



ALBERTA'S  
**2017**

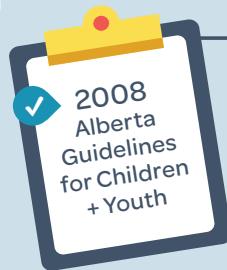
**NUTRITION  
REPORT CARD**

***On Food  
Environments for  
Children & Youth***

# Road map to help youth (12-17 yrs) thrive in Alberta's food policy environment

- ✓ Supportive Policies
- R Recommendation

- R Work toward zoning to decrease food food outlets within 500m of schools



Still not mandatory across child-oriented settings

- R Mandate + provide incentives

Most schools (80% Edmonton, 74% Calgary) have a poor food outlet in walking distance

- ✓ Food prep skills are available in some schools but not mandatory
- R Make it mandatory
- ✓ Various NGOs + Govt orgs with personnel steward childhood healthy living & obesity prevention

SCHOOL

New Alberta School Nutrition Program K-6 only

- R Include Gr 7-12

Weight bias negative attitudes toward an individual because of his/her weight

- R Addressing weight bias is currently optional, ensure it is addressed

500m walking distance

26% of children + youth in Alberta have overweight or obesity



No restrictions on marketing unhealthy food to children in Alberta

- R Prohibit marketing unhealthy food to children < 18 yrs

It's hard to eat healthy

GROCERY

- ✓ 0% GST on healthy foods

FOOD BANK

Food bank use up for 0-17 yr olds between 2013-16

46%

HOME

Households with food insecurity have insufficient funds to purchase a nutritious food basket

- R Income based policies & programs to tackle child & youth food insecurity

RECREATION CENTRE

+50% of rec centres do not have a healthy eating policy

- R Sugar sweetened beverage tax may be a cost-deterrent for youth

- R Continue to support rec centres opting to bring in contracts that support healthy eating

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# Background

According to Statistics Canada, rates of overweight and obesity among children aged 2-11 in Canada are on a downward trend, but showing a slight increase among 12- to-17-year olds. In Alberta, 26% of children and youth have overweight and obesity<sup>1</sup>. Obesity and associated chronic diseases such as certain cancers, heart disease, high blood pressure, and type 2 diabetes are still a major public health concern in Canada<sup>2</sup>.

In the past, obesity-related chronic diseases were usually only seen in older adults, but now these diseases are becoming more common in children and youth.<sup>3</sup> Furthermore, we know that children with obesity are more likely to have unhealthy body weights into adulthood.<sup>4</sup> Given the enormous cost to individuals' health, as well as health care costs associated with treating obesity—which was estimated to be over \$4.6 billion in 2008<sup>5</sup>—there is clearly much prevention to be done.

*In the past, obesity-related chronic diseases were usually only seen in older adults, but now these diseases are becoming more common in children and youth.<sup>3</sup>*

## Healthy Eating is More Than An Individual Choice

It is well established that healthy eating can help prevent childhood obesity and chronic disease.<sup>3,6,7</sup> Increasing prevention efforts to fend off obesity early in life is crucial, as we know that early eating patterns are often sustained into adulthood.<sup>8,9,10</sup> Most importantly, we know that healthy eating is more than an individual choice and is influenced by the environments in which we live.<sup>11</sup> The community nutrition environment, defined as the number, type, location, and accessibility of food stores, influences individuals' food choices for better or for worse.<sup>12</sup> Living in a community with predominantly unhealthy food stores, for instance, has been found to increase consumption of unhealthy foods because these items are more accessible and are heavily promoted.<sup>11-15</sup> To improve children's eating behaviours and body weights, it is helpful to understand the current landscape, and how current policies and actions may act as barriers or facilitators to positive change.<sup>13-16</sup> Once we have a better understanding of the policy landscape within eating environments, we can devise goals to move towards healthier eating options for children and youth.<sup>11-15</sup>

## Ensure Environments Provide and Encourage Healthy Food Choices

Although policies and actions can be difficult to change due to competing interests,<sup>13,17</sup> governments have the ability to ensure environments provide and encourage healthy food choices, thereby protecting and promoting child health.<sup>16,31</sup> 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<sup>18</sup>.

## Policies and Environments Interact To Shape Children's Health-Related Behaviours And Body Weights

Brennan et al.<sup>19</sup> provided a comprehensive overview of policy and environmental strategies to reduce obesity and improve children and youth'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's health-related behaviors and body weights. Four environments (physical, communication, economic, and social) and their corresponding categories, all encompassed by the political environment<sup>13,18</sup> form the structure of the Nutrition Report Card.<sup>13,18</sup> Three major settings have the greatest relevance to children and youth's: schools, childcare, and community settings<sup>3</sup>.

### MICRO-ENVIRONMENTS



#### Physical

The physical environment refers to what is available in a variety of food outlets<sup>13</sup> including restaurants, supermarkets,<sup>20</sup> schools,<sup>21</sup> worksites,<sup>22</sup> as well as community, sports and arts venues.<sup>23,24</sup>



#### Communication

The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing,<sup>25,26</sup> 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.<sup>13</sup> 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,<sup>27</sup> financial support for health promotion programs,<sup>26</sup> and healthy food purchasing policies and practices through sponsorship<sup>23</sup> can affect food choices.<sup>13</sup>



#### Social

The social environment refers to the attitudes, beliefs and values of a community or society.<sup>13</sup> It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models,<sup>13</sup> 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).

### MACRO-ENVIRONMENTS



#### Political

The political environment refers to a broader context, which can provide supportive infrastructure for policies and actions within micro-environments.<sup>18,26</sup>



Examining current food environments is a step in the right direction toward creating more supportive environments which enable obesity prevention to take place. Alberta's 2017 Nutrition Report Card is the third 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.<sup>18</sup>

## 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.<sup>18</sup>

In 2017, 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 third Nutrition Report Card. Thirty-six indicators were graded by the Expert Working Group in the 2017 Nutrition Report Card.

	Indicators	Benchmark
1	High availability of healthy food in school settings	Approximately ¾ of foods available in schools are healthy.
2	High availability of healthy food in childcare settings	Approximately ¾ of foods available in childcare settings are healthy.
3	High availability of healthy food in community settings: Recreation Facilities	Approximately ¾ of foods available in recreation facilities are healthy.
4	High availability of food stores and restaurants selling primarily healthy foods	The modified retail food environment index across all census areas is ≥ 10.
5	Limited availability of food stores and restaurants selling primarily unhealthy foods	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.
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.
9	Product labelling is present	A simple, evidence-based, government-sanctioned Front-of-Package 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	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.

	Indicators	Benchmark
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.
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 $\geq 5.0$ out of 10.0.
27	Breastfeeding is supported in public buildings	All public buildings are required to permit and promote 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 1% of the Alberta provincial health budget is dedicated to implementation of the government's healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.
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.
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.

# Report Card Structure

The Report Card was organized according to the elements of the adapted theoretical framework into environments, with additional subdivisions of categories, indicators, and benchmarks.<sup>28</sup> Examples of each subdivision are described below.

Environments	Four types of micro-environments (physical, communication, economic, social) and the political macro-environment. <i>Example: Physical Environment</i>
Categories	Indicators are grouped into broader descriptive categories within each type of environment. <i>Example: Food Availability Within Settings</i>
Indicators	Specific domains within each category in which actions and policies will be assessed. <i>Example: High availability of healthy food</i>
Benchmarks	Benchmarks of strong policies and actions are provided for each indicator. <i>Example: Approximately ¾ of foods available in schools are healthy</i>

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 obesity prevention cannot be achieved through any single strategy, the Nutrition Report Card is not intended to exhaustively document the state of children and youth'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 obesity, non-communicable diseases, and their related inequalities.<sup>29</sup>





# The Grading Process

## Grading the Nutrition Report Card

Based on the best available scientific knowledge and data on policies, programs, and actions relevant to each indicator, the 2017 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:

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

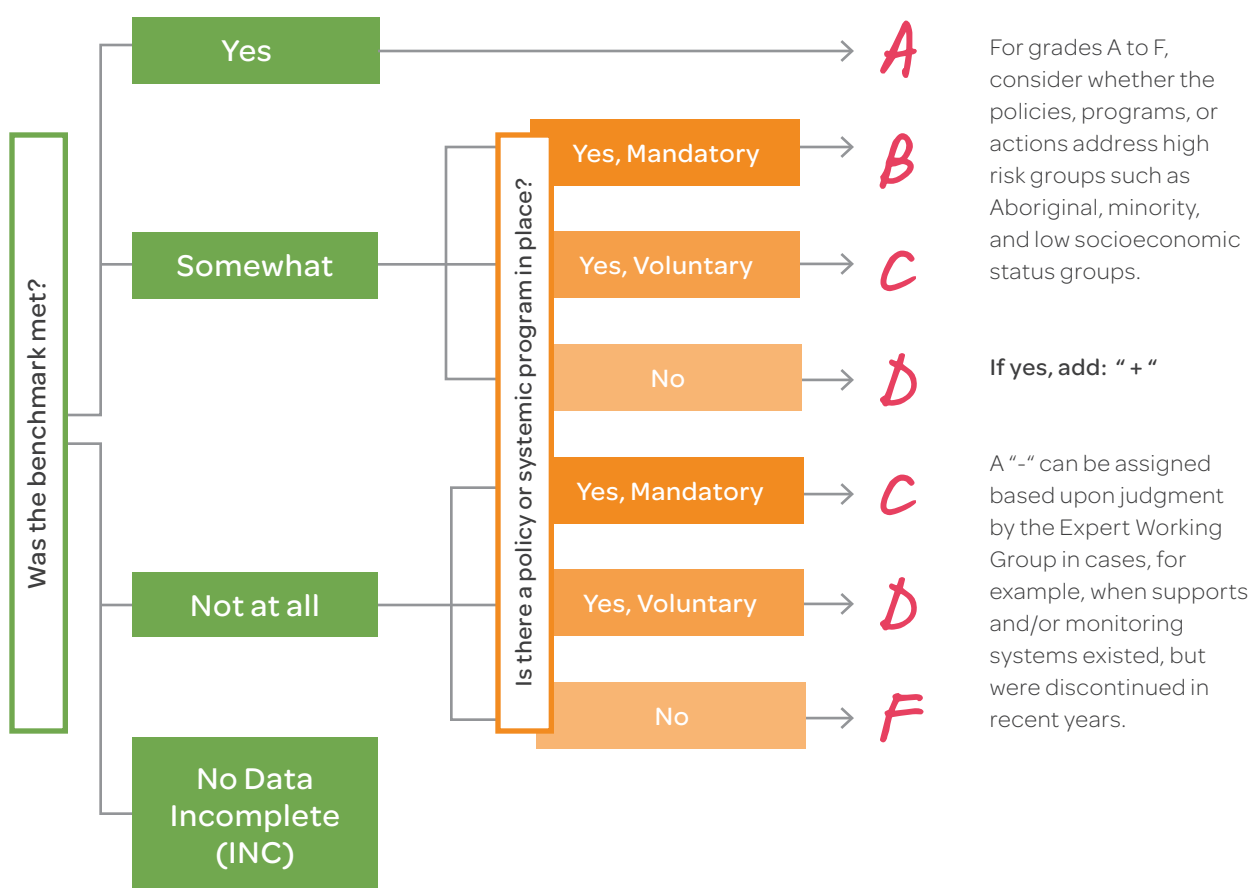


FIGURE 1. Grading system flow-chart<sup>18</sup>



## An Example of How the Grading Works

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):

TABLE 1: Example of a Benchmark

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

# Alberta's 2017 Nutrition Report Card:

*The grades are in!*

## What final grade did Alberta receive on the 2017 Nutrition Report Card?

Following this year's rigorous grading process, Alberta received an overall score of 'C,' which is an improvement from last year!



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 the corresponding 36 Indicators and Benchmarks.

### Physical Categories

- Food availability within settings
- Neighbourhood availability of restaurants and food stores
- Food composition

### Communication Categories

- Nutrition information at the point-of-purchase
- Food marketing
- Nutrition education

### Social Categories

- Weight bias
- Corporate responsibility
- Breastfeeding support

### Economic Categories

- Financial incentives for consumers
- Financial incentives for industry
- Government assistance programs

### Political Categories

- Leadership and coordination
- Funding
- Monitoring and evaluation
- Capacity building

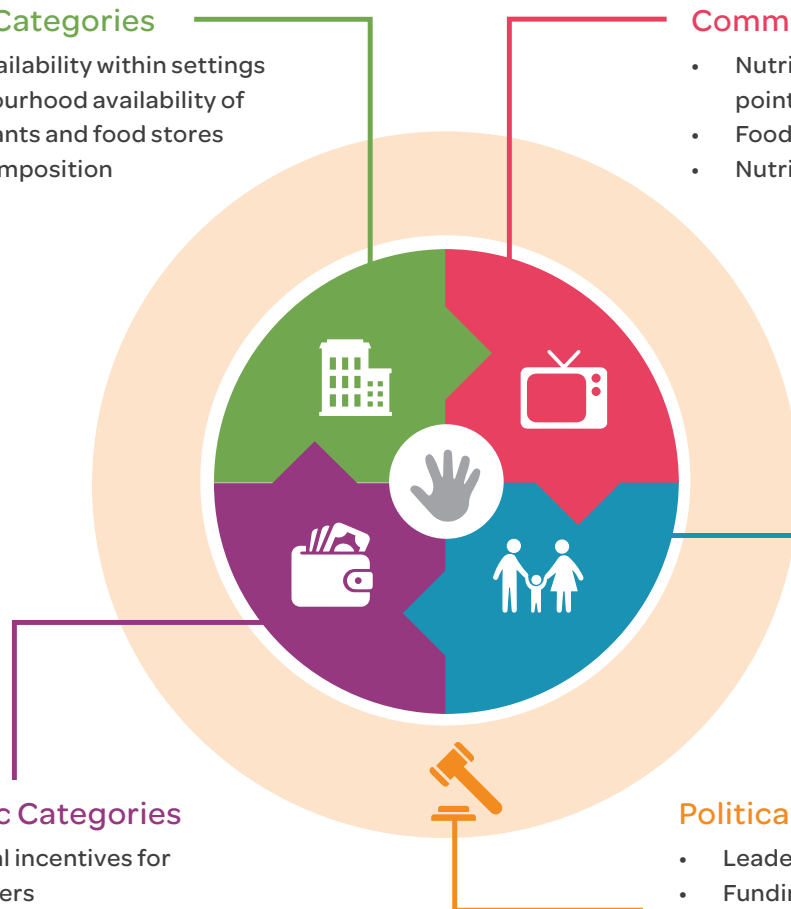


FIGURE 2. Adapted conceptual framework highlighting key categories embedded within each environment<sup>14,18,19</sup>









# Physical Environment

This environment refers to the types of foods and beverages available in different outlets<sup>13,30</sup> such as restaurants, supermarkets,<sup>20</sup> schools,<sup>31</sup> worksites,<sup>32</sup> and community, sports, and arts venues.<sup>33,34</sup>

## OVERALL GRADE



CATEGORY	GRADE
<i>Food Availability Within Settings</i>	<i>C</i>
<i>Neighbourhood Availability of Restaurants and Food Stores</i>	<i>D</i>
<i>Food Composition</i>	<i>F</i>



## 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).

INDICATOR	GRADE
<i>High Availability of Healthy Food in School Settings.</i>	<i>C+</i>
<i>High Availability of Healthy Food in Childcare Settings.</i>	<i>INC</i>
<i>High Availability of Healthy Food in Community Facilities.</i>	<i>D</i>

### WHAT RESEARCH SUGGESTS

Consumption of energy-dense, nutrient-poor foods (e.g., fast food, candy)<sup>35-40</sup> and sugar-sweetened beverages<sup>444-447</sup> is associated with poor eating behaviours and an increased risk of obesity.<sup>36</sup> Children's eating behaviours are influenced by community food environments, which facilitate access to either healthy or unhealthy foods.<sup>36</sup> The WHO 2017 Report of the Commission on Ending Childhood Obesity, emphasizes the importance of establishing healthy food environments within schools, childcare facilities, and recreation facilities—three key environments frequented by children and youth.<sup>3</sup>

Healthy food and beverage policies and programs within children's environments can positively influence eating behaviours by increasing access to, and thereby promoting the sales and intake of, healthy foods.<sup>41-50</sup> The likelihood of children choosing healthy foods and beverages tends to decrease in the presence of less healthy options.<sup>39,51-56</sup> Students with restricted access to unhealthy choices through snack bars,<sup>57-59</sup> vending machines,<sup>30,3,59</sup> convenience stores, or fast-food restaurants<sup>31</sup> have better eating behaviours compared to unrestricted students. Introducing nutrition policies and standards to increase the availability of healthier foods and beverages and reduce the availability of less healthy items has shown promise for positive behaviour changes.<sup>32-34,59,60</sup>

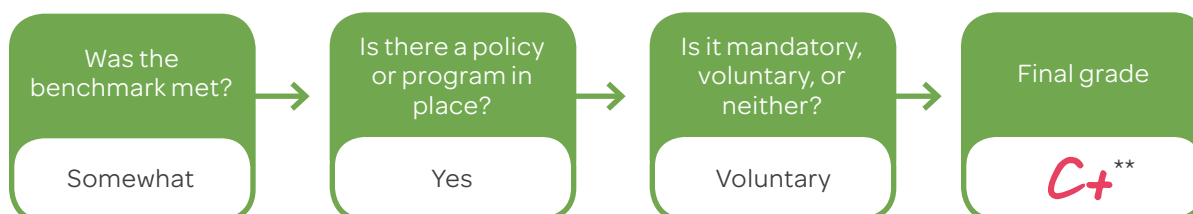
Schools and childcare facilities are particularly important environments to consider, in light of the fact that they consume at least one meal and several snacks per day in these settings.<sup>61,62</sup> Although several Canadian jurisdictions have introduced a range of voluntary and mandatory nutrition policies,<sup>63</sup> it is critical that adequate resources be invested in implementing, monitoring, and evaluating these policies.<sup>62</sup> In an investigation of a sample of Ontario and Alberta secondary schools' compliance with provincial nutrition policies regarding foods and beverages sold in vending machines, Vine et al. found that nutrition standard policies were not adhered to in most schools.<sup>62</sup> Specific to childcare settings in Alberta, it was recently highlighted that certain organizational characteristics and processes, such as organizational culture, leadership, and staff who embrace their role as health champions, can influence whether nutrition guidelines are adopted in a facility.<sup>64</sup>

\*healthy foods = 75% of food offered meets Choose Most Often & Choose Sometimes according to the Alberta Nutrition Guidelines for Children and Youth

## 1 INDICATOR

**High Availability of Healthy Food in School Settings****BENCHMARK**

*Approximately  $\frac{3}{4}$  of foods available in schools are healthy.\**

**Q KEY FINDINGS**

1. In November 2016, Alberta Education invested \$3.5 million in the Alberta School Nutrition Program for students in need<sup>65</sup> across 14 school boards. Participating schools had to show how their program adhered to the Alberta Nutrition Guidelines for Children and Youth (ANGCY). Over 5000 students from Grades K- 6 in 33 schools have been receiving a nutritious meal or snack each day since the program began. In Alberta's 2017/18 Budget, \$10million was assigned for the remaining 46 authorities to receive funding. The original participating 14 school boards will receive \$250,000 annually, and the remainder of the boards will receive \$141,000 annually.<sup>66</sup>
2. The Pan-Canadian Joint Consortium for School Health (JCSH), a partnership of 25 Ministries of Health and Education across Canada, works to promote student health achievement through Community School Health approaches.<sup>67</sup> In Alberta, the Alberta Healthy School Community Wellness Fund (AHSCWF) provides facilitated support to school communities across the province to improve students' health and learning outcomes, while addressing wellness in a planned, integrated, and holistic way using a whole-school, comprehensive approach. AHSCWF is a joint initiative between the Alberta government and the University of Alberta School of Public Health. Other organizations they work closely with include Alberta Health Services, Ever Active Schools, Be Fit For Life Moving Alberta, and JCSH.

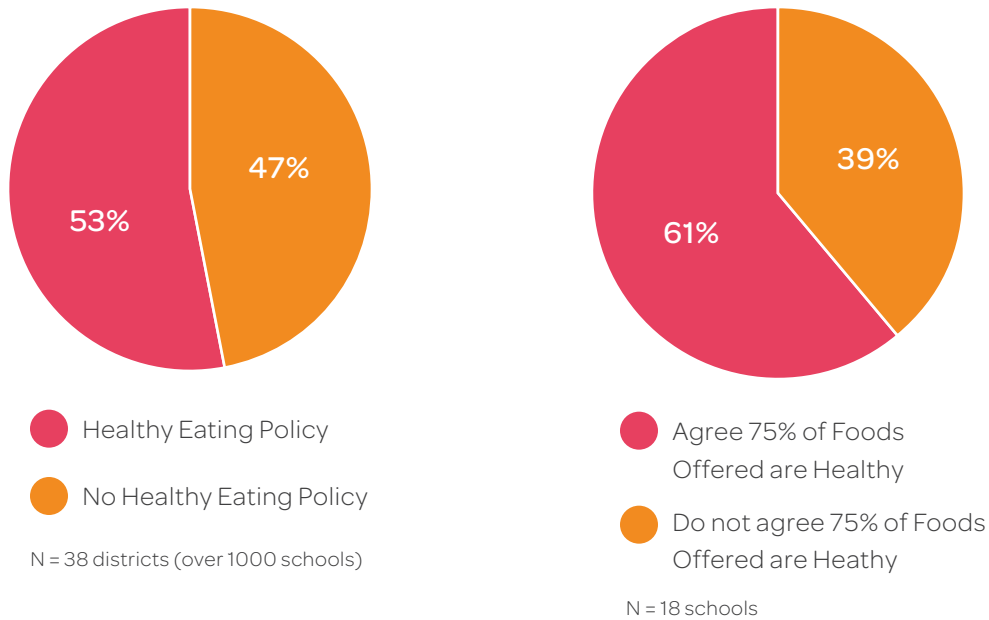
AHSCWF<sup>68</sup> has tracked the number of schools that have completed the JCSH Planner modules since 2013 as a way of measuring the implementation of Comprehensive School Health in Alberta. As part of reporting, AHSCWF requests a Reporting and Reflection Tool be completed by participating districts and individual schools implementing CSH project. Out of 38 districts representing almost 1000 schools in Alberta that reported in 2017, over half (53%) have nutrition policies in place. Out of 18 schools that were asked if 75% of foods offered met the 'Choose Most Often' criteria of the Alberta Nutrition Guidelines for Children and Youth, 11 (61%) agreed. This number shows a strong emerging foundation in Alberta towards schools that develop healthy eating policies and offer healthy foods. [Note: 'Choose Sometimes' foods were not included in this survey question; thus, we are unaware of the proportion of remaining foods offered which would be deemed "healthy," as outlined in this benchmark].

