain and contain $< 13\text{g}$ of sugar per 50g serving.
6. a. Foods meet Health Canada's Phase III Targets for Sodium Reduction	$\geq 75\%$ 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

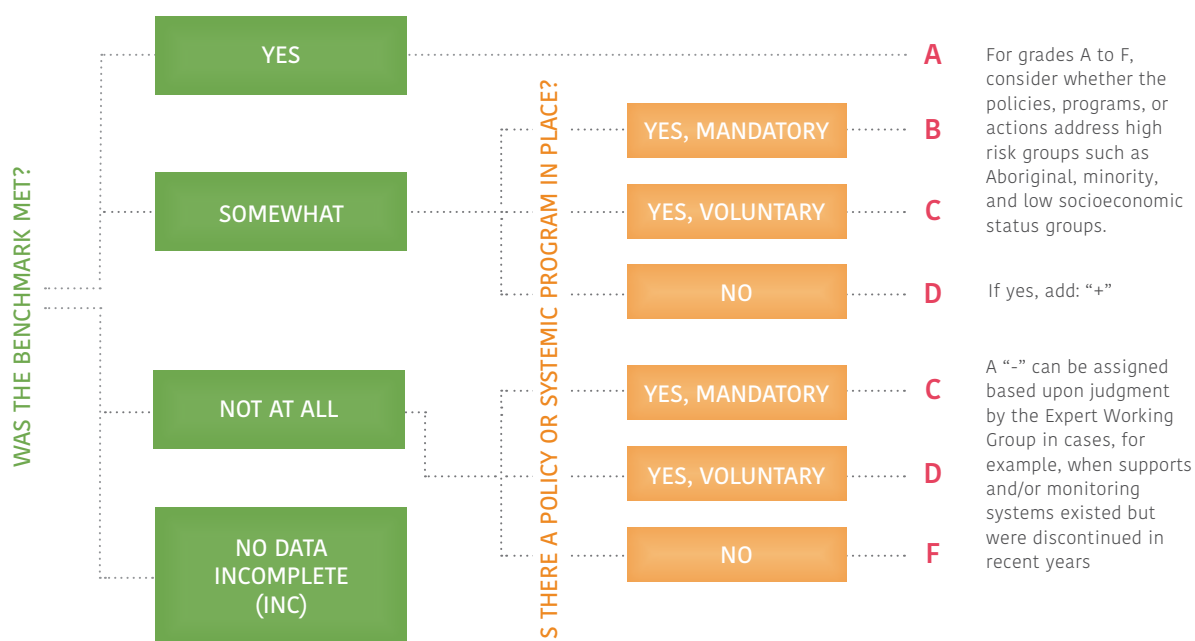
Based on the best available scientific knowledge and data on policies, programs, and actions relevant to each indicator, the 2018 Expert Working Group used the grading scheme illustrated below to assign a grade to each indicator. The grading scheme follows a series of three key decision steps:

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.

STEP 1

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.

STEP 2

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

STEP 3

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.