\*healthy foods = 75% of food offered meets Choose Most Often & Choose Sometimes according to the Alberta Nutrition Guidelines for Children and Youth

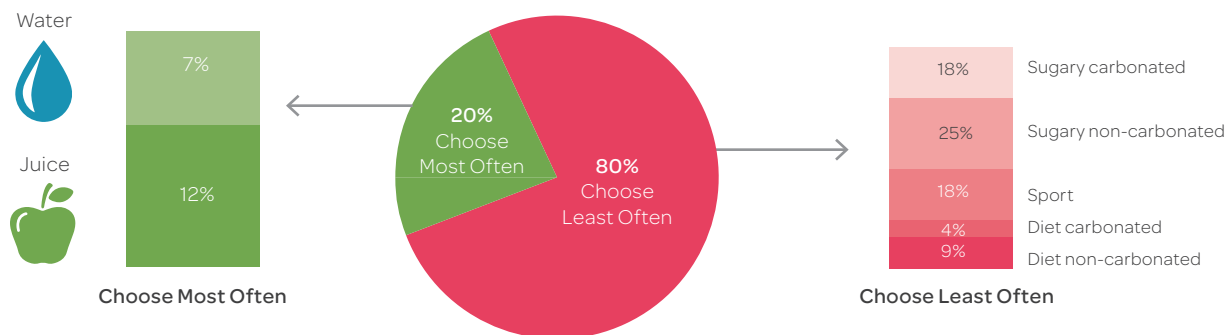
\*\*high risk addressed

1

FIGURE 3: AHSCWF Reporting &amp; Reflection Tool: Healthy Eating Policies &amp; Foods Offered in Schools Reporting



3. The COMPASS study assessed food and beverages offered in 8 Alberta schools in the 2015-16 school year.<sup>69</sup>
- Six of eight schools with a cafeteria had daily healthy specials. Healthy food choices cost the same as unhealthy food choices in five of these eight schools. Healthy food choices cost more than unhealthy food choices in three of the eight schools.
  - Chips and chocolate bars were the most common items in snack vending machines, representing 37% and 29% of all snack vending machine products, respectively. No school offered fruits and vegetables in vending machines.
  - Figure 1 highlights the contents of beverages sold in vending machines in relation to the ANGCY. The bar graphs further break down the type of beverages offered, aligning with either the 'Choose Most Often' or 'Choose Least Often' categories, as no beverages fell into the 'Choose Sometimes' category.

FIGURE 4: Proportion of Beverages by the ANGCY in School Vending Machines<sup>102</sup>

\*"Choose Least Often" includes: sugary carbonated drinks, sugary non-carbonated drinks, diet carbonated drinks, diet non-carbonated drinks and sport drinks; "Choose Sometimes" includes: flavoured milk; "Choose Most Often" includes: water, plain milk and 100% juice.

## 1

## POLICIES/SYSTEMIC PROGRAMS

TABLE 2. Examples of Available Mandatory or Voluntary Policies and Systemic Programs

Type of Policy or Systemic Program	Mandatory / Voluntary / Neither
<b>Alberta School Nutrition Program<sup>65</sup></b> 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
<b>Alberta Nutrition Guidelines for Children and Youth<sup>70</sup></b> Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food. <a href="#">[View Here]</a>	Voluntary policy across all settings
<b>Communities ChooseWell<sup>71</sup></b> Capacity-building initiative that promotes and supports the development of community programs, policies, and partnerships that foster wellness through healthy eating and active living. <a href="#">[View Here]</a>	Voluntary systemic program
<b>Health Promotion Coordinators (HPCs)</b> Alberta Health Services personnel supporting school jurisdictions in Alberta to build healthy school communities using a Comprehensive School Health approach. <a href="#">[View Here]</a>	Mandatory program
<b>Alberta Healthy School Communities Wellness Fund<sup>72</sup></b> Provides financial and facilitated support for school communities to create healthy environments for their students, following a Comprehensive School Health approach. <a href="#">[View Here]</a>	Voluntary systemic program
<b>Framework for Comprehensive School Health (CSH) approach<sup>73</sup></b> 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.	Voluntary systemic program

## RECOMMENDATIONS

### Research

Monitor school food policies and foods offered on an annual basis.

### Practice

The 2013 Heart & Stroke position statement recommends:<sup>74</sup>

- Introducing nutrition standards for foods and beverages provided in schools
- Providing appropriate portion sizes
- Removing unhealthy food and beverages from school vending machines and cafeterias
- Monitoring adherence to healthy eating policies/guidelines

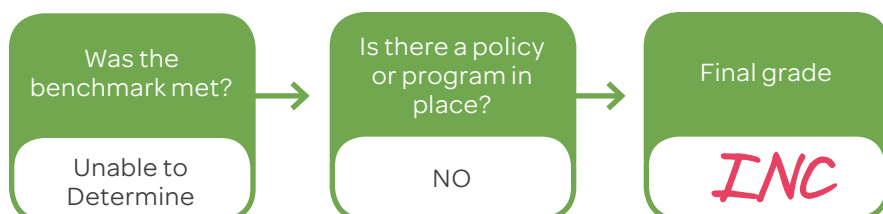
### Policy

- Implement mandatory rather than voluntary healthy eating policies for improved effectiveness. (See also 2017 WHO Report of the Commission on Ending Childhood Obesity.<sup>3</sup>)
- Develop healthy food procurement contracts that adhere to nutrition standards, encompassing all food and beverages served in schools, including third-party vendors (e.g. franchising, fundraising).<sup>75</sup>

## 2 INDICATOR

**High Availability of Healthy Food in Childcare Settings****BENCHMARK**

*Approximately  $\frac{3}{4}$  of foods available in childcare settings are healthy.\**

**Q KEY FINDINGS**

Nutrition is not addressed in detail in the Alberta Child Care Accreditation Standards other than in the statement: "Respect children's dietary requirements for individual and cultural needs."<sup>76</sup>

Child Care Licensing Regulation states that, "where the license holder provides meals and snacks, ensure that the meals and snacks are provided to children (i) at appropriate times and in sufficient quantities in accordance with the needs of each child, and (ii) in accordance with a food guide recognized by Health Canada...."<sup>77</sup>

We are not aware of any more recent data on the availability of healthy foods in childcare settings. However, a Healthy Eating Environments in Childcare Provincial Advisory Committee was formed in 2015 "to bring together stakeholders from various sectors, including government, non-profit, early learning and care programs, health, and research, to work synergistically to: improve the nutritional intake of children; enhance the food and nutrition knowledge of ELCP providers; and increase the positive role modelling by child care staff, as well as parents in the home." (L. McLaughlin, Personal Communication, May 26, 2017) There is an urgent need to collect data in this area.

**↑ POLICIES/SYSTEMIC PROGRAMS**

**TABLE 3. Examples of Available Mandatory or Voluntary Policies and Systemic Programs**

Type of Policy or Systemic Program	Mandatory / Voluntary / Neither
<b>Alberta Nutrition Guidelines for Children and Youth<sup>70</sup></b> Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food. <a href="#">[View Here]</a>	Voluntary policy across all settings

\*healthy foods = 75% of food offered meets Choose Most Often & Choose Sometimes according to the Alberta Nutrition Guidelines for Children and Youth



## 2 ★ RECOMMENDATIONS

### Research

There is an urgent need to collect data on the availability of healthy food in childcare settings across Alberta and make it accessible to the public.

#### → ON THE HORIZON

*CHEERS stands for Creating Healthy Eating & Active Environments Survey*

<http://cheerskids.ca/about-cheers/>

*This online self-assessment tool examines the nutrition and physical activity environments in childcare settings. Childcare centre leaders use the tool to assess eating and activity environments in order to create the best environment to raise healthy kids. They assess foods served; healthy eating environments; healthy eating program planning; and physically active environment areas. At this time the tool is being piloted in the Alberta childcare community. We look forward to the release of data in future publications.*

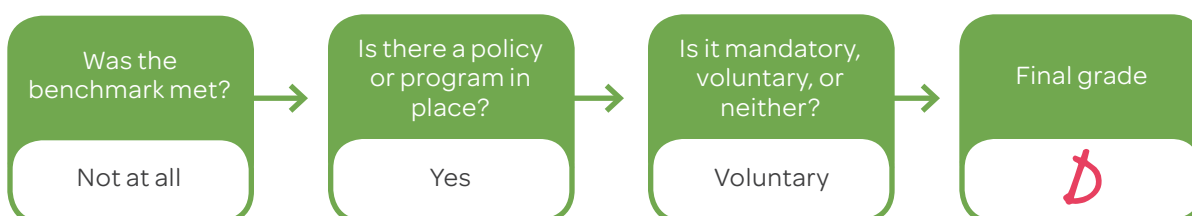


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## INDICATOR

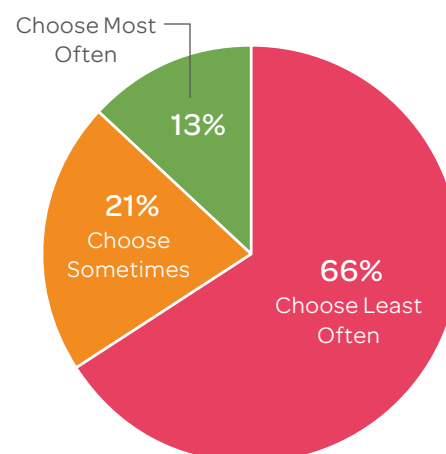
**High Availability of Healthy Food in Recreation Facilities****BENCHMARK**

*Approximately  $\frac{3}{4}$  of foods available in recreation facilities are healthy.\**

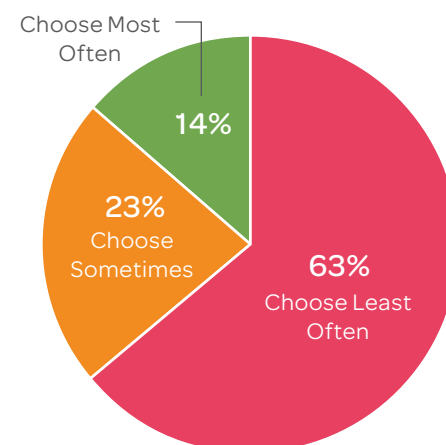
**Q KEY FINDINGS**Food Environment in Central Alberta Recreation Facilities Report<sup>78</sup>

- In 2016, 19 recreation facilities were surveyed in the Alberta Health Services Central Zone, which consists of 50 communities from "Two Hills to Drumheller, Lloydminster to Rocky Mountain House, and everywhere in between"<sup>78</sup>
- Response items were classified into the 'Choose Most Often,' 'Choose Sometimes,' and 'Choose Least Often' categories by research assistants in accordance with the ANGCI, guided by the 'Harmonized Ranking System for Concession Sales.'<sup>79</sup>
- One-quarter (26%) of recreation facilities have a policy or guidelines that determine what types of foods and beverages are sold at their facility, while 63% do not. Ten percent are in the process of adopting healthy eating policies.
- While over half (63%) of recreation facilities report offering healthy food options, 26% do not offer healthy food options, and 10% selected 'unsure.'
- 58% of recreation facilities offer healthy food and beverages at an equal or lower price than less healthy foods, while 21% do not, and another 21% of respondents were 'unsure.'
- Figure 2 shows that 66% of snacks/sides offered in food service outlets were 'Choose Least Often.'

**FIGURE 5: Types of Snacks/Sides Offered in Food Service Outlets in Recreation Facilities**



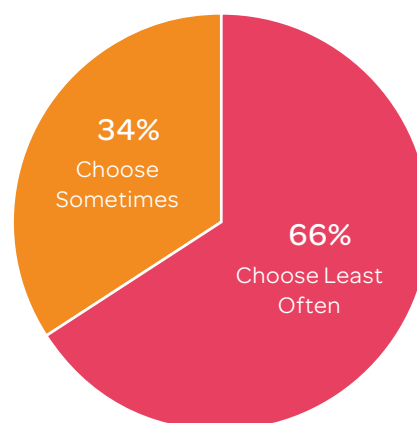
**FIGURE 6: Types of Beverages Offered in Foodservice Outlets in Recreation Facilities**



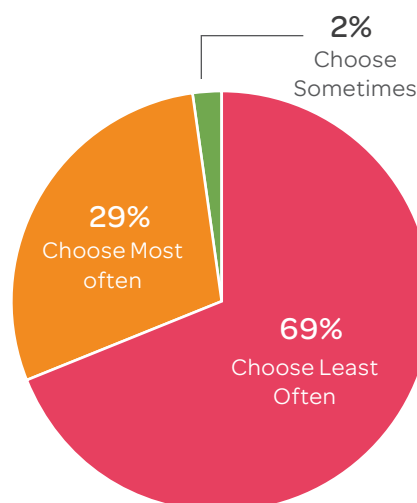
3

- Figure 3 indicates that 63% of beverages in food service outlets were 'Choose Least Often.'
- The most frequently reported challenge/barrier to offering healthy foods was customer interest/awareness (80%) followed by expense (60%). Other barriers included lack of equipment (27%), preparation time (27%), space to position new food options (27%), staff training (13%), and vendor support or contracts (13%).
- Figure 4 shows that 66% of foods in vending machines were 'Choose Least Often.' Common foods offered included potato chips and chocolate bars.
- Figure 5 shows that close to 70% of beverages in vending machines contained 'Choose Least Often' offerings, such as pop.
- Recreation facilities are recognizing the importance of healthy eating and are voluntarily opting to bring in contracts that facilitate healthy eating. Various programs are assisting recreation facilities to this end, including the Eat/Play/Live project (see <http://hsf.ca/research/en/eat-play-live-population-intervention-promote-nutrition-guideline-implementation-recreation>), Communities Choose Well (see page 17), AHS Registered Dietitians (see page 105), and CHEERS (see page 105).

**FIGURE 7: Types of Foods Offered in Snack and Vending Machines in Recreation Facilities**



**FIGURE 8: Types of Beverages in Vending Machines in Recreation Facilities**



## 📌 POLICIES/SYSTEMIC PROGRAMS

**TABLE 4. Examples of Available Mandatory or Voluntary Policies and Systemic Programs**

Type of Policy or Systemic Program	Mandatory / Voluntary / Neither
<b>Alberta Nutrition Guidelines for Children and Youth<sup>70</sup></b> Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food. <a href="#">[View Here]</a>	Voluntary policy across all settings



### 3 ★ RECOMMENDATIONS

#### Research

Explore effective implementation strategies to improve 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. For example, in 2011, the City of Hamilton adopted a healthy food and beverage policy which applies to all city buildings and public events.<sup>80</sup> <http://www.apccproject.com/policy-stories>*



# Neighbourhood Availability of Restaurants and Food Stores

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

INDICATOR	GRADE
<i>High availability of food stores and restaurants selling primarily healthy foods.</i>	<i>D</i>
<i>Limited availability of food stores and restaurants selling primarily unhealthy foods.</i>	<i>D</i>

## WHAT RESEARCH SUGGESTS

Research suggests that the availability of healthy and unhealthy foods within neighbourhoods can strongly influence children's eating behaviours<sup>81-83</sup> and health outcomes.<sup>84,85</sup> Several studies have found that healthy food availability is higher in grocery stores than convenience stores.<sup>12,86,87</sup>

Disparities also exist in the availability of healthy food stores in neighbourhoods based on race and ethnicity,<sup>88-92</sup> socioeconomic status (SES)<sup>89-92</sup> and urbanicity<sup>89,90,93</sup> (urban, suburban, rural). Healthy food is typically harder to find in marginalized neighbourhoods<sup>94</sup> with certain racial and ethnic minority groups<sup>92</sup> such as Aboriginal communities,<sup>91</sup> low SES neighbourhoods,<sup>89-92</sup> and rural<sup>93</sup> and urban, as compared to suburban<sup>89</sup> neighbourhoods. These disparities are often associated with food deserts (areas with low access to affordable healthy foods from grocery stores) and food swamps (areas with an abundance of unhealthy foods from convenience stores and fast-food outlets).<sup>91</sup>

To improve the healthfulness of community food environments, interventions to increase the availability of healthy food in grocery stores and restaurants in rural communities,<sup>95</sup> and in corner stores across urban centres have been shown to be effective.<sup>96</sup> That being said, food store owners in rural and low-income communities face barriers, often related to profitability, to providing healthy food.<sup>97,98</sup> To resolve these barriers, providing financial and technical assistance to independent food vendors,<sup>97</sup> and enhancing stakeholder engagement with vendors and schools<sup>98</sup> have been suggested as strategies to improve healthy food availability in these smaller food stores.

Of particular concern is the fact that many schools are surrounded by unhealthy food outlets<sup>81,83,84,99</sup> with a low availability of healthy food sources.<sup>100</sup> A 2013 report by Health Canada indicated that the majority of published Canadian data demonstrates a significant association between geographic food access and diet-related health outcomes.<sup>101</sup> A 2016 study in Quebec<sup>102</sup> found that exposure to two or more fast-food outlets within a 750m radius of schools was associated with an increased likelihood of excess junk food consumption at lunchtime. Youth from neighbourhoods with a moderate or high density of chain fast-food outlets (within 1km of their school) were more likely to be excessive fast-food consumers than youth from neighbourhoods with no chain fast-food outlets.<sup>82</sup>

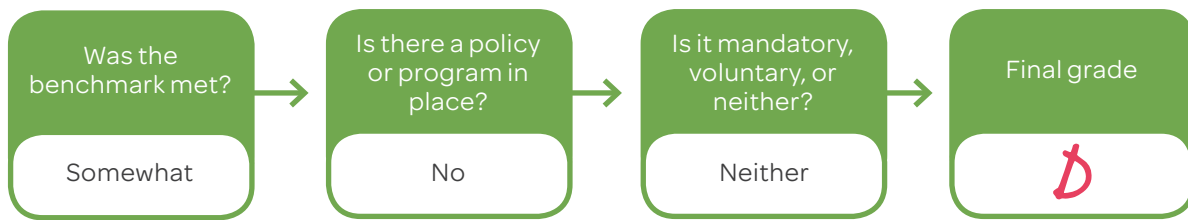
The International Network for Food and Obesity/non-communicable Diseases Research, Monitoring and Action Support (INFORMAS) provided the following proposed statement of good practice: "There are policies and programs implemented to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and proximity) and in-store (product density)."<sup>13</sup>



## 4 INDICATOR

**High Availability of Food Stores and Restaurants Selling Primarily Healthy Foods****BENCHMARK**

*The modified retail food environment index across all census areas is  $\geq 10$ .*

**Q KEY FINDINGS**

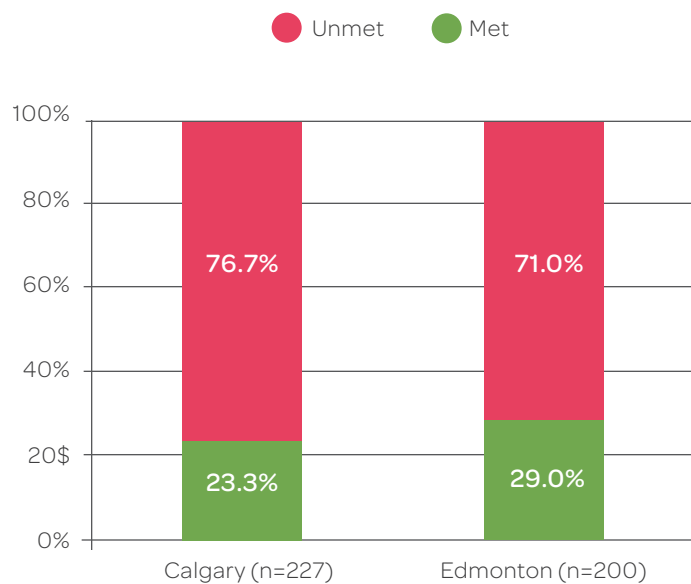
Street addresses for all of the food retailers in Edmonton and Calgary were documented. The modified Retail Food Environment Index (mRFEI)<sup>442</sup> formula was calculated according to the proportion of food retailers identified as “healthy” (grocery stores, fruit and vegetable retailers, and food wholesalers) 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.<sup>443</sup> The mRFEI is the proportion of healthy to unhealthy food retailers, representing “the percentage of retailers that are more likely to sell healthful food<sup>103</sup>”. 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.”

$$\text{mRFEI} = 100 \times \left( \frac{\text{\# Healthy Food Retailers}}{\text{\#Healthy Food Retailers} + \text{\# Unhealthy Food Retailers}} \right)$$

As highlighted in Figure 9, 29% (n=58) of all census tracts in Edmonton and 23% (n=52) of all census tracts in Calgary met the mRFEI score of  $\geq 10$ .

4

FIGURE 9. Percentage of Census Tracts that Met the Benchmark Modified Retail Food Environment Index Score



## ↑ POLICIES/SYSTEMIC 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.<sup>104</sup>

### Policy

The Province of Alberta mandate municipal zoning policies to address poor retail food environments at the local level.

### → POLICY ROLE MODELS

*Innovative retail food environment interventions have been implemented across Canada, including zoning regulations (Quebec), healthy corner stores (Toronto), and mobile good-food vending trucks (Ottawa).*

[http://www.quebecenforme.org/media/103607/08\\_research\\_summary.pdf](http://www.quebecenforme.org/media/103607/08_research_summary.pdf)

<https://www.theglobeandmail.com/news/toronto/corner-stores-in-toronto-are-getting-a-new-kind-of-power-wall-fresh-fruit/article25419254/>

<http://ottawa.ca/en/news/new-marketmobile-bus-brings-affordable-produce-ottawa-neighbourhoods>

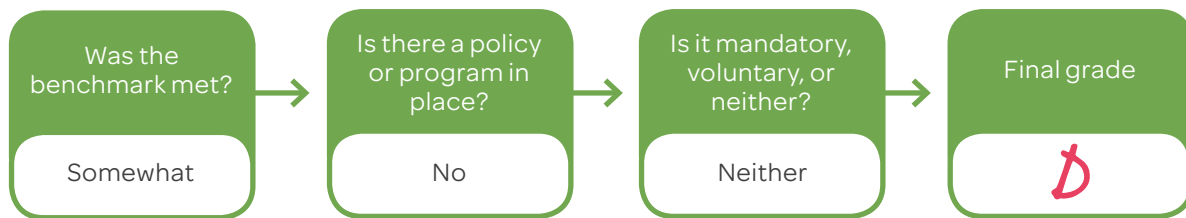


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## INDICATOR

**Limited Availability of Food Stores and Restaurants Selling Primarily Unhealthy Foods****BENCHMARK**

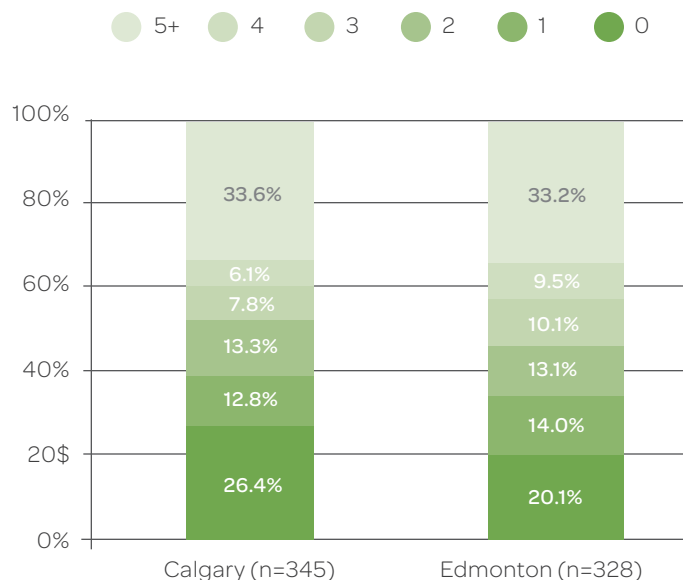
*Traditional convenience stores (i.e. not including healthy corner stores) and fast-food outlets are not present within 500m of schools.*

**Q KEY FINDINGS**

1. Street addresses for all schools and all food retailers in Edmonton, Calgary, and High Level were documented. We calculated<sup>105</sup> the number of “unhealthy” food retailers (i.e. fast food or take-away eating places and convenience stores)<sup>442</sup> within a 500m radius of each school.

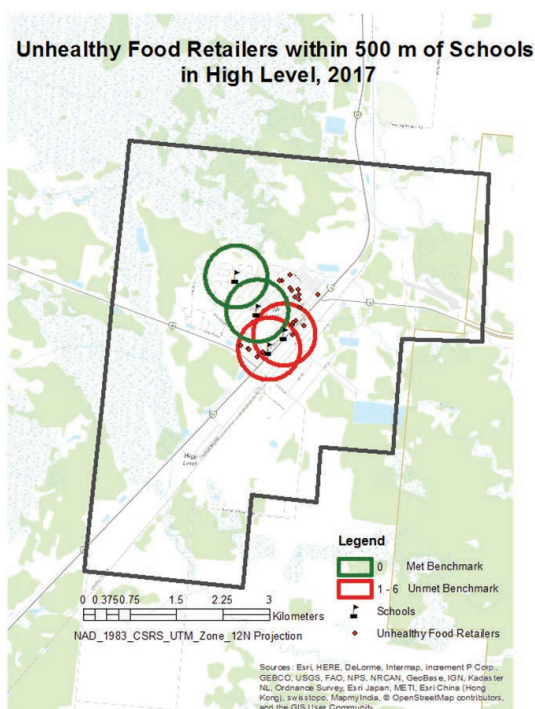
Figure 10 highlights the number of convenience stores and fast-food restaurants located within 500m of schools (assumed to sell primarily unhealthy foods). Most schools in Edmonton (80%) and Calgary (74%) have at least one convenience store or restaurant within 500m.

**FIGURE 10. Proportion of Schools with 0, 1, 2, 3, 4, or 5 or More Unhealthy Food Retailers Within 500 Metres**



- Figure 11 highlights a rural town example, whereby half of the schools in High Level, Alberta, met the benchmark and half did not.

FIGURE 11. Number of Schools in High Level with an Unhealthy Food Retailer Within 500 Metres



## 📌 POLICIES/SYSTEMIC 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.
- Encourage municipalities to decrease access to unhealthy choices through the establishment of appropriate zoning by-laws and other applicable policies.<sup>74</sup>

## Policy

- Require municipal zoning policies to work towards decreasing poor food retail outlets within 500m 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."  
[http://www.aspq.org/documents/file/aspq\\_gzonage\\_eng\\_final\(2\).pdf](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,<sup>448</sup> while South Korea's 'Green Food Zones' restrict sales of unhealthy foods within a 200m radius of schools.<sup>449</sup>
- In 2009, the Waltham Forest Council in East London, UK, banned new fast food outlets from opening within 400m of schools.  
<http://www.express.co.uk/news/uk/96145/Takeway-is-shut-to-combat-pupil-obesity>.

# Food Composition

Policies and actions that ensure products available in the marketplace are formulated in a healthful manner.

INDICATOR	GRADE
<i>Foods contain healthful ingredients.</i>	<b>F</b>

## WHAT RESEARCH SUGGESTS

### Children's Breakfast Cereals

Public health and food industry initiatives aim to increase breakfast consumption among children, particularly through increased consumption of ready-to-eat cereals.<sup>106</sup> Evidence suggests that there are many health benefits for children who regularly consume breakfast cereals, including improved micronutrient intake, fruit and milk consumption, reduced fat consumption, healthy eating behaviours (e.g., not skipping breakfast), and a decreased likelihood of overweight and obesity.<sup>107,108</sup> Additionally, research has indicated that consumption of whole-grain or high-fibre breakfast cereals is associated with a lower risk of diabetes and cardiovascular disease.<sup>108</sup>

However, cereals marketed to children often contain more energy, sugar, and sodium compared to cereals that are not marketed to children.<sup>106,109,110</sup> There are differing reports on the fibre and protein content of children's cereals, with some studies suggesting less<sup>106</sup> and some suggesting more<sup>109</sup> fibre and protein in children's cereals, compared to other types of breakfast cereals.

- Ready-to-eat cereals are the second-most heavily marketed food product to children after fast food,<sup>111</sup> and most ads use promotional characters<sup>109</sup> to promote high-sugar cereals.<sup>112</sup>
- Increasing the whole grain content could improve the nutritional quality of children's cereals. It is also a feasible target for intervention, given that many companies market cereals on the basis of their whole grain content.<sup>106</sup>
- Fortification of cereal can contribute to the recommended intake of micronutrients in children's diets.<sup>113</sup> Food composition targets and policies set or endorsed by government are one strategy to improve the healthfulness of children's breakfast cereals.<sup>109</sup>
- The US Interagency Working Group on foods marketed to children designates cereals as high sugar if they contain more than 13g of sugar per 50g of product.<sup>114</sup>

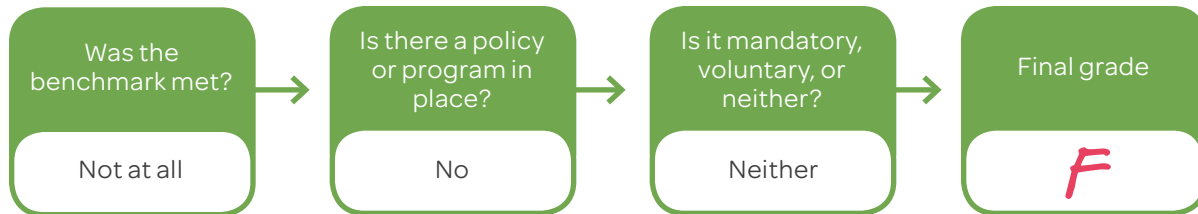




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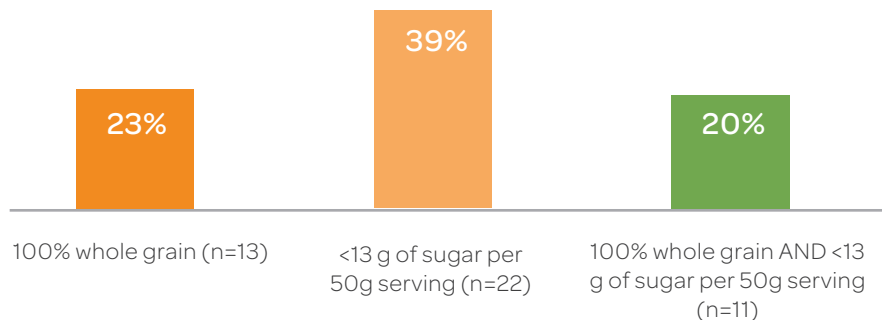
**INDICATOR****Foods Contain Healthful Ingredients****BENCHMARK**

*≥ 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving.*

**Q KEY FINDINGS**

A sample of Edmonton supermarkets (the top two supermarkets, by sales, in Canada) offering a full selection of grocery items was chosen.<sup>115</sup> Information from Nutrition Facts tables and ingredient lists was obtained to determine the whole-grain and sugar content of all hot and cold children's cereals sold. Cereals were identified as 'children's cereals' if the boxes displayed a cartoon, company-owned character, licensed character, sports person, celebrity, or movie tie-in.<sup>116</sup> Figure 12 illustrates that out of 56 child-specific cereals identified, 11 cereals (20%) were 100% whole grain and had < 13g of sugar per 50g serving.

**FIGURE 12. Sugar Content and Whole Grain Content of Children's Cereals (n=56) from the Top Two Supermarkets in Edmonton, Alberta**

**↑ POLICIES/SYSTEMIC PROGRAMS**

None

**★ RECOMMENDATIONS****Practice**

- Encourage industry to reformulate children's cereals to reduce sugar and increase whole grain content.
- Urge store owners to stock healthier cereals, such that 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving.

**Policy**

- Urge Health Canada to create policies such as Front-of-Package warning labels that encourage industry to reformulate children's cereals that contain <13 g of sugar per 50g serving are 100% whole grain.





# Communication Environment

The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing,<sup>25,26</sup> 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
<i>Nutrition Information at the Point-of-Purchase</i>	<i>D</i>
<i>Food Marketing</i>	<i>D</i>
<i>Nutrition Education</i>	<i>C</i>

# 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	GRADE
<i>Menu labelling is present.</i>	<i>D</i>
<i>Shelf labelling is present.</i>	<i>D</i>
<i>Product labelling is present.</i>	<i>F</i>
<i>Product labelling is regulated.</i>	<i>D</i>

## WHAT RESEARCH SUGGESTS

Nutrition labelling is a key policy tool for tackling unhealthy diets, overweight, and obesity by enabling consumers to choose healthier foods in retail settings.<sup>117,118</sup> The WHO Global Strategy on Diet, Physical Activity and Health<sup>119</sup> recommends that governments ensure consumers have the information they need to make healthy food choices. In Canada, the inclusion of a Nutrition Facts table on the back of pre-packaged foods became mandatory in 2007.<sup>120</sup> However, research shows that consumers have difficulty understanding Nutrition Facts tables.<sup>121</sup> This consumer confusion is augmented by the fact that, in Canada, more than 158 different types of front-of-package (FOP) labels have been documented,<sup>122</sup> with many being applied inconsistently.<sup>123</sup>

A growing body of evidence suggests that simple, interpretive nutrition labelling systems, such as shelf-labelling systems and FOP-labelling systems with colour-coded text to indicate nutrient levels can improve comprehension and product selection.<sup>121,124-127</sup> Menu labelling is another example of a population-based approach that helps consumers make informed food choices by including nutrition information in restaurant menus.<sup>128</sup> However, findings with respect to the impact of menu labelling are mixed.<sup>129-131</sup> In comparison with product labelling, reviews on menu labelling cite relatively weak impacts on consumers' eating behaviours, and report varied results across population sub-groups and retail food settings.<sup>130,132,133</sup> Nevertheless, there is strong public support for menu labelling,<sup>134</sup> likely because it aligns with public values of transparency. Menu labelling also has the potential to drive product reformulation, benefiting all consumers whether they read the information or not.<sup>135</sup>

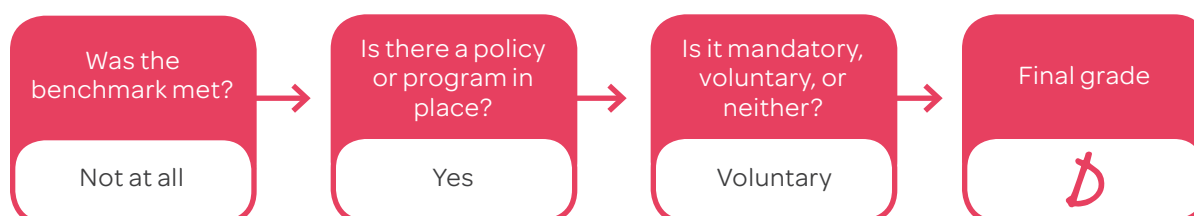
A 2016 Canadian report by the Standing Senate Committee on Social Affairs, Science and Technology recommended mandating an effective, evidence-based FOP labelling system for packaged foods.<sup>136</sup> A 2016 Canadian consensus conference with research, practice and policy experts emphasized the importance of FOP, shelf, and menu labelling as part of a standardized, coordinated, and multi-pronged strategy supported by a robust, evidence-based nutrition profiling system. These recommendations align with those developed by the National Academy of Medicine in 2012.<sup>127</sup>



## 7 INDICATOR

**Menu Labelling is Present****BENCHMARK**

*A simple and consistent system of menu labelling is mandated in restaurants with  $\geq 20$  locations.*

**Q KEY FINDINGS**

1. Alberta does not have a menu labelling policy.
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.<sup>137</sup>

**↑ POLICIES/SYSTEMIC PROGRAMS****Voluntary Program****INFORMED DINING PROGRAM<sup>138</sup>**

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, poster, as well as on an electronic tablet.

**★ RECOMMENDATIONS****Research**

- Assess the impact of legislating menu labelling on consumer food choices.

**Policy**

- Mandate menu labelling in restaurants with  $\geq 20$  locations.

**→ POLICY ROLE MODELS**

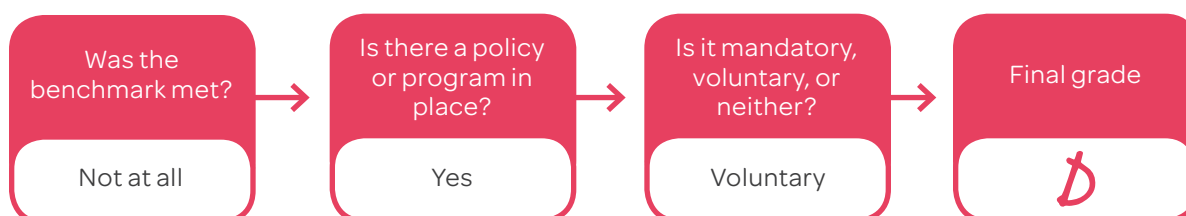
- In Canada, the Healthy Menu Choices Act was implemented by the Government of Ontario as of January 1, 2017. The Act requires that owners and operators of more than 20 food service locations in the province present calorie information on their menus.<sup>139</sup>
- In the US, an example of mandated menu labelling is in the Affordable Health Care Act, which requires menu labelling in restaurants and similar retail establishments with  $\geq 20$  locations nationwide; however, full enforcement has been delayed until May 7, 2018. <http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm217762.htm>



## 8 INDICATOR

**Shelf Labelling is Present****BENCHMARK**

*Grocery chains with  $\geq 20$  locations provide logos/symbols on store shelves to identify healthy foods.*

**Q KEY FINDINGS**

1. Alberta lacks a simple and consistent government-approved shelf-labelling program.
2. Loblaw Companies Limited – Guiding Stars ([guidingstars.ca](http://guidingstars.ca))

Guiding Stars is a patented food rating system that rates foods based on their “nutrient density using a scientific algorithm. Foods are rated based on a balance of credits and debits. Foods are **credited** for vitamins, minerals, dietary fibre, whole grains, and omega-3 fatty acids, and **debited** for saturated fats, trans fats, added sodium, and added sugar. Rated foods are marked with tags indicating 1, 2, or 3 stars”.<sup>140</sup>

Loblaw Companies Limited’s Guiding Stars program is the only shelf-labelling program in Alberta grocery stores of which we are aware. The result is that 32% of major Alberta grocery stores have a shelf-labelling program.

**TABLE 5. Availability of Shelf Labelling in Major Grocery Stores in Alberta**<sup>141-147</sup>

Chain name	Number of stores in AB	Loblaw Chain (Y/N)	Guiding Stars (Y/N)
Real Canadian Superstore	31	Y	Y
Loblaws CityMarket	2	Y	Y
No Frills	37	Y	Y
Your Independent Grocer	9	Y	Y
Box	1	Y	N
Extra Foods	5	Y	Y
Safeway	85	N	N
Sobeys	54	N	N
Save-On-Foods	37	N	N

3. No change in regulations has occurred.

## 8 POLICIES/SYSTEMIC PROGRAMS

### Voluntary Program

Loblaw Companies Limited – Guiding Stars (specific to Loblaw incorporated only)

## ★ RECOMMENDATIONS

### Research

- Continue to examine the effectiveness of shelf labelling systems in identifying healthy foods.

### Practice

- Promote government engagement with stakeholders to determine how to provide consumers with easy-to-understand, useful nutrition information to identify healthy food at point of purchase.

### Policy

- Initiate a simple and consistent government-approved shelf labelling system across Alberta.

### → ON THE HORIZON

Canada Healthy Eating Strategy initiatives call for strengthened labelling and claims (e.g. changes to the nutrition facts table, ingredient lists, serving sizes, and information on sugars). The food industry has five years to implement these changes.<sup>148</sup>

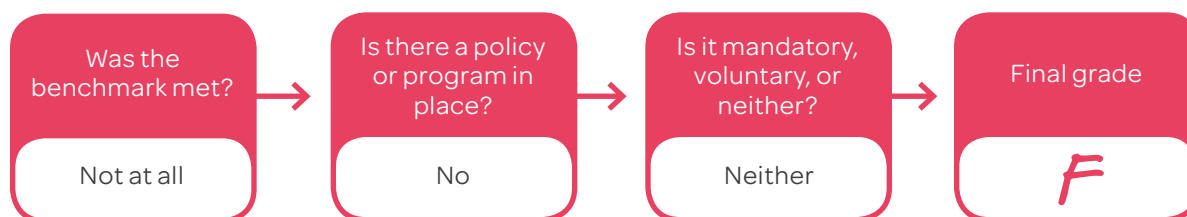
<https://www.canada.ca/en/health-canada/services/food-labelling-changes.html#a3>



## 9 INDICATOR

**Product Labelling is Present****BENCHMARK**

*A simple, evidence-based, government-sanctioned front-of-package food-labelling system is mandated for all packaged foods.*

**Q KEY FINDINGS**

- On Dec 14, 2016, the final amendments to the Food and Drug Regulations – Nutrition Labelling, Other Labelling Provisions and Food Colours were published in the Canada Gazette – Part II. The new requirements make nutrition information on food labels easier to understand. This strategy includes changes to how the Nutrition Facts table, list of ingredients, serving size, and sugars information are displayed<sup>149</sup> (see <http://www.healthycanadians.gc.ca/eating-nutrition/label-etiquetage/changes-modifications-eng.php>).
- Despite some changes, the Nutrition Facts table, as seen in Figure 13, is mandated on almost all packaged foods by the federal government;<sup>150</sup> however, this indicator received an F because a simple label is not provided front-of-package.

FIGURE 13. Nutrition Facts Table

**Whole Wheat Bread**

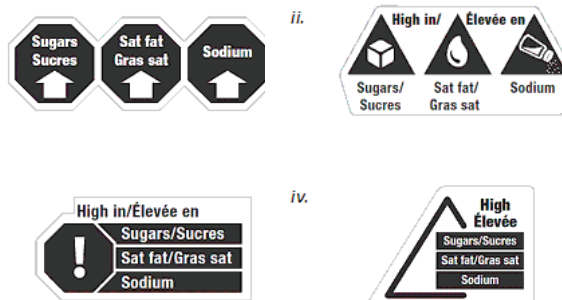
Nutrition Facts			
Per 2 slices (75 g)			
Amount		% Daily Value	
Calories 140			
Fat 1.5 g		2 %	
Saturated 0.3 g		4 %	
+ Trans 0.5 g			
Sodium 290 mg		12 %	
Carbohydrate 26 g		9 %	
Fiber		12 %	
Sugars 2 g			
Protein 5 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	4 %	Iron	10 %

**→ ON THE HORIZON**

Healthy Eating Strategy<sup>148</sup> – Announced October 2016 by Health Canada:

Consultations with Canadians on front-of-package labelling systems closed June 21, 2017. We are awaiting next steps on findings.

**Figure 14. Proposed FOP Symbols under Consideration** (https://www.canada.ca/content/dam/canada/health-canada/migration/health-system-systeme-sante/consultations/labels-nutrition-etiquetage/alt/figure1.gif)



## 9

## POLICIES/SYSTEMIC PROGRAMS

### Mandatory Policy

The Government of Canada provides online resources to learn more about the Nutrition Facts table, including an interactive tool to help consumers understand the table, the amount of food in a single serving, and the percent daily value.<sup>150,151</sup>

The Food and Drugs Act<sup>152</sup> regulates the labelling of food products in Canada as a way to:

- Make nutrition labelling mandatory on most food labels
- Update requirements for nutrient content claims
- Monitor diet-related health claims for foods

### Voluntary Programs (Resources)

In collaboration with Health Canada, the Canadian Food Inspection Agency developed tools to assist industry in complying with food labelling regulations, including the 2003 Guide to Food Labelling and Advertising, the Compendium of Templates for Nutrition Facts Tables, and the Nutrition Labelling Compliance Test (see <http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/nutrition-labelling/additional-information/compliance-test/eng/1409949165321/1409949250097>).<sup>151</sup> The Compliance Test provides a transparent, science-based system for assessing the accuracy of the nutrient information on food labels in Canada.<sup>153</sup>

### Minister of Health Mandate Letter – Priority<sup>154</sup>

"Promote public health by...improving food labels to give more information on added sugars and artificial dyes in processed foods."<sup>154</sup>

## ★ RECOMMENDATIONS

### Research

- Identify the most effective front-of-package food-labelling system.