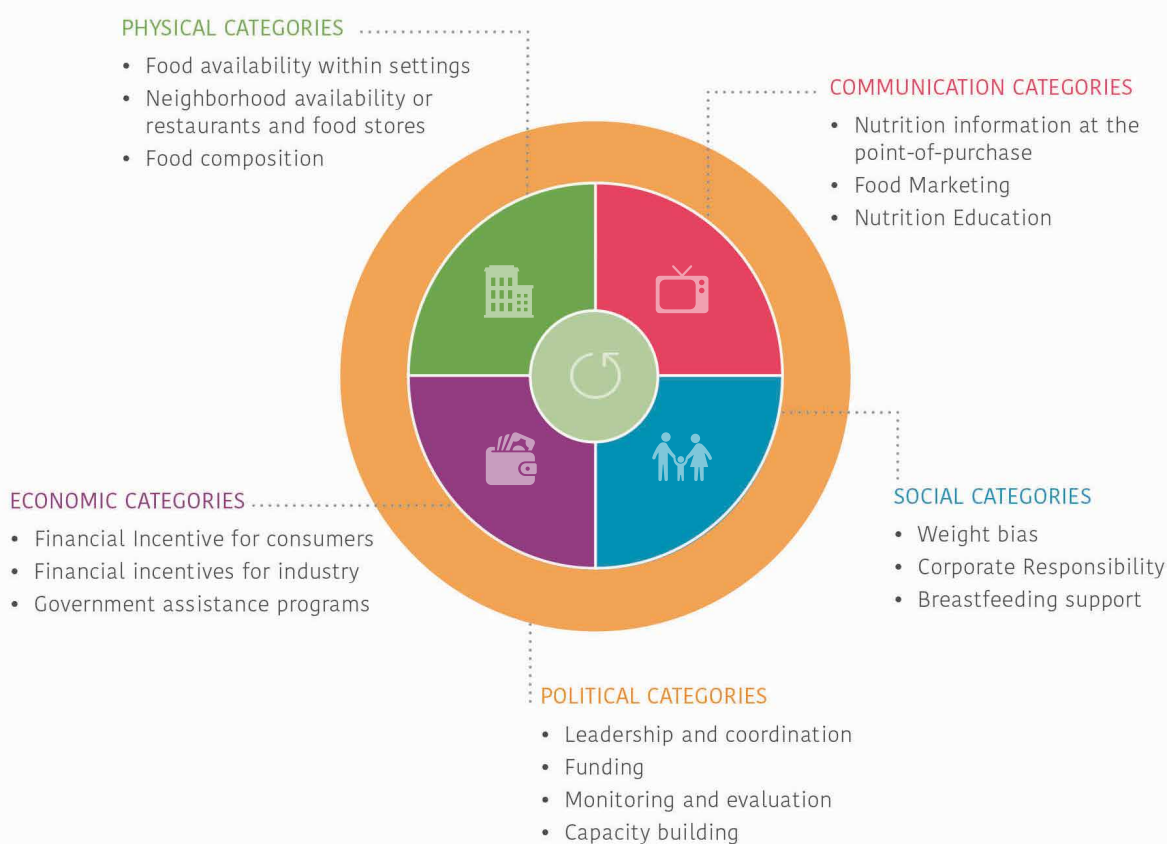
What overall grade did Alberta receive on the 2018 Nutrition Report Card?

C

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)





PHYSICAL ENVIRONMENT

Food Availability Within Settings

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>1. High availability of healthy food in school settings</p> <p>BENCHMARK: Approximately 3/4 of foods available in schools are healthy.</p> <p>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.</p> <p>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.</p>	C+	<p>RESEARCH Monitor school food policies and the healthfulness of foods offered on an annual basis.</p> <p>PRACTICE Implement the Alberta Nutrition Guidelines for Children and Youth (ANGCY) in all school settings.</p> <p>POLICY Support local school boards and districts in implementing mandatory rather than voluntary healthy eating policies.</p> <p>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).</p>
<p>3. High availability of healthy food in community settings</p> <p>BENCHMARK: Approximately 3/4 of foods available in public buildings are healthy .</p> <p>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.</p> <p>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.</p>	D	<p>RESEARCH Explore effective implementation strategies to improve the healthfulness of food available in recreation facilities.</p> <p>PRACTICE Continue to support and educate facility and concession managers about the ANGCY and provide context-specific strategies for implementation.</p> <p>POLICY Mandate and provide incentives for implementing the ANGCY in recreation facilities.</p> <p>MUNICIPALITIES Municipalities have the power to mandate changes to improve the food environment in their recreation facilities.</p>

Key Findings & Recommendations

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>4. High availability of healthy food vendors</p> <p>BENCHMARK: The modified retail food environment index across all census areas is ≥ 10.</p> <p>[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.]</p> <p>KEY FINDINGS: Due to the prevalence of fast-food restaurants and convenience stores, unhealthy food vendors greatly outnumber those likely to sell healthful options in both Edmonton and Calgary.</p>	D	<p>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.</p> <p>POLICY Use municipal zoning policies to improve retail food environments at the local level.</p> <p>MUNICIPALITIES Consider tax incentives for entrepreneurs with innovative ways of offering healthy foods and consider the healthfulness of products offered when providing licenses to food trucks.</p> <p>Municipalities use their authority to make changes in zoning policies to improve food environments. For example, when a grocery store closes down, municipalities can prevent covenants from restricting future grocery store potential.</p>
<p>5. Limited availability of unhealthy food vendors</p> <p>BENCHMARK: Traditional convenience stores (i.e. not including healthy corner stores) and fast-food outlets not present within 500m of schools.</p> <p>KEY FINDINGS: Most schools in Edmonton (77%) and Calgary (71%) have at least one convenience store or fast food restaurant within 500m.</p> <p>Similar findings in three towns from north, central, and southern Alberta were also observed.</p>	D	<p>RESEARCH Explore facilitators and barriers in decreasing the proximity of unhealthy food stores to schools.</p> <p>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.</p> <p>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.</p> <p>MUNICIPALITIES Municipalities use their authority to make changes in zoning policies to address unhealthy food vendors:</p> <ol style="list-style-type: none"> 1. When fast food restaurants within 500m of schools close down, municipalities can decide what type of food vendor sets up shop next. 2. As new proposals come forward for land use, municipalities can consider a by-law that restricts unhealthy food vendors within 500m of schools.

**COMMUNICATION ENVIRONMENT****OVERALL
GRADE****C****Nutrition Information At The Point-Of-Purchase**

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>7. Menu labelling is present</p> <p>BENCHMARK: A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations.</p> <p>KEY FINDINGS: While some restaurants have voluntarily provided nutrition information for consumers, menu labelling is not mandatory in Alberta.</p>	D	<p>RESEARCH Assess the impact of legislation requiring menu labelling on consumer food choices.</p> <p>POLICY Require that menu labelling be mandated in restaurants with ≥ 20 locations.</p> <p>MUNICIPALITIES Engage local dietitians in working with local businesses to identify healthy choices on menus.</p>
<p>11. Government-sanctioned public health campaigns encourage children to consume healthy foods</p> <p>BENCHMARK: Broad-reaching child-directed social marketing campaigns for healthy foods.</p> <p>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.</p>	C+	<p>PRACTICE Develop a provincial, broad-reaching, sustained, and targeted social marketing program to encourage healthy food consumption.</p> <p>MUNICIPALITIES 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.)</p>

Key Findings & Recommendations

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>12. Restrictions on marketing unhealthy foods to children</p> <p>BENCHMARK: All forms of marketing unhealthy foods to children are prohibited.</p> <p>KEY FINDINGS: Alberta does not have official policies in place that prohibit advertising of unhealthy food to children.</p> <p>At the federal level, Bill S-228 aims to prohibit advertising of unhealthy food and beverages to children younger than 13 years of age. It is slated for third reading when Parliament resumes in the fall.</p>	D	<p>RESEARCH Determine the level of children's exposure to food and beverage marketing in multiple local contexts.</p> <p>PRACTICE Encourage adoption of voluntary self-regulatory initiatives following government-approved guidelines subject to independent audits.</p> <p>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.</p> <p>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!</p>
<p>14. Food skills education provided to children in schools</p> <p>BENCHMARK: Food skills are a required component in the curriculum at the junior high level.</p> <p>KEY FINDINGS: Many schools offer Home Economics (food skills education), but it is not mandatory for Grade 7-9 students.</p>	D	<p>PRACTICE Monitor and advocate for the delivery of food skills education to all students at the junior high level.</p> <p>Make food preparation classes available to children, their parents, and child caregivers.</p> <p>POLICY Make food skills education mandatory at the junior high level.</p> <p>MUNICIPALITIES Municipalities working with school boards may suggest that Home Economics be made mandatory for junior high students.</p> <p>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.</p>



ECONOMIC ENVIRONMENT

OVERALL
GRADE

D

Financial Incentives For Consumers

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>18. Higher prices for unhealthy foods</p> <p>BENCHMARK: A minimum excise tax of \$0.05/100mL is applied to sugar-sweetened beverages sold in any form.</p> <p>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.</p>	F	<p>PRACTICE Promote public and policy-maker understanding and support of a sugar-sweetened beverages tax.</p> <p>POLICY Implement a minimum excise tax of \$0.05/100mL on sugar-sweetened beverages. Dedicate a portion of this revenue to health promotion programs.</p> <p>MUNICIPALITIES Similar to St. Albert, municipalities can ask the federal government to implement a sugar-sweetened beverage tax.</p>
<p>19. Affordable prices for healthy foods in rural, remote, or northern Areas</p> <p>BENCHMARK: Subsidies to improve access to healthy food in rural, remote, or Northern communities to enhance affordability for local consumers.</p> <p>KEY FINDINGS: There are no provincial initiatives to increase the availability and affordability of nutritious foods in rural, remote and northern areas.</p>	D+	<p>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.</p> <p>POLICY Provide subsidies directly to consumers to increase the affordability of healthy food in rural, remote, and Northern communities.</p> <p>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.</p>