### Practice

- Develop a nutrient profiling system to identify unhealthy foods and beverages<sup>3</sup> to support the creation of a consumer-friendly front-of-package food-labelling system.

### Policy

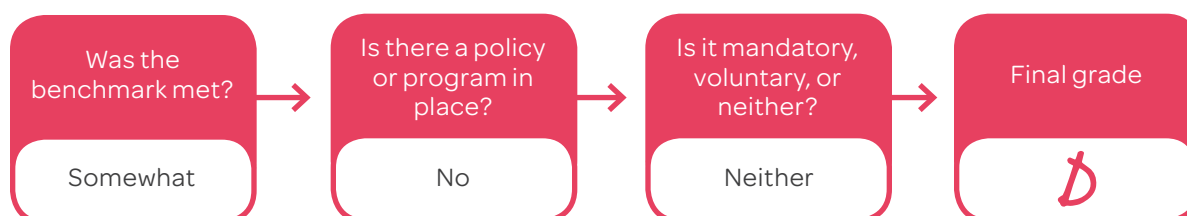
- Mandate a simple, standardized front-of-package food-labelling system for all packaged foods in Canada.



## 10 INDICATOR

**Product Labelling is Regulated****BENCHMARK**

*Strict government regulation of industry-devised logos/branding denoting 'healthy' foods.*

**Q KEY FINDINGS**

1. In Canada, the National Food and Drugs Act<sup>152</sup> regulates the labelling of all pre-packaged foods, which includes ingredient lists, nutrition labelling, shelf life, nutrient content claims, health claims, and foods for special dietary use.<sup>155</sup>
2. The Food and Drug regulations provide criteria that must be satisfied for nutrient content claims and health claims to be allowed on food and beverage packages. Most importantly, content claims may not be false, misleading, or deceptive. These regulations apply to:<sup>155</sup>

- |               |                |  |
|---------------|----------------|--|
| ➔ Energy      | ➔ Sodium       | ➔ Fibre  |
| ➔ Protein     | ➔ Potassium    | ➔ Vitamins and minerals                                  |
| ➔ Fats        | ➔ Carbohydrate | ➔ The use of the words, "light", "lean" and "extra lean" |
| ➔ Cholesterol | ➔ Sugars       |  |

3. Industry-devised logos denoting 'healthy' foods are permitted. Food manufacturers have a great amount of freedom in determining what appears on food packaging, provided they adhere to regulations regarding nutrition tables, as well as regulations regarding any specific health or nutrient claims. There is a general prohibition of any false, misleading, or deceptive promotion. However, it is unlikely that this requirement could be used to preclude labelling schemes or industry logos unless items carrying the designation are no different than comparable items without the designation.

## 10

**📌 POLICIES/SYSTEMIC PROGRAMS****Mandatory Policy - National**

- Food Directorate of Health Canada – Food and Nutrition Health Claims Acts and Regulations<sup>156</sup> [[View Here](#)]
- The Canadian Food Inspection Agency is responsible for enforcing food-related aspects of the Consumer Packaging and Labelling Act, and the Food and Drugs Act.<sup>157</sup>
- The federal Minister of Health is responsible for “establishing policies and standards relating to the safety and nutritional quality of food sold in Canada and assessing the effectiveness of the Agency’s activities related to food safety.”<sup>157</sup>
- Health Canada – Guidance Document for Preparing Submission of Food Claims<sup>123</sup> [[View Here](#)]

**★ RECOMMENDATIONS****Practice**

- Enforce existing regulations regarding industry-devised logos/branding.

**Policy**

- Implement clear and strict regulations regarding industry-devised logos/branding.



# 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	GRADE
<i>Government-sanctioned public health campaigns encourage children to consume healthy foods.</i>	<i>F</i>
<i>Restrictions on marketing unhealthy foods to children.</i>	<i>D</i>

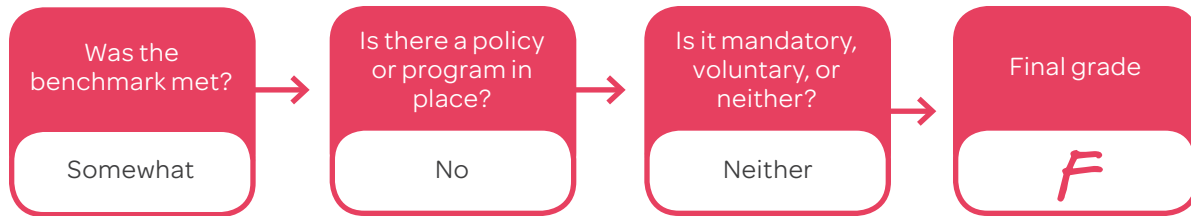
## WHAT RESEARCH SUGGESTS

Unhealthy food and beverage marketing contributes to poor eating behaviours in children.<sup>158,159</sup> A systematic review conducted by WHO found strong evidence to suggest that marketing influences children's food purchases, and modestly impacts their food knowledge, preferences, and intake, with implications for weight gain.<sup>160</sup> This is concerning, given that children are exposed to food advertising through multiple avenues, including television and radio, online (e.g. social media), print (e.g. magazines), cinema (e.g. pre-film advertisements), point-of-sale (e.g. checkouts), and outdoors (e.g. billboards, event sponsorships).<sup>161</sup> A 2017 Heart & Stroke report<sup>162</sup> revealed that in a single year, children view more than 25 million food and beverage ads on their favourite websites, with more than 90% of these advertising unhealthy choices. The report also revealed that the average child watches two hours of television per day, and views four to five food and beverage ads per hour.<sup>162</sup> Even older children are vulnerable to unhealthy food marketing, due to their higher levels of media consumption, and the fact that their brains are still immature and thus remain susceptible to marketing messages.<sup>163</sup>

Whereas voluntary 'self-regulatory' advertising initiatives have emerged as a way to reduce unhealthy food marketing to children,<sup>161,164</sup> they have failed to substantially improve the food marketing landscape.<sup>162,165</sup> The 2017 Heart & Stroke report highlighted weaknesses within the Canadian Children's Food and Beverage Advertising Initiative (CAI) approach and criteria, with one study indicating that three-quarters of unhealthy food ads viewed by children were indeed from companies that participate in the CAI.<sup>162</sup>

Overall, restricting children's exposure to unhealthy food and beverage marketing is an effective and cost-effective intervention to improve children's eating behaviours and body weights.<sup>166</sup> Public health campaigns are another promising example of a policy action that can promote the consumption of healthy foods.<sup>49,167,168</sup>

## 11 INDICATOR

**Government-sanctioned public health campaigns encourage children to consume healthy foods****BENCHMARK***Child-directed social marketing campaigns for healthy foods.***Q KEY FINDINGS**

Whereas some education resources and websites exist, few active, sustained, educational, and media-based public health campaigns directed specifically at children to promote healthy food consumption exist.

**📌 POLICIES/SYSTEMIC PROGRAMS**

None

**★ RECOMMENDATIONS****Practice**

- Develop a sustained and targeted social marketing program to encourage healthy food consumption.

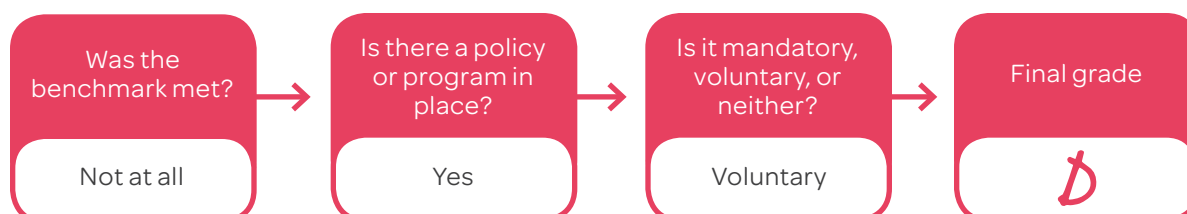




## 12 INDICATOR

**Restrictions on Marketing Unhealthy Foods to Children****BENCHMARK**

*All forms of marketing unhealthy foods to children are prohibited.*

**Q KEY FINDINGS**

1. Alberta does not have official initiatives or policies to limit food marketing to children.
2. Out of 38 districts that completed the 2017 Reporting and Reflection Tool for the Alberta Healthy School Community Wellness Fund, 15 districts voluntarily restricted marketing of unhealthy foods and beverages on school grounds, 17 in classrooms, 14 in fundraising, and 13 at sporting and school events. Less than half of districts have developed criteria for restricting marketing and advertising of unhealthy foods; however, 68% of respondents either somewhat or strongly supported criteria to restrict food and beverage marketing.
3. Bill S-228 is an act to amend the Food and Drugs Act that prohibits food and beverage marketing directed at children.<sup>169</sup> The bill was passed in the Senate in June 2017, and is now going to Parliament (see <http://nancygreeneraine.ca/en/bill-s-228-act-amend-food-drugs-act-prohibiting-food-beverage-marketing-directed-children/http://www.parl.gc.ca/HousePublications/Publication.aspx?Mode=1&DocId=8439399&Language=Ez>)
4. National broadcast initiatives and policies exist. These are described in Table 6.

**→ ON THE HORIZON**

Canada's healthy eating strategy<sup>148</sup> will have upcoming initiatives addressing the marketing of unhealthy food to children. For example, Health Canada is working to restrict the marketing of unhealthy foods and beverages to children.

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TABLE 6. Broadcast initiatives, purpose, and adherence

	Canada's Food and Beverage Advertising Initiative <sup>170</sup>	Broadcast Code for Advertising to Children (Children's Code) <sup>172</sup> [except QC]	Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age <sup>173</sup> [except QC]
PURPOSE	<p>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.</p> <p>The core principles of the CAI are to:<sup>170</sup></p> <ul style="list-style-type: none"> <li>• Market only healthy foods and beverages through television, radio, print, internet, mobile media, and interactive games intended for children under 12 years.</li> <li>• Not place any food or beverage in any program or editorial content directed to children;</li> <li>• Not advertise foods or beverages in elementary schools (pre-K to grade 6).</li> </ul>	<p>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."<sup>172</sup></p>	<p>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.<sup>173</sup></p>
ADHERENCE	<p>To date, 19 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.</p> <p><b>Uniform Nutrition Criteria White Paper<sup>171</sup></b></p> <p>The CAI adopted common uniform nutrition criteria that came into effect Dec 31, 2015.</p> <p>The CAI is a voluntary initiative coming from leading food and beverage companies (Participants).</p>	<p>In effect across Canada, except in Quebec, where the government prohibits broadcast advertising to children.<sup>172</sup></p> <p>No new information for 2017</p>	<p>In effect in all of Canada, except in Quebec, where advertising to children is not permitted.</p> <p>No new information for 2017</p>

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The current industry standards are not sufficient to protect children from the potential negative impacts of the marketing of unhealthy food.<sup>174,175</sup> 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.<sup>175</sup> 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.<sup>176</sup>

5. 2015 Compliance report findings:<sup>177</sup>

<http://www.adstandards.com/en/childrensinitiative/2015ComplianceReport.pdf>

Assesses the performance of 17 participating companies (Participants) in the CAI in meeting their public commitments under the program. This report covers the period from January 1 to December 31, 2015. The CAI had been in effect for eight years when the report was completed (initiated April 2007).

"Advertising Standards Canada (ASC) evaluated each Participant's compliance with its individual CAI commitment through an independent audit and a detailed review of each Participant's compliance report, certified as complete and accurate by a senior corporate officer."

Out of 18 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, Nestle, PepsiCo, Unilever, and Weston Bakeries. Seven committed to including only products meeting the nutrition criteria outlined in their individual commitments and approved by ASC in child-directed advertising. Those companies are: Campbell Canada, Danone, General Mills, Kellogg's, McDonald's, Parmalat, and Post.

All Participants committed to devoting 100% of their television, radio, print, Internet, movie DVD, video and computer game, and mobile media advertising directed primarily at children under 12 years of age to better-for-you products.



## 12 ↑ POLICIES/SYSTEMIC PROGRAMS

See Table 6

### ★ RECOMMENDATIONS

#### Research

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

#### Practice

- Encourage adoption of voluntary self-regulatory initiatives following government-approved guidelines subject to independent audits.<sup>3,162</sup>

#### 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.<sup>178,179</sup>

#### → POLICY ROLE MODELS

*At the national level, 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 recommendation of restricting all food and beverage marketing to Canadian children ages 16 and younger. <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).<sup>162</sup>*

*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. <https://www.asa.org.uk/news/tougher-new-food-and-drink-rules-come-into-effect-in-children-s-media.html>*



# Nutrition Education

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

INDICATOR	GRADE
<i>Nutrition education provided to children in schools.</i>	<i>B</i>
<i>Food skills education provided to children in schools.</i>	<i>D</i>
<i>Nutrition education and training provided to teachers.</i>	<i>D</i>
<i>Nutrition education and training provided to childcare workers.</i>	<i>D</i>

## WHAT RESEARCH SUGGESTS

Over recent decades, food skills (i.e. the skills needed to plan, purchase, and prepare food) and knowledge have declined in Canada.<sup>180</sup> This has occurred in tandem with a decline in children's exposure to cooking and food preparation activities within home and school environments.<sup>181</sup> However, research suggests that having better food skills and knowledge is associated with increased diet quality.<sup>182-184</sup> Experience with food preparation has been shown to positively impact the food-related preferences, attitudes, and behaviours of children.<sup>185-187</sup> Receiving nutrition education from an early age is critical to promoting lifelong healthy eating behaviours.<sup>188-191</sup>

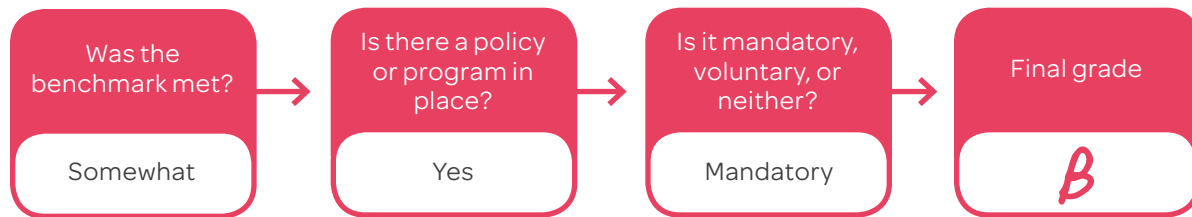
The WHO Global Strategy on Diet, Physical Activity, and Health<sup>119</sup> recommends that governments ensure nutrition education programs are available starting in primary school. In Canada, an examination of school nutrition policies suggested that nutrition education is a high federal and provincial priority, particularly as it relates to curricular improvements.<sup>192</sup> However, the "optionalization" of food skills in the curriculum has raised public concern, as it may lead those who opt out to develop a dependency on convenience foods which are typically of poorer nutritional quality and more expensive than home-cooked meals. Food skills need to be prioritized in schools as one of the most effective health promotion strategies, teaching individuals to make informed food choices.<sup>193</sup>

Teacher and childcare worker training is a key component of effective implementation and delivery of curriculum.<sup>194-197</sup> Factors influencing the amount of time teachers dedicate to nutrition instruction may include nutrition training and access to supportive resources, which in turn can impact their self-efficacy, knowledge, and beliefs.<sup>198-200</sup> Decision makers acknowledge the importance of nutrition education; however, there is a lack of information on strategies to improve the quality of nutrition education provided within schools.<sup>192</sup> One study found that schools are more likely to participate in health-promoting interventions that encompass nutrition education when they align with a school's priority to improve students' academic achievement.<sup>201</sup> Further research is needed to assess the impact of integrating nutrition education into core subject curricula, as the prioritization of core subjects has been cited as a barrier to the delivery of nutrition education.<sup>200,202</sup>

## 13 INDICATOR

**Nutrition Education Provided to Children in Schools****BENCHMARK**

*Nutrition is a required component of the curriculum at all school grade levels.*

**Q KEY FINDINGS**

1. Curriculum redesign<sup>203</sup> is underway in Alberta; however, the current curriculum remains in effect until the future provincial curriculum is approved by the Minister of Education. Implementation dates have yet to be determined (see <https://education.alberta.ca/curriculum-development>).
2. Mandatory health courses are incorporated into the Alberta school curriculum for students in Grades K-12, with courses aimed to “enable students to make well-informed, healthy choices and to develop behaviours that contribute to the well-being of self and others.”<sup>204,205</sup> Table 7 provides an outline of nutrition-related outcomes by grade level.<sup>204,205</sup> Grades 10-12 do not have any nutrition-specific outcomes within this framework.



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TABLE 7. Nutrition-related outcomes by grade level of the mandatory health courses in Alberta.<sup>204,205</sup>

GRADE	NUTRITION-RELATED OUTCOMES
K	"recognize that nutritious foods are needed for growth and to feel good/have energy; e.g., nutritious snacks" (W-K.5)
1	"recognize the importance of basic, healthy, nutritional choices to well-being of self; e.g., variety of food, drinking water, eating a nutritious breakfast" (W-1.5)
2	"classify foods according to Canada's Food Guide to Healthy Eating, and apply knowledge of food groups to plan for appropriate snacks and meals" (W-2.5)
3	"describe the effects of combining healthy eating and physical activity" (W-2.1)
4	"apply guidelines from Canada's Food Guide to Healthy Eating to individual nutritional circumstances; e.g., active children eat/drink more" (W-3.5)
5	"analyze the need for variety and moderation in a balanced diet; e.g., role of protein, fats, carbohydrates, minerals, water, vitamins" (W-4.5)
6	"examine ways in which healthy eating can accommodate a broad range of eating behaviours; e.g., individual preferences, vegetarianism, cultural food patterns, allergies/medical conditions, diabetes" (W-5.5)
7	"examine the impact of physical activity, nutrition, rest and immunization on the immune system" (W-5.1)
8	"evaluate personal food choices, and identify strategies to maintain optimal nutrition when eating away from home; e.g., eating healthy fast foods" (W-8.5)
9	"develop strategies that promote healthy nutritional choices for self and others; e.g., adopt goals that reflect healthy eating, encourage the placement of nutritious food in vending machines" (W-9.5)
10-12	Career and Life Management (CALM) outcomes build upon those from K-9; however, there are no nutrition-specific outcomes.

## 📌 POLICIES/SYSTEMIC PROGRAMS

Alberta Education is currently moving forward with provincial curriculum development.

## ★ RECOMMENDATIONS

### Practice

- Monitor and advocate for the delivery of nutrition education to children at all grade levels.

### Policy

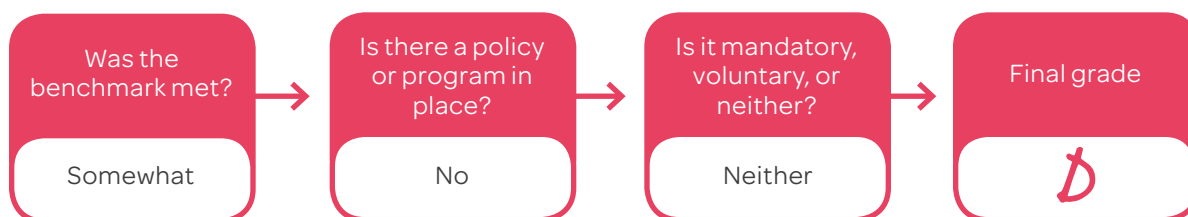
- Mandate nutrition education within the school health and wellness curriculum for grades 10-12.

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## INDICATOR

**Food Skills Education Provided to Children in Schools****BENCHMARK**

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

**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.<sup>206</sup> Food skills fall under the 'Foods occupational area' located within the 'Human Services' cluster<sup>206</sup> (see <http://albertactf.ca>).

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 the students and 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.

**📌 POLICIES/SYSTEMIC PROGRAMS**

See above Key Finding 1.

**★ RECOMMENDATIONS****Practice**

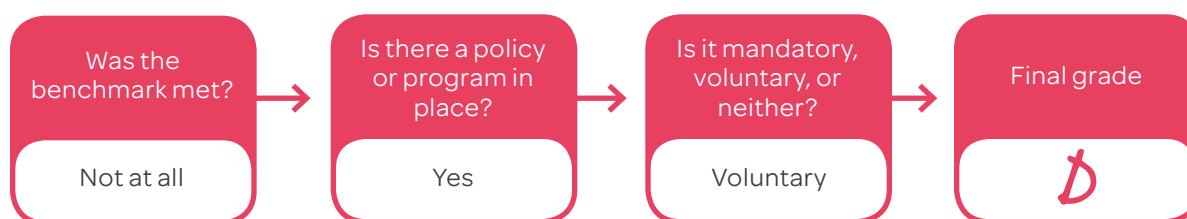
- Monitor and advocate for the delivery of food skills education to all children at the junior high level.<sup>3</sup>
- Make food preparation classes available to children, their parents, and child caregivers.<sup>3</sup>

**Policy**

- Make food skills education mandatory at the junior high level.

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## INDICATOR

**Nutrition Education and Training Provided to Teachers****BENCHMARK***Nutrition education and training is a requirement for teachers.***Q KEY FINDINGS**

Alberta does not require teachers to participate in nutrition education training; however, changes are coming.

**📌 POLICIES/SYSTEMIC PROGRAMS****Voluntary Programs and Resources**

AHS Nutrition Services offers curriculum-based lesson plans for Grades K-9.<sup>207</sup> [View here]

The AHS School Nutrition Education Resource List provides “teachers with helpful information and materials to teach students and children about nutrition and healthy food choices<sup>208</sup>”. All resources in this list align with the Comprehensive School Health model, Alberta Education curriculum, the ANGCY, and Eating Well with Canada’s Food Guide. For example, The Cooking Club Manual<sup>208</sup> “aims to teach children aged 8-12 food preparation and cooking skills, as well as healthy eating and food safety so that they can confidently choose and make nutritious foods<sup>208</sup>.”