Key Findings & Recommendations

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>24. Subsidized fruit and vegetable subscription program in schools</p> <p>BENCHMARK: Children in elementary school receive a free or subsidized fruit or vegetable each day.</p> <p>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.</p>	C+	<p>RESEARCH Assess the impact of existing programs providing subsidized fruits and vegetables in schools in Alberta.</p> <p>PRACTICE Develop province-wide strategies for providing subsidized fruit and vegetables to elementary students.</p> <p>POLICY Commit sustainable government funding to existing fruit and vegetable subscription programs and designate funding to increase reach across Alberta.</p> <p>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.</p> <p>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).</p>



SOCIAL ENVIRONMENT

OVERALL
GRADE



Weight Bias

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>27. Breastfeeding is supported in public buildings</p> <p>BENCHMARK: All public buildings are required to permit and facilitate breastfeeding.</p> <p>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.</p>	B	<p>RESEARCH Understand ways to reduce stigma and barriers to breastfeeding in public places.</p> <p>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.</p> <p>Adopt a breastfeeding resolution, see Model Breastfeeding Resolution http://abpolicycoalitionforprevention.ca/wp-content/uploads/2016/10/resolution_making-your-municipality-more-breastfeeding-friendly.pdf</p> <p>POLICY All public buildings have a mandate to promote and facilitate breastfeeding, so that women wanting to breastfeed can do so comfortably.</p> <p>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.</p>
<p>28. Breastfeeding is supported in hospitals</p> <p>BENCHMARK: All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards.</p> <p>KEY FINDINGS: In 2017, one health centre and two hospitals in Alberta achieved WHO Baby-Friendly designation.</p> <p>Current professional education strategies align with elements of the WHO Baby-Friendly Initiative.</p>	C	<p>RESEARCH Assess barriers to pursuing WHO Baby-Friendly designation in Alberta's hospitals.</p> <p>PRACTICE Continue to foster a supportive breastfeeding culture in hospitals.</p> <p>POLICY Mandate a province-wide policy that requires hospitals to support breastfeeding, including monitoring and evaluating adherence.</p> <p>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.</p>



POLITICAL ENVIRONMENT

OVERALL
GRADE

C

Leadership & Coordination

INDICATOR:	GRADE:	RECOMMENDATIONS
<p>30. Health In All policies</p> <p>BENCHMARK: Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.</p> <p>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.</p>	C	<p>PRACTICE Include Health Impact Assessments in all government policies with potential to impact child health.</p> <p>POLICY Require Alberta government departments and agencies to conduct Health Impact Assessments before proposing laws or regulations.</p> <p>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.</p>
<p>32. Compliance monitoring of policies and actions to improve children’s eating behaviours and body weights</p> <p>BENCHMARK: Mechanisms are in place to monitor adherence to mandated nutrition policies.</p> <p>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.</p> <p>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.</p>	C	<p>PRACTICE Engage key stakeholders to participate in reporting on the healthfulness of food available within settings where children eat.</p> <p>POLICY Establish system-wide monitoring of adherence to mandated nutrition policies.</p> <p>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.</p>

Acknowledgements



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



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

References

- 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.
- 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
- 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.
- 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.
- 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.
- 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.
- 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.
- 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., 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]
- 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., 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.
- Hawkes, C. (2012). Food policies for healthy populations and healthy economies. *British Medical Journal*, 334 (e2801).
- 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.
- 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.
- 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.
- 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.
- 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.
- Mikkila, V., Rasanen, L., Raitakari, O.T., Pietinen, P., & Viikari, J. (2004). Longitudinal changes in diet from childhood into adulthood with respect to risk of cardiovascular diseases: the Cardiovascular Risk in Young Finns Study. *European Journal of Clinical Nutrition*, 58: 1038-1045.
- 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.
- 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.
- 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.
- Smoyer-Tomic, K., Spence, J.C., Raine, K.D., Amrhein, C., Cameron, N., Yassenovskiy, 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.

References

- 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.
- Swinburn, B., Vandevijvere, S., Kraak, V., Sacks, G., Snowden, 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
- 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.
- 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.
- Wang, Y. & Lobstein, T. (2006). Worldwide trends in childhood overweight and obesity. *International Journal of Pediatric Obesity*, 1:11-25.
- 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. (2003). Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation. Geneva: World Health Organization.