<http://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-school-resource-list.pdf>

**★ RECOMMENDATIONS****Practice**

- Encourage all post-secondary institutions to begin integrating nutrition education into teacher training.

**Policy**

- Mandate nutrition-specific training and CSH as part of all new teachers’ training and ongoing professional development in Alberta.

**➔ ON THE HORIZON**

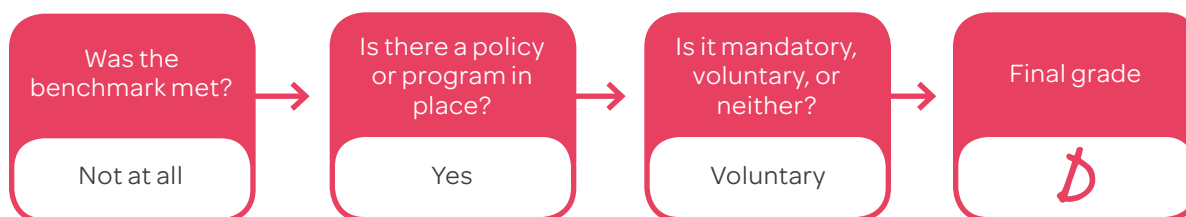
Starting Winter 2018, **University of Calgary** Education students will be required to take a course on Comprehensive School Health, which addresses nutrition. “This course provides the theoretical foundations, research base, community resources, and experiential learning to create the capacity for future teachers to be health champions.” Education 551: Comprehensive School Health and Wellness, <http://www.ucalgary.ca/pubs/calendar/current/education>



## 16 INDICATOR Nutrition Education and Training Provided to Childcare Workers

### BENCHMARK

*Nutrition education and training is a requirement for childcare workers.*



### Q KEY FINDINGS

1. Alberta does not require childcare workers to participate in nutrition education training.
2. "Play, Participation, and Possibilities: An Early Learning and Child Care Curriculum Framework"<sup>209</sup> is currently being piloted at Grant MacEwan University, which includes 3-5 hours of nutrition-specific training. It is available free of charge for educators and guides them in teaching children about food and nutrition through:<sup>209</sup>
  - i. understanding the relationship between food and their bodies
  - ii. building confidence to try new foods
  - iii. making decisions about food consumption, preparation, serving, and clean-up

The framework is currently being explored, with the hopes of larger-scale implementation in the future. (C. Smey Carston, personal communication, Mar 22, 2017)

There is funding available for Child Development Supervisors working in licensed childcare programs, maximum of \$5000/Professional Learning Community)

<http://albertachildcareassociation.com/pd-funding/professionallelearning-community-application/>

### 📌 POLICIES/SYSTEMIC PROGRAMS

None

### ★ RECOMMENDATIONS

#### Policy

- Mandate nutrition-specific training as part of training and ongoing professional development of childcare workers in Alberta.





## Economic Environment

The economic environment refers to financial influences, such as manufacturing, distribution, and retailing, which primarily relate to cost of food.<sup>14</sup> 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,<sup>27</sup> financial support for health promotion programs,<sup>26</sup> and healthy food purchasing policies and practices through sponsorship<sup>23</sup> can affect food choice.<sup>14</sup>

### OVERALL GRADE



CATEGORY	GRADE
Financial incentives for consumers	C
Financial incentives for industry	F
Government assistance programs	D

# 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	GRADE
<i>Lower prices for healthy foods.</i>	<i>A</i>
<i>Higher prices for unhealthy foods.</i>	<i>F</i>
<i>Affordable prices for healthy foods in rural, remote, or northern areas.</i>	<i>D</i>

## WHAT RESEARCH SUGGESTS

Food prices are important determinants of food choices.<sup>210</sup> Differences in the prices of healthy and less healthy foods and diets can contribute to obesity and chronic disease.<sup>211</sup> A recent WHO report highlights a growing body of research on pricing policies and cites food taxes and subsidies as an effective and economical intervention to promote healthier food purchases and consumption.<sup>212</sup>

### Food Subsidies

There is some evidence that food subsidies may be more effective than taxation.<sup>213</sup> One study found that a 10% price decrease in healthy foods resulted in 12% increased consumption, whereas a 10% price increase in unhealthy foods resulted in 6% decreased consumption.<sup>214</sup> Thus, subsidizing healthier foods is an effective means of modifying eating behaviours.<sup>215,216</sup> Coupons, vouchers, cash rebates, and price reductions are examples of financial incentives found to be effective in increasing the purchase and consumption of healthy foods.<sup>217,218</sup> A recent systematic review and meta-analysis found that subsidies increased fruit and vegetable intake by 14% and other healthful foods by 16%.<sup>214</sup> Similarly, a 20% reduction in the price of produce was found to be associated with a 15% increase in vegetable purchases and a 35% increase in fruit purchases per household.<sup>219</sup>

These findings align with earlier research showing a 10% reduction in the price of fruit and vegetables was associated with a 5-7% increase in their consumption.<sup>220</sup> Lower prices for fruit and vegetables also favourably affect body weights, particularly among low-income families<sup>220</sup> and remote Aboriginal communities.<sup>221</sup> Combination discounting of fruits and vegetables, and diet drinks and water have been shown to have the largest reduction in calories per person in remote Aboriginal communities.<sup>221</sup>

### Food Taxes

Financial disincentives for consumers (taxing less healthy foods and beverages) is a public policy strategy that could improve the diets of Canadians.<sup>222</sup> The WHO Report of the Commission on Ending Childhood Obesity recommended taxation on sugar-sweetened beverages as a feasible strategy to reduce consumption.<sup>3</sup> A 10% increase in the price of sugar-sweetened beverages (e.g. pop, fruit punch, energy drinks) is estimated to reduce intake by 13%,<sup>223</sup> but taxes causing a price increase of < 5% are likely insufficient to impact consumption rates.<sup>223</sup>



A 2011 Canadian consensus conference around policy levers to address environmental determinants of obesity recommended instituting a \$0.05/100mL excise tax on all sugar-sweetened beverages sold, with at least half of the revenues generated dedicated to health promotion initiatives.<sup>225</sup> Cumulative evidence suggests a subsidy and/or tax of 10-15% would maximize success and impact on population dietary behaviours, preferably with both economical interventions used in tandem.<sup>226</sup> Both France and Mexico have imposed a sugar-sweetened beverage tax and have found a decrease in consumption. In Mexico, consumers replaced sugar-sweetened beverages primarily with bottled water.<sup>223</sup> Researchers predict that taxation of carbonated and fruit-based beverages is feasible in some provinces and territories.<sup>227</sup>

Experimental studies have shown that higher sugar-sweetened beverage 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.<sup>227,228</sup> 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.<sup>227</sup> 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.<sup>227</sup>

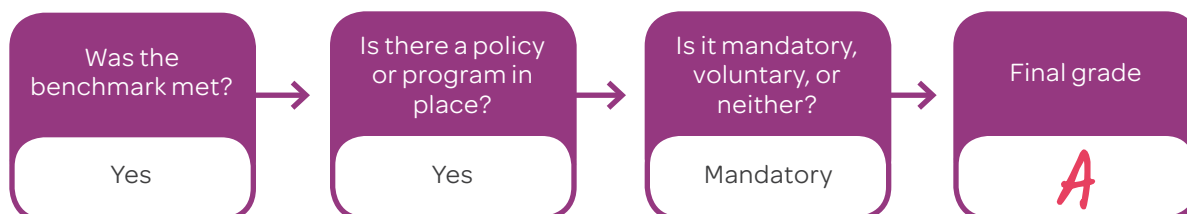




## 17 INDICATOR

**Lower Prices for Healthy Foods****BENCHMARK**

*Basic groceries\* are exempt from point-of-sale taxes.*

**Q KEY FINDINGS**

The Government of Canada's Excise Tax Act excludes basic groceries such as "fresh, frozen, canned and vacuum sealed fruits and vegetables, breakfast cereals, most milk products, fresh meat, poultry and fish, eggs and coffee beans."<sup>229</sup> The Excise Tax Act provides information on foods subject to and exempt from point-of-sale taxes (Table 8).<sup>230</sup>

**Table 8. Overview of Canada's Excise Tax Act<sup>230</sup>**

Food Tax Category	Zero-Rated Foods	Taxable Foodstuffs
Examples of foods	Bread, milk, and vegetables	Carbonated beverages, candies and confectionery, and snack foods
% Tax	0% GST	5% GST or 13% HST

At this time, Alberta is not considering tax credits or incentives as a nutrition policy.<sup>231</sup>

**↑ POLICIES/SYSTEMIC PROGRAMS**

The Government of Canada's Excise Tax Act is a mandatory policy.

**★ RECOMMENDATIONS****Practice**

- Continue to exclude basic groceries from point-of-sale taxes.

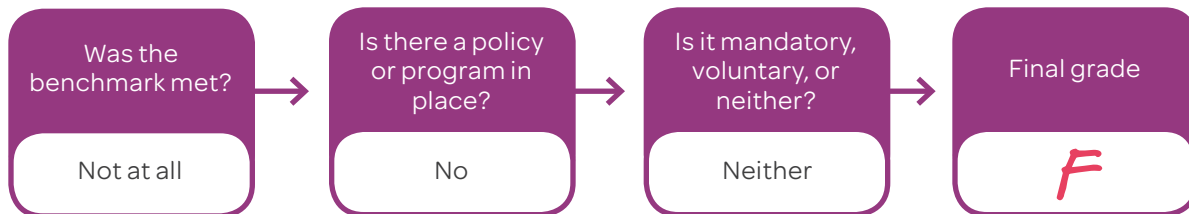
\*Basic groceries include "fresh, frozen, canned and vacuum sealed fruits and vegetables, breakfast cereals, most milk products, fresh meat, poultry and fish, eggs and coffee beans"<sup>229</sup>.

18

## INDICATOR

**Higher Prices for Unhealthy Foods****BENCHMARK**

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

**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.<sup>231</sup> 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.<sup>229</sup> Additionally, prepared restaurant foods are taxed at 5%, and healthy food choices are not exempt from this tax.<sup>232</sup>
2. Public health researchers, practitioners, advocates, and decision makers are increasingly recognizing the impact of food environments on diet and health, including factors such as the availability, pricing, and marketing of foods and beverages.<sup>225</sup> Sixty percent of Alberta policy influencers support taxing soft drinks and energy drinks.<sup>225-223</sup>

**↑ POLICIES/SYSTEMIC PROGRAMS**

Currently, no formal policies exist in Alberta to promote healthy eating using tax credits and incentives. Alberta's 2017-2020 Fiscal Plan articulates that there will be no new tax increases.<sup>234</sup>

**★ 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.

**→ 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.<sup>235</sup>

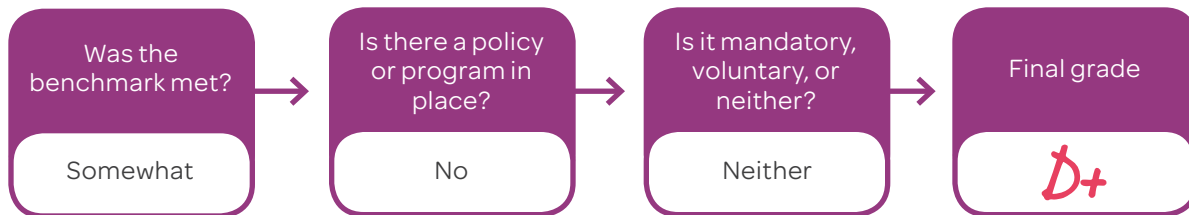
The Hungarian "Public Health Product Tax" adopted in 2011 and Mexican "Special Tax on Production and Services" adopted in 2014 tax energy-dense products, including sugar-sweetened beverages.<sup>3</sup> Both of these taxes are levied on the manufacturer or importer, but in the Canadian context would likely have to be imposed at the federal level.<sup>227</sup>

19

## INDICATOR

**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.*

**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.<sup>236</sup> In Northern Canada, feeding a family costs twice as much as it does further south.<sup>237</sup> 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.<sup>238</sup> Considering the most recently available rate of household food insecurity is 16%,<sup>239</sup> 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<sup>240</sup> with the aim of bringing healthy perishable food to isolated Northern communities.<sup>241</sup> 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).<sup>240</sup>

Fort Chipewyan is the only Alberta community currently eligible for the Nutrition North Canada Program. To be eligible for NNC, a community must:<sup>242</sup>

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.<sup>236</sup> Although NNC provides a transportation subsidy, it will not lower costs to make food affordable in the North.<sup>237,243</sup> Specifically in northern First Nations communities, food prices are still higher than in non-Indigenous communities who live in nearby northern cities and towns.<sup>237</sup>

### → ON THE HORIZON

*As part of its commitment to improving NNC, the Government of Canada is currently consulting with community members and other stakeholders on how the program can be more "transparent, cost-effective, and culturally appropriate."<sup>244</sup>*

*Beginning in the 2016-17 fiscal year, the Government of Canada proposed allocating \$64.5million over five years to support the provision of nutritious food and culturally appropriate nutrition education initiatives in northern isolated communities,<sup>245</sup> as well as \$13.8million per year to expand Nutrition North Canada to support all isolated northern communities.<sup>246</sup>*

- 3 With \$1.5million from the Alberta Government business investment fund, the Blood Tribe has built a multi-million dollar grocery store on-reserve. The 11,000 square foot store in Standoff aims to provide affordable, fresh, healthy food to on-reserve residents who currently have no alternative to convenience store junk food. Since it opened in September 2016, the Kainai Marketplace has created employment opportunities, improved access to healthier foods, and renewed pride in the community.<sup>247</sup>
- 4 At present, prices continue to rise at the only grocery store in Fort Chipewyan. A news article published in December 2016 noted that the price of a 10kg bag of flour had reached a high of \$32<sup>248</sup>. In response to the high prices, the Athabasca Chipewyan First Nation has plans to open another grocery store. Their primary goal is to provide affordable, healthy food for the people of Fort Chipewyan<sup>249</sup>.

## ↑ POLICIES/SYSTEMIC PROGRAMS

None

## ★ RECOMMENDATIONS

### Practice

- Create provincial initiatives to increase the availability and accessibility of nutritious foods in remote and northern areas.
- Expand the NNC 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.

### → 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. Projects include support for horticulture activities, greenhouse operations, fishing, and community scale poultry operations. 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>).*

# Financial Incentives for Industry

Policies and actions that encourage corporations to produce and sell healthy foods.

INDICATOR	GRADE
<i>Incentives exist for industry production and sales of healthy foods.</i>	<i>F</i>

## WHAT RESEARCH SUGGESTS

Incentives and disincentives can be offered to the food industry to increase the number of healthy foods and beverages available in the marketplace.<sup>250</sup> Food retailers have been highlighted as an important target for policies and actions, as they influence the procurement, stocking, and affordability of healthy foods in retail outlets.<sup>251</sup>

The purpose of corporations is to maximize profits, and industry is legally bound to attempt to maximize value for its shareholders. Government subsidies could be used to reduce the costs associated with manufacturing, procuring, distributing, and retailing healthy foods.<sup>251</sup> This would provide a market incentive that would allow industry to remain profitable while advancing public health interests. These subsidies could be offered in the form of reduced tax rates, tax rebates, and loans or grants. Some evidence suggests that government agricultural subsidies have contributed to the overproduction of commodities that are the major ingredients in highly processed, energy-dense, nutrient-poor foods.<sup>252</sup> One study conducted in the United States estimated that more than 50% of individual energy intake was derived from federally subsidized commodities, highlighting the importance of aligning agricultural policies and government subsidies with nutrition recommendations.<sup>253</sup> Local production of healthy foods such as produce may be encouraged by ensuring farmers who grow fruits and vegetables have equitable access to subsidies and other forms of financial support such as agricultural loans.<sup>254</sup>

The NOURISHING Framework, created by the World Cancer Research Fund International, highlights healthy retail food environment incentives as a policy area on which to focus.<sup>167</sup> This policy strategy is associated with improvements to healthy diets and may help reduce obesity and other non-communicable diseases. The Framework also acts to monitor policy actions from around the world. The Healthy Food Financing Initiative (HFFI), formally established by the United States Congress in 2014, is one example of policy action in this area. Initiated in 2011, the HFFI was piloted over three years and distributed over \$140 million in grant funding to states to provide financial and other forms of assistance that would draw healthier retail outlets to under-served communities. At the time of writing, 23 U.S. states are cited as having implemented financing initiatives. City-level initiatives, such as the Food Retail Expansion to Support Health program in New York City include financial incentives such as tax exemptions and reductions to promote the sale of healthy fresh foods in neighbourhood grocery stores where they are often less available.<sup>167</sup>

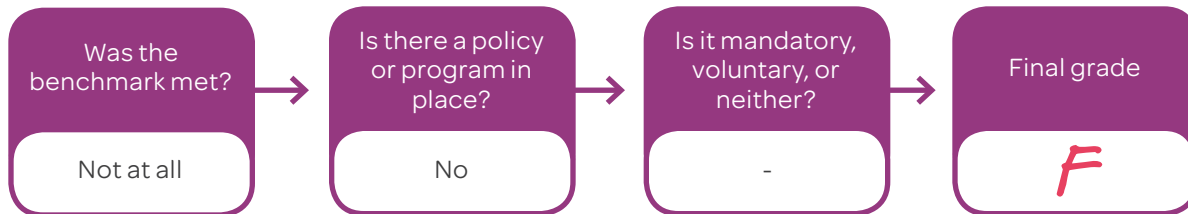


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## INDICATOR

**Incentives Exist for Industry Production and Sales of Healthy Foods****BENCHMARK**

*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).*

**Q KEY FINDINGS**

At this time, there is no evidence to suggest that corporate revenues earned via sales of healthy foods are taxed at a lower rate, nor that corporate revenues earned via sales of unhealthy foods are taxed at a higher rate in Alberta.

**📌 POLICIES/SYSTEMIC PROGRAMS**

None

**★ RECOMMENDATIONS****Policy**

- Provide incentives via differential taxation of revenues from healthy food sales and unhealthy food sales.

**➔ POLICY ROLE MODELS**

*In Fiji, excise duties have been removed on imported fruits and legumes to promote fruit and vegetable consumption.<sup>227</sup>*

*In 2013, Tonga lowered import duties from 20% to 5% for imported fresh, tinned, or frozen fish to increase affordability and promote healthier diets.<sup>227</sup>*

# Government Assistance Programs

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

INDICATOR	GRADE
<i>Reduce household food insecurity</i>	<i>INC</i>
<i>Reduce households with children who rely on charity for food.</i>	<i>F</i>
<i>Nutritious food basket is affordable.</i>	<i>F</i>
<i>Subsidized fruit and vegetable subscription program in schools.</i>	<i>C+</i>

## WHAT RESEARCH SUGGESTS

Food insecurity is an important public health issue in Canada, especially among Indigenous people. It is estimated that 29% of Indigenous adults in Canada live in food-insecure households,<sup>255</sup> compared to 8% of non-Indigenous Canadian adults.<sup>256</sup> Households with children consistently report even higher rates of food insecurity among both Indigenous and non-Indigenous households.<sup>236,257</sup> In 2014, 16% of children in Alberta lived in food-insecure households.<sup>239</sup> Moreover, 47% of on-reserve Indigenous households experience either moderate or severe food insecurity.<sup>258</sup> If marginally food-insecure households are included, this number rises to 60%, a value nearly six times the rate of the general public in Alberta.<sup>258</sup>

Most households that experience food insecurity cannot spend adequate money on healthy foods because a substantial portion of their budget is assigned to housing and utility costs.<sup>257</sup> Nearly 80% of Albertan households experiencing food insecurity rely on employment earnings as their primary source of income but still cannot afford enough food for each person in their home.<sup>259</sup> One study conducted in Nova Scotia suggests a nutritious diet based on the National Nutritious Food Basket remains unaffordable for individuals from low-income households and for individuals from households with children, even when a substantial increase in minimum wages is taken into account.<sup>260</sup> Approximately 110,000 Alberta households compromise food quality, eat small portions, skip meals, or go an entire day without food.<sup>259</sup>

As household food insecurity increases in severity, food prices, not nutritional quality, often dictate consumer choice.<sup>257</sup> As a result, food insecurity in childhood has been associated with a greater risk of obesity, a relationship that may be explained by the selection of cheaper foods that are high in calories and low in nutrients.<sup>261</sup> In Canada, food mirages exist whereby nutritious foods are available but are not affordable.<sup>262</sup> Remedying these food mirages cannot be done by intervening in the food environment; instead, economic solutions, such as increasing the minimum wage to a living wage for households to afford food, are required.<sup>262,263</sup> Studies demonstrate that government nutrition assistance programs, such as those that reimburse food vendors for increasing the sale and the consumption of healthy foods/ beverages and reducing the sale and consumption of unhealthy choices among qualifying lower-income individuals and families,<sup>19</sup> can help to prevent childhood obesity.<sup>28</sup>

A recent 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<sup>264</sup>. Emerging evidence suggests that the provision of free or subsidized fruit and vegetables in schools can increase their intake.<sup>28</sup> Subsidized programs that provide free fruit and vegetables are more effective than paid programs,<sup>265</sup> with programs in the United Kingdom, Netherlands, United States, Denmark, New Zealand, Greece, and Norway all having been effective in increasing children's fruit and vegetable intake.<sup>266-269</sup> Food-centered responses to food insecurity such as food banks, free meal services, and community and school food programs provide limited impact on household food insecurity because they perpetuate health inequities, generate no long-term reprieve and are often not a viable option until a household faces severe food insecurity.<sup>259</sup>

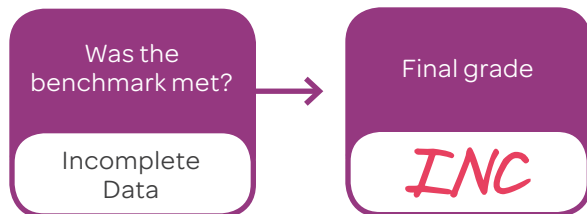


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## INDICATOR

**Reduce Household Food Insecurity****BENCHMARK**

*Reduce the proportion of children living in food insecure households by 15% over three years.*

**Q KEY FINDINGS**

1. Household food insecurity in Canada, defined as inadequate or insecure access to food because of financial constraints, is captured through the Household Food Security Survey Module (HFSSM) in the Canadian Community Health Survey (CCHS).<sup>239</sup> The Government of Alberta has demonstrated commitment to monitoring the prevalence of household food insecurity by including the HFSSM every year it is offered.<sup>270</sup> Nevertheless, the true prevalence of food insecurity is likely underestimated as the survey does not include certain segments of the population, most notably on-reserve Indigenous peoples.<sup>239</sup> To our knowledge the most recent wave of CCHS data for 2016 has been released, but has not been reported on for household insecurity in any reports to date. We will report on the next cycle of data when it is released in 2018.
2. The First Nations Food, Nutrition and Environment Study looked at the diets and contaminants of the traditional food of on-reserve First Nations populations.<sup>258</sup> The HFSSM was used to measure the prevalence of food insecurity, and the 2013 Alberta data showed that 47% of on-reserve households were food insecure, of which 60% reported marginal food insecurity, 34% reported moderate food insecurity and 13% as severely food insecure.<sup>258</sup> Of the households that completed the HFSSM, 68% contained children, and those households experienced greater food insecurity than those without children.<sup>258</sup> 46% of households with children relied on less expensive foods to feed their children, and 29% said they could not afford to feed their children balanced meals.<sup>258</sup> Factors contributing to the high levels of food insecurity in this population included high cost of market food, high cost of living, and limited access to healthy market and traditional foods.<sup>271</sup> There are hopes that this report will be done again in 2019.

## 21 ↑ POLICIES/SYSTEMIC PROGRAMS

### Mandatory Programs

Government-administered programs such as the Canada Child Benefit initiative, the Alberta Family Employment Tax Credit, and the Alberta Child Benefit help with the overall costs of raising children. Even with these programs, food insecurity remains an issue.

TABLE 9. Income Support Programs Currently Available for Households with Children Both Provincially and Nationally

Type of Systemic Program	Description
Alberta Child Benefit <sup>272</sup>	Estimated to provide \$174million in annual benefits to families across the province. Families with two children under 18 whose family net income is less than \$41,746 per year are eligible for up to \$1,671.
Alberta Family Employment Tax Credit <sup>273</sup>	Estimated to provide \$147million in annual benefits to families across the province. Families with two children who earn a net income of less than \$78,676 are eligible for up to \$1,476.
Alberta Child Care Subsidy <sup>274</sup>	Provides financial assistance to eligible lower-income families using licensed day care centres, group family childcare, out-of-school care centres, preschools, and approved early childhood development programs for children under 12 years.
Direct Rent Supplement <sup>275</sup>	Limits rent of eligible lower-income families to 30% of their annual income.
Canada Child Benefit <sup>276</sup>	Provides tax-free monthly payments to eligible families to help with the cost of raising children under 18.
GST/HST Credit <sup>277</sup>	Provides tax-free quarterly payments to eligible individuals and families with lower-incomes to offset GST or HST payments.

## ★ RECOMMENDATIONS

### Research

- Mandated surveillance of household food insecurity and quicker release of data is urgently needed.

### Policy

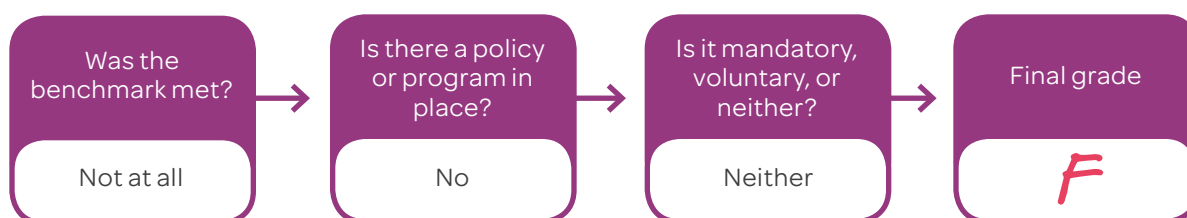
- Develop income-based (not food-based) programs and policies to tackle childhood food insecurity in Alberta.



## 22 INDICATOR

**Reduce Households with Children Who Rely on Charity for Food****BENCHMARK**

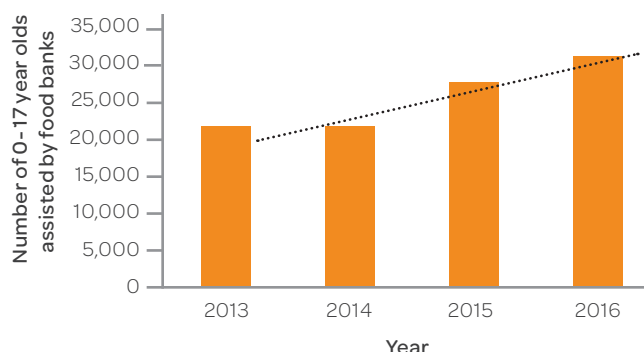
*Reduce the proportion of households with children that access food banks by 15% over three years.*

**Q KEY FINDINGS**

Food bank usage greatly underestimates the prevalence of household food insecurity, Kirkpatrick (2009) found one-third or less of food insecure households in their sample accessed a food bank<sup>378</sup>. While food bank usage data is not an accurate reflection of household food insecurity, it does show numbers reliant on charity for food.

Based on the 2016 HungerCount report describing food bank use, the number of children and youth between 0-17 years of age assisted by food banks increased by 45.6% between 2013 and 2016 in Alberta (Figure 15).<sup>243</sup> This past year, 80% of food banks saw an increase in use.<sup>243</sup> In particular, Edmonton food banks saw a 31% increase in food bank usage.<sup>243</sup> 39.4% of those using food banks in Alberta were children.<sup>243</sup>

**FIGURE 15. Food Bank Use by Children and Adolescents Over Time**

**📌 POLICIES/SYSTEMIC PROGRAMS**

Charitable food-relief programs may provide periodic, episodic support to children who live in food insecure households; nevertheless, food bank usage does not increase household finances. See Table 9 in Indicator 21 for income support programs currently available for households with children both provincially and nationally.

**★ RECOMMENDATIONS****Policy**

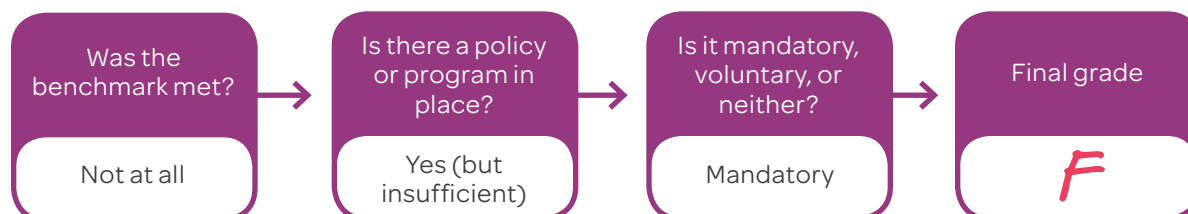
- Increase social assistance rates and minimum wage to ensure income is adequate for healthy foods to be affordable.
- Provide low-income households access to benefits currently only available to those on social assistance (e.g. child care subsidies, affordable housing supplements).<sup>243</sup>

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## INDICATOR

**Nutritious Food Basket is Affordable****BENCHMARK**

*Social assistance rate and minimum wage provide sufficient funds to purchase the contents of a Nutritious Food Basket.*

**Q KEY FINDINGS**

The Alberta Nutritious Food Basket estimates the cost of healthy eating for a number of age and gender groups based on current national dietary guidelines (e.g. Canada's Food Guide).<sup>70,279</sup> Individual communities across Alberta have a Nutritious Food Basket costed by Nutrition Services within AHS, with the support of the Ministry of Agriculture and Rural Development.<sup>280</sup> It is most appropriately used to monitor the cost and affordability of a nutritious diet for various population groups, particularly those known through survey prevalence data to be at increased risk for household food insecurity. According to the Cost of Healthy Eating in Alberta Report 2015<sup>263</sup>, the average monthly cost of a Nutritious Food Basket for a family of four, based on prices collected during a four-day time frame in the third week of June, 2015, was \$1,089.54.

- ➔ The Affordability of Healthy Eating in Alberta<sup>259,281</sup> report from Alberta Health Services identified a number of Albertan household profiles, such as single income earner, income support, and minimum wage, that lacked sufficient income to afford a Nutritious Food Basket. This study accounted for other basic needs such as housing and transportation.<sup>281</sup> Table 10 below shows two profiles based on household food insecurity prevalence data for Alberta representative of households with children. The family of four with two parents and two children represents a low-income, single-earner household, and the lone mother family with one child represents a household with children whose main source of income is Income Support.

**TABLE 10. Inability To Purchase A Nutritious Food Basket In Two Family Profiles**

	Single Income \$24/hour: Family of four, Grande Prairie	Income Support: Single parent with one child, Edmonton
Monthly Income	\$3,581.17	\$1,467.25
Less Non-Food Household Expenses	-\$3,604.16	-\$1,579.66
\$ Remaining for Food	-\$22.99	-\$112.41
Less Monthly Food Costs (Nutritious Food Basket per # of people/area)	-\$1,084.82	-\$477.16
Balance	-\$1,107.81	-\$589.57

23

In both representative profiles, the family faces a significant income deficit each month, as the money necessary to purchase a Nutritious Food Basket would be consumed by other basic living costs such as shelter, childcare, and transportation. Since food costs are usually the malleable part of household expenses, the quality and quantity of food brought into the home are negatively impacted.<sup>259</sup> Considering that with an income of \$24/hour, there is insufficient income to purchase the contents of a Nutritious Food Basket, a minimum wage income with government benefits would also be insufficient to purchase the contents of a Nutritious Food Basket.

## 📌 POLICIES/SYSTEMIC PROGRAMS

### Mandatory Policies Programs

Nutritious Food Basket – Ministry of Agriculture and Rural Development

At the national level, the Canada Child Benefit program increased benefits for low-income households with children.

## ★ RECOMMENDATIONS

### Research

- Measure the cost of a Nutritious Food Basket in remote Alberta communities to determine affordability.

### Policy

- Raise social assistance rates and minimum wage\* to increase household income to enable purchase of a Nutritious Food Basket.

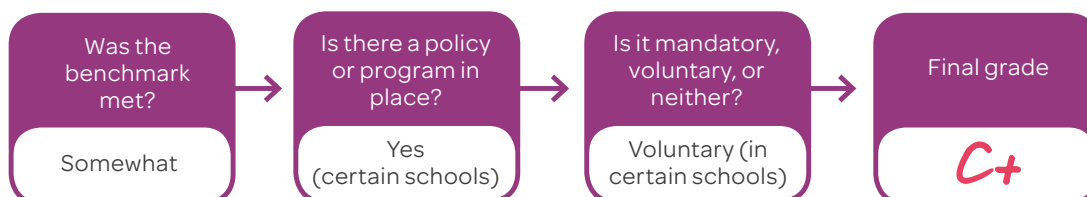
\* Though the minimum wage is expected to rise to \$15/hour by 2018, the living wage (i.e. the actual amount that earners need to make to be able to live in a specific community, whereas minimum wage is the lowest legal amount employers can compensate employees) was \$16.69 in Edmonton in 2016 for a family of four with full-time dual income.<sup>282</sup>



## 24 INDICATOR

**Subsidized Fruit and Vegetable Subscription Program In Schools****BENCHMARK**

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

**Q KEY FINDINGS**

1. Twenty-one percent of districts in Alberta that completed the 2017 Reporting and Reflection Tool for AHSCWF reported that they offered a fruit and vegetable subscription program to students. However, the frequency of the program was not included in the reporting, so it is uncertain whether it was on a daily basis.
2. In November 2016, Alberta Education invested \$3.5million in a nutrition pilot program for 14 school boards across Alberta. Participating schools had to show how their program adhered to the ANGCY. Over 5000 students in 33 schools have been receiving a nutritious meal or snack each day.<sup>66</sup> Schools were chosen based on students with the greatest need. In Alberta's 2017/18 Budget, \$10million was assigned for the remaining 46 divisions to receive funding.<sup>66</sup> The original participating 14 school boards will receive \$250,000 annually, and the remainder of the boards will receive \$141,000 annually.<sup>66</sup> With a total of 703,214 students in Grades K-12,<sup>283</sup> these funds are insufficient in providing nutritious meals to all students.
3. At Ermineskin School in Maskwacis, students are provided breakfast, lunch, and snacks for less than one dollar/day. Working with local grocers and producers, as well as involving students in food preparation, keeps costs low and sustainable.<sup>284</sup>
4. A universal program fruit and vegetable subscription program does not exist in Alberta; however, there are many programs and initiatives to ensure that food is available for students if/when needed. Looking at the table below, many of these initiatives are informal or are supported by community/ corporate donations, and do not have the security of continued funding year to year.<sup>285</sup>

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TABLE 11. Government-Funded Programs (or Partially Supported by Government).

Organization	Description	Reach
<b>Alberta School Nutrition Program</b> <sup>*65</sup>	Students from participating schools Grades K to 6 receive a nutritious meal or snack each day. The program is aimed at students with the greatest needs.	Serves over 5000 students in 33 schools.
<b>Northland School Division Hot Lunch and Morning Nutrition Program</b> <sup>286</sup>	All children received a hot lunch and morning snack at no charge.	Serves the Northland School Division, which includes 23 schools.
<b>APPLE schools</b> <sup>287</sup> <a href="#">[View Here]</a>	This CSH program includes the provision of healthy meals or snacks.	Serves 51 schools in high-needs locations in Alberta. In the 2015-16 school year, there were 6.5 full-time staff to support the work in these 51 schools. It will expand to 10 more schools in Northern Alberta.
<b>E4C</b> <sup>* 388</sup> <a href="#">[View Here]</a>	This snack program provides a healthy mid-morning snack to all students.	Serves 15 public and 9 Catholic elementary schools in high needs locations in Alberta.
	The lunch program provides a healthy lunch, including at least one serving of fruit or vegetables to all students whose parents have subscribed.	Serves 10 public and Catholic schools in high-needs locations in Alberta.
<b>Student-run breakfast and lunch program in Ermineskin School, Maskwacis</b> <sup>284</sup>	Students are provided breakfast, lunch, and snacks.	Serves K-12 students at Ermineskin School in Maskwacis.

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

TABLE 12. Privately Funded Programs

Organization	Description	Reach
<b>Brown Bagging for Calgary's Kids</b> <sup>289</sup> <a href="#">[View Here]</a>	Free, healthy lunches are delivered to students identified by their teacher as having limited food to eat for the day.	Serves 3200 kids each day.
<b>Food for Thought</b> <sup>*290</sup>	Healthy meals and snacks are provided to children in participating schools.	Serves 500 students in 14 schools in high-needs locations in Edmonton.
<b>Fuel for School</b> <sup>291</sup> <a href="#">[View Here]</a>	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.
<b>Meals on Wheels, Calgary</b> <sup>292</sup>	Food supports are offered to schools.	Serves 15 schools in Calgary
<b>Local school lunch/breakfast programs in school divisions</b>	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. <sup>293</sup>
		e.g. Whitecourt Central School provides approximately 145 servings of breakfast per day for free. <sup>294</sup>
		e.g. Community Lunch Box Program in Northern Gateway and Living Waters School Divisions offers breakfast, lunch, and snacks to all students. <sup>295</sup>

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



## 24 ↑ POLICIES/SYSTEMIC 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 students in Grades K-6 in at-risk schools (see page 70).*

#### → POLICY ROLE MODELS

*The BC School Fruit & Vegetable Nutritional Program (BCSFVNP) has grown from 10 schools in 2005 to 1464 K-12 public schools and K-12 First Nations schools in the 2015-2016 school year.<sup>296</sup>*

*Fresh fruit and vegetable snacks are provided every other week and served during class time, reaching 549,000 students.<sup>296</sup> Schools enrolled in BCSFVNP are also eligible for the pilot BCSFVNP+Milk program.<sup>297</sup> The BCSFVNP+Milk program is offered to Grades 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.<sup>296</sup>*







## Social Environment

The social environment refers to the attitudes, beliefs, and values of a community or society.<sup>14</sup> It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models,<sup>14</sup> 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).

### OVERALL GRADE

C

CATEGORY	GRADE
<i>Weight Bias</i>	D
<i>Corporate Social Responsibility</i>	INC
<i>Breastfeeding Support</i>	B



# Weight Bias

Policies and actions that ensure all children are treated equally regardless of weight status in schools and childcare settings.

INDICATOR	GRADE
<i>Weight bias is avoided.</i>	<i>D</i>

## WHAT RESEARCH SUGGESTS

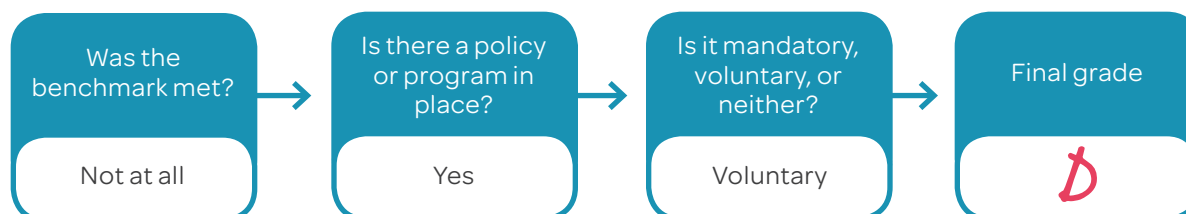
Weight bias is a broad concept that encompasses stigma, prejudice, stereotyping, and discrimination directed towards individuals because of their weight.<sup>298</sup> Around the world, people with obesity are typically viewed as being lazy, unmotivated, untidy, or lacking self-discipline.<sup>299</sup> There are many physical, mental, and social health consequences of weight bias. For example, “fat-shaming” can lead to unhealthy coping strategies, such as binge eating and avoidance of physical activity, which can further weight gain.<sup>301</sup> Additionally, experiencing weight bias has been associated with an increased risk of poor body image, low self-esteem, depression, anxiety, loneliness, and eating disorders.<sup>301,302</sup> An area of growing interest, recent evidence suggests that experiencing weight bias can also increase cardiometabolic risk factors (e.g. high blood pressure, high blood sugars).<sup>303</sup> The adverse effects of weight bias become particularly problematic when weight bias is internalized, and individuals are made to feel personally responsible for their excess weight.<sup>302,304</sup>

Children as young as three years old have been shown to exhibit weight bias.<sup>305</sup> Ingrained in society, weight bias is evidenced in various environments encountered by children, including the media, healthcare settings, schools, and even the home.<sup>298</sup> Unfortunately, certain school-based obesity prevention efforts may unintentionally increase weight bias by framing obesity as a personal responsibility.<sup>299</sup> A cross-national survey (including Canada) indicated that although weight-related bullying is the most common form of bullying in schools,<sup>306</sup> it tends to be overlooked in school-based anti-bullying programs.<sup>306,307</sup>

Children with overweight and obesity often experience weight bias from their peers, educators, and parents.<sup>308</sup> Moreover, teachers have reported that students with obesity are a greater “burden” in the classroom,<sup>299</sup> and may perceive students with obesity as having poorer social reasoning, physical, and cooperation skills.<sup>309,310</sup> Of notable concern is the fact that weight bias can harm a child’s academic performance, which undoubtedly impacts post-secondary admissions, and therefore future employment status as well.<sup>311</sup> Encouragingly, parents and school staff have recently demonstrated a strong interest in weight bias reduction strategies,<sup>312,312</sup> and there has been a shift in focus toward wellness, rather than weight, in health promotion interventions.<sup>314</sup> Such support from parents and educators can catalyze change, both in the school environment and childcare settings, with respect to developing policies to reduce weight bias and thereby prevent its harmful effects.

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## INDICATOR

**Weight Bias is Avoided****BENCHMARK***Weight bias is explicitly addressed in schools and childcare.***Q KEY FINDINGS**

1. A review of Alberta school and childcare curricula indicated that weight bias is not explicitly addressed.<sup>315,316</sup> Instead, schools follow a comprehensive school health framework which broadly promotes healthy body image, wellness choices, healthy relationships, anti-bullying practices, and overall positive social environments. The K-9 Health and Life Skills and high school CALM programs allow teachers the flexibility to discuss topics related to weight bias, but it is not a required component of the curriculum.<sup>317</sup>
2. Effective June 1, 2015, amendments to the School Act outlined responsibilities for all partners in the education system, including students, parents, and school boards, to ensure welcoming, caring, respectful and safe learning environments. Several tools, such as the Bullying Prevention Toolkit ([bullyfreealberta.ca](http://bullyfreealberta.ca)), are available on the Alberta Education website (<https://education.alberta.ca/safe-and-caring-schools/safe-and-caring-schools/>) to establish such environments. However, none of these guidelines or resources specifically address weight bias, but rather speak to understanding and valuing diversity.

**📌 POLICIES/SYSTEMIC PROGRAMS**

None

TABLE 13: Voluntary Programs (Resources) to Address Weight Bias

Online Resources	Description
<b>National Eating Disorder Information Centre</b> <a href="http://nedic.ca">http://nedic.ca</a> <a href="http://beyondimages.ca">http://beyondimages.ca</a>	Provides program support and curriculum, such as 'Beyond Images,' a free self-esteem and body image curriculum for Grades 4-8 that addresses critical media literacy, digital citizenship, appearance-based bullying, and more (updated in 2016).
<b>Canadian Obesity Network (CON)</b> <a href="http://www.obesitynetwork.ca/weight-bias">http://www.obesitynetwork.ca/weight-bias</a> <a href="http://www.obesitynetwork.ca/images-bank">http://www.obesitynetwork.ca/images-bank</a>	Provides weight bias information for the public on their website and blog, such as the importance of using people-first language. CON also has an image gallery of positive, non-stigmatizing images of individuals living with obesity, which can be used free of charge by researchers, educators, and others.



## ★ RECOMMENDATIONS

### Research

- Explore the impact of programs aimed at reducing weight bias within school and childcare communities.
- Involve people with obesity in researching and developing weight bias reduction messages.<sup>318</sup>

### Practice

- Incorporate weight bias education into pre-service teacher and childcare worker education programs.
- Integrate weight bias reduction strategies into existing programs related to nutrition, physical activity, and bullying in schools and childcare.<sup>318</sup>
- Promote body size diversity and body inclusivity.<sup>318</sup>

### Policy

- Incorporate weight bias into the *School Act* and provincial childcare policies, ensuring that weight bias is addressed in all anti-bullying policies in Alberta.

#### ➔ ON THE HORIZON

Starting Winter 2018, University of Calgary Education students will be required to take a course on Comprehensive School Health, which addresses weight bias under the pillar of developing positive social environments. Education 551: Comprehensive School Health and Wellness, <http://www.ucalgary.ca/pubs/calendar/current/education-educ.html#42155>

#### ➔ POLICY ROLE MODELS

In Quebec, there are many voluntary initiatives led by Équilibre, a non-profit organization which aims to reduce body image issues in the population. Some examples include:

- “Healthy Mind, Healthy Body” program:<sup>319</sup> This program targets elementary and high school students and staff, taking a multi-level approach to creating environments that reduce weight bias. Training and support are offered to adults who work with children to help them become good role models in promoting healthy lifestyles and a positive body image.
- “Behind the Mirror” campaign:<sup>320</sup> This campaign strives to educate boys and girls that “beauty” as seen in the media does not represent reality, and that beauty comes in all sizes and forms.
- “Le poids? Sans commentaire!” (“Weight? No comment!”) week-long campaign:<sup>321</sup> Held annually in November, this campaign was inspired by “Fat Talk Free Week” and aims to raise awareness of weight bias.

# Corporate Social Responsibility

Policies and actions that encourage industry to produce, sell, and market healthy foods.

INDICATOR	GRADE
<i>Corporations Have Strong Nutrition-Related Commitments And Actions.</i>	<i>INC</i>

## WHAT RESEARCH SUGGESTS

The food industry is believed to be a major driver of the obesity and chronic disease epidemic through the production, sale, and promotion of unhealthy food and beverages.<sup>322-324</sup> The food industry infiltrates environments that impact children's eating behaviours, including schools, retailers, the home, and mass media (television and the internet).<sup>322</sup>

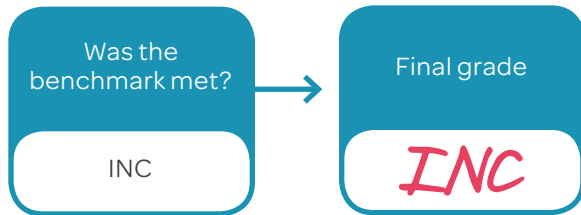
Given the level of control food and beverage corporations have over the food supply, it follows that private sector action can be harnessed to improve the quality of children's food environments and promote healthy eating.<sup>167,325,326</sup> The most effective public-private agreements are those with significant incentives and sanctions to industry for failure to meet targets.<sup>327</sup> Voluntary, industry-led initiatives have produced limited progress.<sup>174,175,328,329</sup> This may be because companies involved in self-regulation tend to strongly influence the development of regulatory standards, making it probable that standards will be set low.<sup>329</sup> Improvement with respect to the production, sales, and marketing of healthier foods may only be perceived as necessary in the face of strict regulations to ensure that companies comply, or when pressure is applied from civil society.<sup>330</sup> As a result, there has been a call for more robust accountability and monitoring systems to support government leadership; limit the private sector influence where conflicts of interest exist; support the public in demanding healthier food environments; and monitor progress in achieving obesity action objectives.<sup>322,331,332,29</sup>

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## INDICATOR

**Corporations Have Strong Nutrition-Related Commitments and Actions****BENCHMARK**

*Most corporations in the Access to Nutrition Index with Canadian operations achieved a score of  $\geq 5.0$  out of 10.0.*

**Q KEY FINDINGS**

As this data is incomplete, we are awaiting the next Access to Nutrition Index to report on.

**📌 POLICIES/SYSTEMIC PROGRAMS**

Voluntary

**★ RECOMMENDATIONS****Practice**

- Provide incentives to industry to increase commitment and actions related to delivering healthy food choices and responsibility for influencing consumers' behaviour.

# Breastfeeding Support

Policies and actions to encourage breastfeeding in community settings.

INDICATOR	GRADE
<i>Breastfeeding is supported in public buildings.</i>	<i>B</i>
<i>Breastfeeding is supported in hospitals.</i>	<i>C</i>

## WHAT RESEARCH SUGGESTS

There are numerous benefits to breastfeeding infants, both in the short and long term.<sup>333</sup> These benefits include improved cognitive development and a reduced risk of chronic diseases such as diabetes and cardiovascular disease.<sup>333</sup> Two recent meta-analyses also suggest that breastfeeding may serve as a protective factor against obesity in children.<sup>334,335</sup> Acknowledged as an important public health intervention around the globe, WHO,<sup>336</sup> World Cancer Research Fund,<sup>337</sup> and national health bodies including the Canadian Pediatric Society,<sup>338,339</sup> Dietitians of Canada<sup>338,339</sup> and Health Canada,<sup>338,339</sup> all recommend exclusive breastfeeding for the first six months of life, and continued breastfeeding (with nutritionally adequate and safe complementary foods) up to two years or beyond. Exclusive breastfeeding refers to no food or drink, including water, except for breastmilk.<sup>337</sup> Nevertheless, Canadian breastfeeding rates have consistently fallen below these strong recommendations, and can vary widely across different cultures and communities, making improving breastfeeding rates a public health priority.<sup>340</sup>

Social and cultural attitudes influence the structural context for breastfeeding.<sup>341</sup> In 2011-12, the national exclusive breastfeeding rate at six months or more was 26%, and the breastfeeding initiation rate was 89%.<sup>342</sup> An Alberta Health Services literature review<sup>340</sup> found that a range of factors affect breastfeeding rates, including discomfort with breastfeeding in public and receiving conflicting information from health care providers.<sup>343-345</sup> Breastfeeding exclusivity and duration can be improved when health care providers are trained appropriately in addressing breastfeeding challenges and can offer sufficient support to mothers.<sup>346,347</sup>

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.<sup>348</sup> Evidence suggests the initiative has helped improve both breastfeeding initiation and duration.<sup>349,350</sup> Following the Ten Steps to Successful Breastfeeding is a requirement for being designated as a WHO Baby-Friendly Hospital.<sup>351</sup>

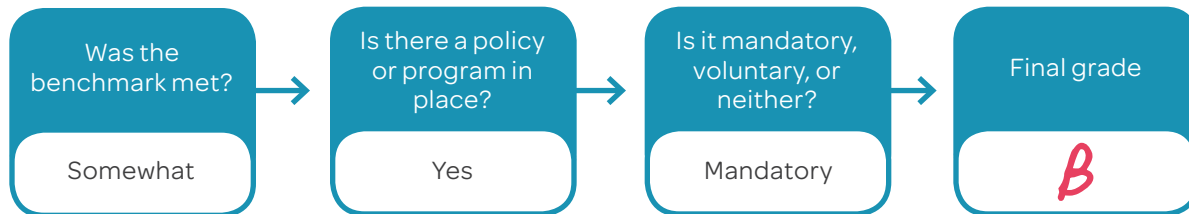
1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers to initiate breastfeeding within one half-hour of birth.
5. Show mothers how to breastfeed and 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 – that is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. 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.

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## INDICATOR

**Breastfeeding is Supported in Public Buildings****BENCHMARK**

*All public buildings are required to permit and promote breastfeeding.*

**Q KEY FINDINGS**

1. The Alberta Human Rights Act protects women from discrimination while breastfeeding in public places.<sup>352</sup> There is evidence that some municipalities have publicized that breastfeeding is permitted in public buildings. For example, the City of Edmonton website indicates, “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”.<sup>353</sup> Although breastfeeding is permitted, we were unable to identify evidence of public buildings in Alberta that actively promote breastfeeding.
2. 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.<sup>355</sup>

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

3. The Breastfeeding Action Committee of Edmonton recently 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.<sup>356</sup>





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## 📌 POLICIES/SYSTEMIC PROGRAMS

### Mandatory policy

Alberta Human Rights Act

## ★ RECOMMENDATIONS

### Research

- Understand ways to reduce stigma and barriers to breastfeeding in public places.

### Practice

- Create a culture where breastfeeding is normalized.

### Policy

- All public buildings have a mandate to promote and permit breastfeeding, so that women wanting to breastfeed can do so comfortably.

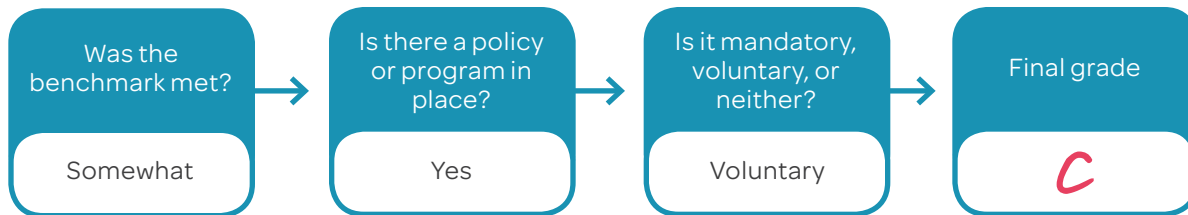


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## INDICATOR

**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.*

**Q KEY FINDINGS**

1. An AHS strategy is currently in development that aligns with many elements of the Baby-Friendly Initiative (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 (a tool kit is being developed for breastfeeding support groups)

Currently, two provincial staff education eLearning modules, which provide standardized breastfeeding education across AHS, are available to perinatal 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 Foundation's module has a section on informed feeding decisions to help staff support women who have challenges with breastfeeding. This content will be expanded on further in a provincial 20-hour breastfeeding course and will place a heavy emphasis on patient- and family-centred 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 be available for all healthcare professionals.

At this time, decisions about whether the modules are mandatory are made at the zone or program level. Although the modules are not mandated at the provincial level, they are integrated in the Well Child Clinics across the province and into the Pregnancy Pathways program for Alberta. The pathways help to standardize practices related to assessment, management, documentation, healthcare providers' skills, and education. They support continuity of care and promote consistent practices.

In addition, parent breastfeeding education is available in the Healthy Parents, Healthy Children (HPPHC) provincial resource (<http://www.healthyparentshealthychildren.ca>), both in print and online. The breastfeeding content is currently being updated, with revisions to include:

- Additional information regarding the resources available to support women
- Improved navigation and search functions (to make the breastfeeding content easier and more intuitive to find)
- Content edits to move towards BFI requirements (similar to the staff education)

(M. Devolin, P. Martz, A.M. McInnis, & S. Tyminski, personal communication, April 6 2017)

- At this time, only one hospital in Alberta (Grey Nuns) has achieved WHO Baby-Friendly designation<sup>357</sup>. 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<sup>358,359</sup>.

## **POLICIES/SYSTEMIC PROGRAMS**

TABLE 14. Examples of Voluntary Organizational Programs to Support and Monitor BFI in Alberta and Nationally

Organization	Description
<b>Breastfeeding Action Committee of Edmonton</b> <a href="#">[View Here]</a>	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”.
<b>Alberta Breastfeeding Committee</b> <a href="#">[View Here]</a>	<p>Focuses on engaging and adopting Baby-Friendly Initiatives in Alberta hospitals and public health centres, and supporting Baby-Friendly Initiatives in Alberta facilities.<sup>360</sup></p> <p>The Data Collection sub-committee aims to improve and standardize the collection of data related to breastfeeding in Alberta.</p>
<b>Breastfeeding Committee of Canada</b> <a href="#">[View Here]</a>	<p>A support body for any facility wishing to pursue BFI designation in Alberta.<sup>354,355</sup></p> <p>Monitors implementation of Baby-Friendly Initiatives in Canadian hospitals and health centres (except Quebec) by:</p> <ul style="list-style-type: none"> <li>• Coordinating BFI Assessments in Canada in collaboration with Provincial and Territorial BFI Committees</li> <li>• Tracking facilities in progress towards BFI designation.</li> <li>• Maintaining a database of designated facilities</li> <li>• Managing BFI Assessments (Pre-, External, and Re-Assessments).</li> </ul>
<b>Canadian Perinatal Surveillance System</b> <sup>361,362</sup>	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.
<b>Healthy Parents, Healthy Children (HPPHC)</b> <a href="#">[View Here]</a>	Parent breastfeeding education.

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## ★ 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.











## Political Environment

The political environment refers to a broader context, which can provide supportive infrastructure for policies and actions within micro-environments.<sup>18,26</sup>

### OVERALL GRADE

*B*

CATEGORY	GRADE
<i>Leadership &amp; Coordination</i>	<i>C</i>
<i>Funding</i>	<i>INC</i>
<i>Monitoring &amp; Evaluation</i>	<i>B</i>
<i>Capacity Building</i>	<i>A</i>

## Leadership & Coordination

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

INDICATOR	GRADE
<i>Healthy Living and Obesity Prevention Strategy/ Action Plan Exists and Includes Eating Behaviours and Body Weight Targets.</i>	<i>C</i>
<i>Health in All Policies.</i>	<i>D</i>

### WHAT RESEARCH SUGGESTS

Solutions to obesity cannot be achieved without the involvement and cooperation of all sectors.<sup>3,363</sup> National governments have the primary responsibility and authority to develop policies to create equitable, safe food environments to prevent obesity and chronic disease.<sup>119,363</sup> An analysis of 872 policy recommendations from 63 Canadian health policy documents published between 1986 and 2009 revealed that the most frequent policy recommendation was to increase the priority of research and programs to improve public health, including chronic disease prevention.<sup>364</sup> In order to create healthy food environments and promote nutritional health, the National Academy of Medicine (formerly the Institute of Medicine) states that there must be:

- Strong political support for the “the vision, planning, communication, implementation, and evaluation of policies and actions.”<sup>13</sup>
- Government structures that “ensure transparency and accountability, and encourage broad community participation and inclusion when formulating and implementing policies and actions.”<sup>13</sup>
- Coordination “across government departments, levels of government and other sectors (e.g. NGO, private sector, academia) such that policies and actions in food and nutrition are coherent, efficient and effective.”<sup>13</sup>

The WHO recommends a whole-of-government approach to preventing and treating childhood obesity.<sup>3</sup> Also known as Health-in-All-Policies (HiAP), this approach to public policies calls on all sectors to systematically take health into account, seek synergies, and avoid harmful health impacts.<sup>365</sup> WHO recognizes the HiAP approach as an integral part of good governance.<sup>366</sup> All European Union policies are required to follow the HiAP approach; however, it is noted that to be most effective, HiAP must be extended to national, regional, and local policies.<sup>367</sup> Finland has reportedly reduced the proportion of five-year-olds who are overweight or obese by integrating HiAP into its national policies.<sup>368</sup>

Health Impact Assessment (HIA) is considered an essential tool to support HiAP by providing a process to identify potential health impacts resulting from projects or policy initiatives.<sup>369</sup> HIA has not yet become an established practice in Canada.<sup>369</sup> 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.<sup>369</sup>

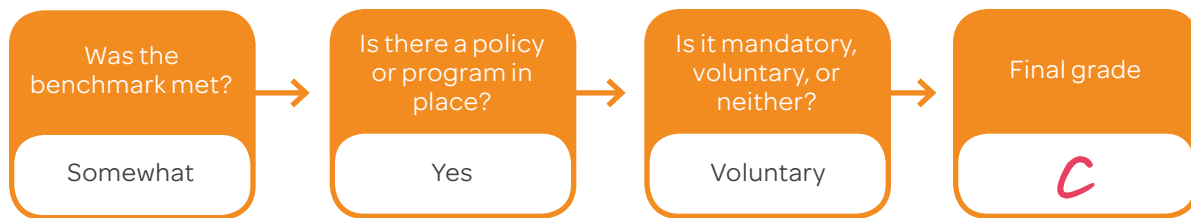
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## INDICATOR

## Healthy Living and Obesity Prevention Strategy/Action Plan Exists and Includes Eating Behaviours and Body Weight Targets

### BENCHMARK

*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.*



### Q KEY FINDINGS

At the provincial level, programs exist to support healthy living and obesity prevention in children and youth:

1. MEND (Mind, Exercise, Nutrition...Do it!) is a healthy weights strategy that focuses on healthy eating and physical activity, offered in 8 communities within five cities/towns in Alberta (Airdrie, Red Deer, Sherwood Park, Calgary, and Camrose) for children aged 2-13 years and their families.<sup>238</sup>
2. The Pan-Canadian Joint Consortium for School Health (JCSH) Comprehensive School Health is a partnership of 25 Ministries of Health and Education across Canada working to promote student health achievement through Community School Health approaches.<sup>67</sup> Alberta Healthy School Community Wellness Fund provides funding and support to projects to address healthy eating. There are a variety of organizations at the provincial level involved in supporting and coordinating Comprehensive School Health in Alberta:
  - An AHS staff member is assigned to all 61 school jurisdictions in the province. Health Promotion Coordinators and School Health Facilitators build healthy school communities using a Comprehensive School Health approach (whole school approach).
  - Ever Active Schools provide resources and support to improve physical education/activity and healthy eating.
  - APPLE Schools works with 63 schools in Alberta, offering a School Health Facilitator to work with the school to create yearly action plans
  - The Health and Physical Education Council provides regional workshops and support.
3. In addition, the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018<sup>370,371</sup> outlines six strategic priority areas (see Table 15). The April 2015-December 2016 Annual Highlights of this action plan reports that Healthy Children and Families advances Community School Health through a number of actions, including interventions and policies to improve healthy eating and active living.

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TABLE 15: Alberta's 2017-2020 Health Business Plan &amp; Alberta Health Services Healthy Children &amp; Families Strategic Action Plan 2015-2018

Organization	Description
Alberta's 2017-2020 Health Business Plan <sup>372</sup>	Outlines key strategies to improve health outcomes for all Albertans and support the well-being of Albertans through public health initiatives. Strategies include collaborating on wellness initiatives, implementing a system-wide response to chronic conditions and disease prevention, reducing the health outcome gaps between Indigenous and non-Indigenous peoples, and supporting maternal health and early childhood development initiatives.
Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018 <sup>370,371</sup>	Establishes six strategic priority areas, including a priority area specific to child and youth nutrition, physical activity, overweight, and obesity. The approaches considered in the plan includes: <ul style="list-style-type: none"> <li>• Interventions to promote fruit and vegetable consumption</li> <li>• Reduced consumption of sugar-sweetened beverages</li> <li>• Strengthened food policies in schools</li> <li>• Structured sessions for physical activity in schools</li> <li>• Support and training for teachers</li> </ul>

## 📌 POLICIES/SYSTEMIC PROGRAMS

### Voluntary

The Alberta Government provides funding for childhood healthy living/obesity prevention strategies/actions related to CSH (see 'Key Findings').

## ★ RECOMMENDATIONS

### Practice

- Continue to fund strategic priority areas identified in the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018.

### Policy

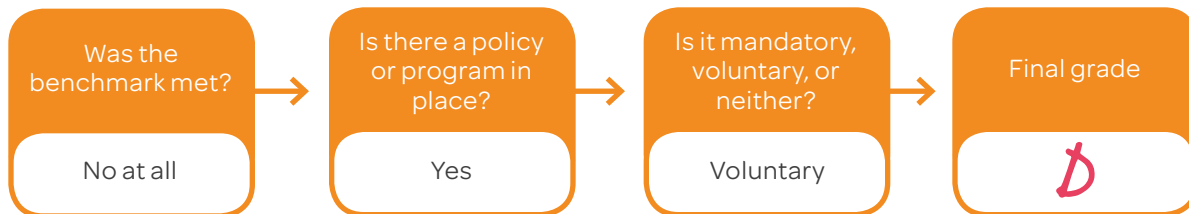
- Create universal, sustainable childhood healthy living programs.
- Create population targets for eating behaviours and body weights of children and youth.

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## INDICATOR

**Health in All Policies****BENCHMARK**

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

**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. 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).<sup>373</sup> 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.<sup>373</sup>

Phase one consisted of applying the HLPP process to the Ministry of Health; the second phase was to expand it to all government bodies. It is unclear if this program has been sustained. Further, the report noted that in contrast to Quebec's approach, Alberta's HLPP adherence was voluntary and did not have legal ground.<sup>373</sup>

2. 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.<sup>374</sup> The HiAP process and toolkit are currently being tested, and plans for implementation are under development.

**📌 POLICIES/SYSTEMIC PROGRAMS****None**

The National Collaborating Centre for Public Policy and Health, based in Quebec, provides resources to support Health Impact Assessments on broad health policy topics.<sup>375</sup>



## 30 ★ 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.

#### → 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.<sup>376,377</sup>*
- *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.<sup>378</sup> 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.<sup>379</sup>*
- *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. 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."<sup>380</sup>*
- *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. 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.<sup>381</sup>*

## Funding

Sufficient funds are allocated to implementation of the government's childhood healthy living and obesity prevention strategy/action plan.

INDICATOR	GRADE
<i>Childhood health promotion activities are adequately funded.</i>	<i>INC</i>

### WHAT RESEARCH SUGGESTS

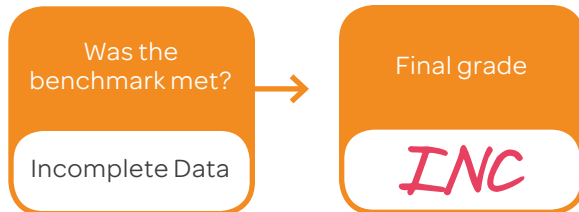
Government must act to combat childhood obesity, given its health and economic burden. Although evidence of the lifetime indirect cost of childhood obesity is scant compared to that of adult obesity,<sup>382,383</sup> one U.S. study estimates that the lifetime direct medical cost of childhood obesity ranges from \$12,660 to \$19,000 per child with obesity.<sup>382</sup> Furthermore, analyses have shown that the majority of children with overweight or obesity will continue to have excess weight through to their adult lives, contributing to significant indirect lifetime costs.<sup>384</sup> Thus, given limited resources, government must strategically allocate dedicated and sufficient resources for childhood overweight or obesity treatment and prevention to reduce both healthcare and non-healthcare costs over the lifetime. Health economic research on the cost-effectiveness of interventions can assist government in resource allocation decision-making.<sup>385</sup>

Growing evidence suggests that investment in primary obesity prevention activities is likely more cost-effective than treatment or secondary prevention interventions.<sup>385</sup> This is consistent with findings that primary prevention activities have the potential to reduce healthcare costs to a greater degree than the cost of program implementation, and can ultimately reduce the prevalence of obesity.<sup>386,387</sup> Examples of these activities include enacting a "sugar-sweetened beverage excise tax, eliminating tax deductions for companies advertising unhealthy foods to children, reducing advertising of unhealthy foods and beverages to children, and setting nutrition standards for food and beverages sold in schools<sup>386</sup>". Taxation revenues can be used to fund other health promotion activities.<sup>386</sup>

## 31 INDICATOR Childhood Health Promotion Activities are Adequately Funded

### BENCHMARK

*At least 1% of the Alberta provincial health budget is dedicated to implementation of the government's healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.*



### Q KEY FINDINGS

1. Alberta Health's 2015-2016 Annual Report suggests that 2% of the provincial health budget is spent on community programs and healthy living,<sup>374</sup> though it remains unknown what programs in particular this portion of the budget supports. For example, it is unclear what proportion of the health budget is spent on childhood healthy living and obesity prevention, as many program areas receive funding from other ministries, such as the Ministry of Education, each of which allocate some of their funding to health promotion and prevention.<sup>388</sup>

The Government of Alberta funds several nutrition- and health-related programs and initiatives. Examples of provincially funded healthy-eating and weight initiatives are provided in Table 15. The Alberta Government funds health promotion professionals to support healthy weight and healthy eating initiatives for children and youth in the province.<sup>389</sup>

2. Twenty-nine school districts that completed the 2017 Reporting and Reflection Tool for Alberta Healthy School Community Wellness Fund reported that food programs such as milk programs (45%), breakfast programs (50%), and lunch programs (37%) have sustainable, long-term funding. Other programs such as community kitchens (17%), extracurricular cooking classes/programs (14%), and vegetable and fruit subscription programs (17%) were mentioned less frequently as having sustainable funding. Such programs supporting healthy eating require increased funding. The targeted school nutrition program recently introduced in Alberta is one example of positive movement in this direction.

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TABLE 16. Alberta Government-Funded Initiatives to Improve Healthy Eating and Weights

Initiative	Description
<b>Comprehensive School Health</b>	With 31 staff (with 24 being full-time employees), there are considerable resources to support CSH.
<b>Alberta Healthy School Communities Wellness Fund<sup>388</sup></b>	Received \$1.6million in funding for the 2016-2017 school year.
<b>Ever Active Schools<sup>388</sup></b>	Received \$350,000 for the 2016-2017 fiscal year from Health, \$225,000 from Education, and \$175,051 from Culture & Tourism.

## ↑ POLICIES/SYSTEMIC PROGRAMS

The above are examples of systemic programs

## ★ RECOMMENDATIONS

### Research

- Determine whether 1% of the provincial health budget is dedicated to implementation of the government's healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.

### Practice

- Continue to fund healthy living and obesity prevention strategies.
- Create a Health Promotion Foundation, such as called for by Wellness Alberta (see <http://www.wellnessalberta.ca>), to consolidate and track the amount of funding dedicated to children's healthy living and obesity prevention programs

### Policy

- Mandate that all government ministries report funds spent on healthy living and obesity prevention for children.

### → POLICY ROLE MODELS

*New Zealand assigns approximately 11% of the Health Research Council's total budget on population nutrition and/or prevention of obesity and non-communicable diseases.<sup>390</sup>*

*"While health promotion is cost-effective, many countries are in need of new resources to promote health and tackle national priority health problems. The development of Health Promotion Foundations is an innovative way of mobilizing new resources for promoting health and can support research, innovation, and the strengthening of health promotion capacities in the health sector and other sectors such as education, sport, the arts, environment and commerce. Health Promotion Foundations work in a complementary way with Ministries of Health, and other relevant Ministries. Effective models for health promotion infrastructures now exist in several countries (Switzerland, Thailand, Australia, Austria and Korea)."<sup>391</sup>*

## 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	GRADE
<i>Compliance Monitoring Of Policies And Actions To Improve Children's Eating Behaviours And Body Weights</i>	<i>C</i>
<i>Children's Eating Behaviours And Body Weights Are Regularly Assessed</i>	<i>A</i>

### WHAT RESEARCH SUGGESTS

Monitoring and surveillance are essential to measure implementation of national strategies for healthy diets and their impacts on population-level eating behaviours and body weights.<sup>119</sup> 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.<sup>3,392,393</sup> The absence of child Body Mass Index surveillance systems limits the ability of public-health practitioners and policymakers to develop and evaluate responses to the childhood obesity epidemic.<sup>394</sup> Policy implementers and the populations targeted by the policies face a variety of barriers to complying with established policies.<sup>395</sup> Evaluating policy compliance can inform new strategies to help increase levels of policy adoption and implementation.<sup>392</sup> A national system that oversees monitoring, surveillance, and evaluation is recommended to facilitate the standardization of methodology, thus increasing the accuracy and representativeness of data.<sup>396</sup> The assessment and evaluation of policy implementation is increasingly being recognized as a key mechanism for enhancing government accountability.<sup>397</sup>

Several research groups and agencies have recommended indicators that should be monitored by a national childhood overweight and obesity monitoring system. At a minimum, childhood overweight and obesity prevalence should be monitored using anthropometric measurements (e.g. height and weight).<sup>398</sup> Surveillance data is used to detect disparities in the prevalence of overweight and obesity based on socioeconomic status and race/ethnicity.<sup>394</sup> In addition, government should measure progress towards health and nutrition targets by regularly and comprehensively monitoring and reporting on the state of food environments, population nutrition and diet-related chronic diseases and related inequalities.<sup>13</sup>

INFORMAS has developed the healthy food environment policy index to assess the extent of government policy implementation on food environments with international best practices.<sup>398</sup> One approach to monitoring eating behaviour involves assessing the proportion of ultra-processed products consumed by using data collected from food intake surveys.<sup>399</sup> Valid and reliable surveillance tools to support population nutrition monitoring are essential. Health Canada's Surveillance Tool Tier System is one example of a nutrient profiling tool that assesses dietary adherence to Canada's food guide amongst the general population.<sup>400</sup>

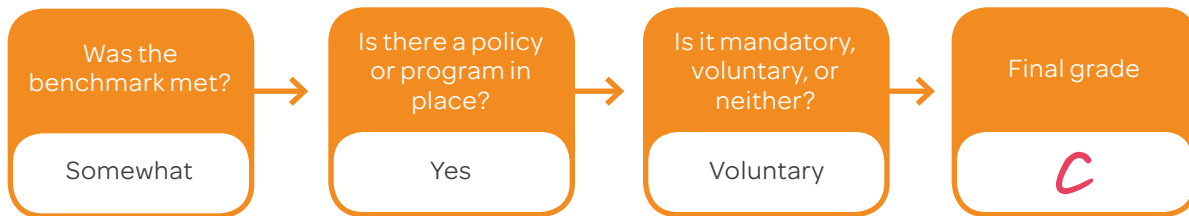


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## INDICATOR

**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*

**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.
2. The annual Alberta Healthy School Community Wellness Fund Reporting and Reflection Tool is a step in the right direction towards monitoring the existence of school nutrition policies. Of 38 districts representing almost 1000 schools in Alberta that reported in 2017, 20 districts (53%) have nutrition policies in place. Of the 18 schools that reported, 61% responded that 75% of foods offered meet the 'Choose Most Often' criteria of the Alberta Nutrition Guidelines for Children and Youth, providing a good indication of adherence to school nutrition policies.

**📌 POLICIES/SYSTEMIC PROGRAMS**

Voluntary evaluation exists, see 2.

**★ RECOMMENDATIONS****Practice**

- Engage key stakeholders to participate in reporting practices

**Policy**

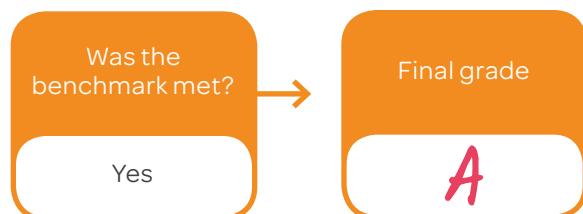
- Establish system-wide monitoring of adherence to mandated nutrition policies

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## INDICATOR

**Children's Eating Behaviours and Body Weights are Regularly Assessed****BENCHMARK**

*Ongoing population-level surveillance of children's eating behaviours and body weights exists*

**Q KEY FINDINGS**

1. All Alberta Health Services zones conduct surveillance of child growth indicators generated from public health clinics. Individual zones have looked at breastfeeding rates, as well as children's height and weight measurements (for children aged 0-6 years). AHS is working on standardizing this data across all zones. For the first time this year, data will be compiled together from Public Health Clinics across the entire province. AHS aims to create a dashboard in order to manipulate data, and may even start to provide community profiles. At this time, there is currently no height and weight surveillance of children and youth aged 7-18 years of age (D. McNeil, personal communication, May 25, 2017)
2. A list detailing the surveillance of diet and weight for children and youth in Alberta is provided in Table 17.

TABLE 17. Surveillance of Child and Youth Diet and Weight in Alberta.

Survey	Years	Age Range	Description
Public Health Clinics Child Growth Indicators	Annual	0-6 years	All AHS zones conduct surveillance of child growth indicators generated from Public Health Clinics. Individual zones have looked at breastfeeding rates, as well as children's height and weight measurements (for children aged 0-6 years).
Canadian Community Health Survey – Annual Component <sup>401</sup>	Annual 2007-present	12 years and older	Collects details on health status, health care utilization, and health determinants of the Canadian population through a survey.
Canadian Community Health Survey – Nutrition <sup>402</sup>	Occasional 2004;*2014-15	1 year and older	Collects details about eating habits, use of vitamin and mineral supplements, as well as other health factors of the Canadian population.
Canadian Health Measures Survey – Annual Component <sup>403</sup>	Biennial 2007-present	3 to 79 years	Collects details by means of direct physical measurements, such as blood pressure, height, weight, and physical fitness of the Canadian population.
Alberta Community Health Survey <sup>404</sup>	Annual 2014-present	18+ (research participant answers, but researcher speaks to the whole family)	Collects data on specific determinants of health and wellbeing. Includes household eating habits of adults and children.

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The Public Health Agency of Canada has a planned spending budget of \$2.73million to enhance capacity for public health chronic disease surveillance and to expand data sources for healthy living.<sup>405</sup>

## 📌 POLICIES/SYSTEMIC PROGRAMS

See table.

## ★ RECOMMENDATIONS

### Practice

- Continue to work toward increasing data visibility/accessibility so that practitioners and researchers can analyze and report on children's eating behaviors and body weights more regularly.

### Policy

- Create provincial initiatives to conduct surveillance of height and weight measurements for children aged 7-18 years.



## Capacity Building

Personnel and resources are available to support the government's childhood healthy living and obesity prevention strategy/action plan.

INDICATOR	GRADE
<i>Resources are available</i>	<i>A</i>
<i>Food rating system and dietary guidelines for foods served to children exists.</i>	<i>A</i>
<i>Support to assist the public and private sectors to comply with nutrition policies.</i>	<i>A</i>

### WHAT RESEARCH SUGGESTS

Governments have the primary responsibility and authority to develop policies that create equitable, safe food environments to prevent obesity and chronic disease.<sup>119,363</sup> Governments must have the capacity to implement and monitor policies and programs to improve population nutrition and health.<sup>13</sup> The WHO Report of the Commission on Ending Childhood Obesity recommends that guidance be provided to children and adolescents, their parents, caregivers, teachers, and health professionals on healthy bodies and physical activity.<sup>3</sup>

The target populations of health strategy and policies may face a variety of barriers to compliance including insufficient incentives, inadequate knowledge, inadequate human and financial resources, and incompatible attitudes and values.<sup>397,406</sup> For example, while guidelines for the provision and sale of healthy food in childcare settings, schools, and recreational facilities exist in Alberta (i.e. the ANG CY), one study found they were not being widely used within recreational facilities.<sup>407</sup> Barriers to the implementation of the ANG CY in recreation facilities included: facility managers' low level of guideline awareness, beliefs that the guideline is incompatible with customers' expectations, and concerns over profit-making ability.<sup>407</sup> The personnel responsible for delivering the policy may lack the skills, knowledge, or resources necessary for implementation. Lessons from past policy failures to promote increased children's physical activity in schools suggest that the development of teachers' skills and knowledge to implement policy, appropriate monitoring of policy implementation, and sufficient funding are essential for policy success.<sup>408</sup> Even local health departments may fail to implement obesity prevention programs when they lack government support (e.g. funding, training, technical assistance); if the workforce is inadequately staffed; or if staff has limited skills in implementing policy and environmental changes associated with obesity prevention recommendations.<sup>409</sup> Therefore, governments must provide effective legislation, required infrastructure, implementation programs, adequate funding, and monitoring and evaluation. They must also commit ongoing research to support their health strategy and policies.<sup>119</sup>

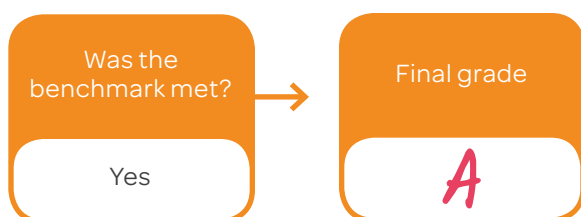
It is not enough that nutrition guidelines and information exist. Guidelines should also contain accurate and appropriate information, and be widely disseminated to the public to aid in their decision-making. WHO recommends governments develop and disseminate appropriate and context-specific dietary guidelines to reach all segments of the population.<sup>3</sup> Recently, the Standing Senate Committee on Social Affairs, Science and Technology recommended the Minister of Health revise Canada's Food Guide and create a public awareness campaign on healthy eating.<sup>136</sup>

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## INDICATOR

**Resources are Available****BENCHMARK**

*A website and other resources exist to support programs and initiatives of the childhood healthy living and obesity prevention strategy/action plan.*

**Q KEY FINDINGS**

Various online resources and media campaigns exist for residents of Alberta that support the childhood healthy living and obesity prevention strategy/action plan. Examples are highlighted in Table 18.

**TABLE 18. Examples of Online Resources and Campaigns to Support Childhood Healthy Living and Obesity Prevention.**

Resource	Description
<b>AHS Healthy Eating Starts Here</b> <sup>410,411</sup>	Resources such as toolkits, handbooks, education materials, nutritional guidelines, and healthy recipes provide individuals, parents, families, child caregivers, schools, and workplaces more guidance on healthy eating at work, school, childcare centres, and in the community.
<b>MyHealth.Alberta.ca</b> <sup>412</sup>	The “Healthy Eating for Children” section of MyHealth.Alberta.ca provides information pertaining to healthy eating habits, appropriate food consumption, getting children to eat well, and links to other related healthy eating resources.
<b>Canada’s Healthy Eating Toolbox</b> <sup>238,413,414</sup>	Launched in 2012, Health Canada developed a toolbox of online nutrition-related resources to support parents and caregivers of children aged 2-12 years. Resources such as fact sheets and promotional media campaign resources are available to support consumers, as well as health professionals and educators. <a href="#">[View Here]</a>
<b>Working with Grocers to Support Healthy Eating and Measuring the Food Environment in Canada</b> <sup>415</sup>	This report describes current evidence linking access to food and diet-related diseases, and highlights gaps in research related to understanding how the retail food environment could better promote and support healthy eating. <a href="#">[View Here]</a>
<b>Raising Our Healthy Kids</b> <sup>416</sup>	Raising Our Healthy Kids provides health information in 60-90 second video clips to help Canadian families live healthier lives
<b>Health Link</b> <sup>417</sup>	Since 2014, Albertans can speak with registered dietitians about their nutrition concerns through Health Link, Alberta’s 24-hour health advice and information line. Individuals who call Health Link with complex nutrition concerns have the option for a registered dietitian to call them back to provide specialized nutrition advice and information. This service can be accessed by contacting Health Link Alberta, speaking with a registered nurse, and requesting a follow-up from a registered dietitian.



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TABLE 19. Online Resources, Continued....

Resource	Description
Healthy Food Checker <sup>418</sup>	Provides an online tool to compare nutrition criteria, and whether the food or beverage inputted is a 'Choose Most Often,' 'Choose Sometimes,' or 'Choose Least Often' item according to Alberta Nutrition Guidelines. ( <a href="http://www.albertahealthservices.ca/assets/info/nutrition/HealthyEating/m/he/foodchecker.htm">http://www.albertahealthservices.ca/assets/info/nutrition/HealthyEating/m/he/foodchecker.htm</a> )
Healthy Eating Starts Here <sup>410</sup>	Provides resources such as toolkits, handbooks, education materials, nutritional guidelines, and healthy recipes provide individuals, parents, families, child caregivers, schools, and workplaces more guidance on healthy eating at work, school, childcare centres, and in the community.
Ever Active Schools <sup>419</sup>	Develops resources that support wellness education and comprehensive school health ( <a href="http://www.everactive.org/resources-1">http://www.everactive.org/resources-1</a> ). Provides healthy eating resources for school programs ( <a href="http://www.everactive.org/healthy-eating-1?id=1396">http://www.everactive.org/healthy-eating-1?id=1396</a> )
Communities Choosewell <sup>420</sup>	Provides e-learning courses for community leaders to learn and understand the benefits and impact that healthy eating, active living, and recreation and parks have on individuals and communities. ( <a href="http://arpaonline.ca/program/choosewell/choosewell-elearning-module/">http://arpaonline.ca/program/choosewell/choosewell-elearning-module/</a> )
Dietitians of Canada Website Resources	Provides fact sheets for adults, parents, seniors, and teens, such as Take the Fight out of Food – Picky Eating, 5 Steps to Healthy Eating for Children Aged 4-11, Tips on Feeding Your Picky Toddler or Preschooler. <a href="https://image.shutterstock.com/z/stock-photo-elementary-pupils-collecting-healthy-lunch-in-cafeteria-141106669.jpg">https://image.shutterstock.com/z/stock-photo-elementary-pupils-collecting-healthy-lunch-in-cafeteria-141106669.jpg</a> 5 Steps to Healthy Eating for Youth 12-18, etc.  <a href="https://www.dietitians.ca/">https://www.dietitians.ca/</a>

## 📌 POLICIES/SYSTEMIC PROGRAMS

See tables above.

## ★ RECOMMENDATIONS

### Practice

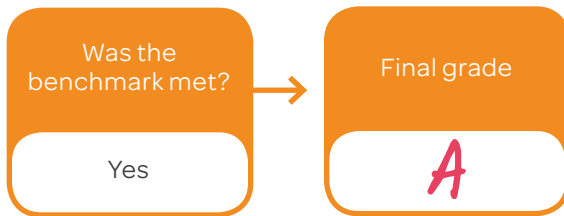
- Increase public knowledge of resources available.

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## INDICATOR

**Food Rating System and Dietary Guidelines for Foods Served to Children Exists****BENCHMARK**

*There is an evidence-based food rating system and dietary guidelines for foods served to children, and tools to support their application.*

**Q KEY FINDINGS****1. Food Rating Systems:**

ALBERTA NUTRITION GUIDELINES FOR CHILDREN AND YOUTH<sup>70</sup>

- In 2008, the ANGCY were released to support the provision of nutritious foods and beverages in child-oriented settings, such as in schools, childcare centres, recreation facilities, and at community events.<sup>70</sup>

FEDERAL/PROVINCIAL/TERRITORIAL HARMONIZED FOOD RATING SYSTEM FOR SCHOOLS<sup>238,421,422</sup>

- This document provides suggested nutrient criteria for 'Choose Most Often' and 'Choose Sometimes' foods to support provinces and territories in developing their own school nutrition guidelines and policies. Alberta led the development<sup>238</sup> of these harmonized nutrition guidelines, which support the Federal/Provincial/Territorial Framework for Action to Promote Healthy Weights.<sup>422</sup>

**2. Dietary Guidelines:**

EATING WELL WITH CANADA'S FOOD GUIDE

- This national guide provides dietary recommendations for Canadians aged two years and older.<sup>423</sup> In addition, the guide provides parents and caregivers with recommendations on small serving sizes, consumption of nutritious, high-fat foods, drinking water and milk, and introducing new foods to children 2-17 years.<sup>423,424</sup>

NUTRITION FOR HEALTHY TERM INFANTS

- Provides evidence-based recommendations for parents of children from birth to two years of age on breastfeeding, breast milk substitutes, complementary feeding, and vitamin D supplementation.<sup>425,426</sup>

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## 📌 POLICIES/SYSTEMIC PROGRAMS

While guidelines and rating systems have been developed, to date there is limited mandatory implementation.

## ★ RECOMMENDATIONS

### Research

- Investigate why there are low implementation rates of the ANGCY.

### Practice

- Increase adoption and implementation of ANGCY by target audiences (ie. schools, recreation facilities).

### Policy

- Mandate the implementation of existing rating systems and guidelines.



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## INDICATOR

**Support to Assist the Public and Private Sectors to Comply With Nutrition Policies****BENCHMARK**

*Support (delivered by qualified personnel) is available free of charge to assist the public and private sectors to comply with nutrition policies.*

Was the benchmark met?

Yes

Final grade

A

**Q KEY FINDINGS**

A large proportion (82%) of school districts that completed the 2017 Reporting and Reflection Tool for the Alberta Healthy School Wellness Fund indicated that they are aware of staff with knowledge of the ANGCY that they can access free of charge to support implementation of the ANGCY.

Various government organizations and NGOs with dedicated personnel exist in Alberta to steward childhood healthy living and obesity prevention action, including support (to schools, etc.) to adhere to policies such as the ANGCY.





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**TABLE 20. Organizations in Alberta Providing Supportive Personnel for Childhood Healthy Living and Obesity Prevention.**

<p><b>Alberta Health Services</b></p> <p>Health Promotion Coordinators (HPCs) from AHS Healthy Children and Youth support school jurisdictions in Alberta in advancing the Comprehensive School Health (CSH) approach. HPCs work with school jurisdictions and community partners to create healthy environments, provide support to school staff, support the development of health and wellness policies, and promote the implementation of the ANGCY.<sup>427</sup></p> <p>There is a key AHS HPC “contact identified for each of the 61 school jurisdictions. Prior to 2013, the HPC positions were funded through the Healthy Weights Initiative grant, sponsored by Alberta Health. In 2013, AHS provided operational funding for the positions.”<sup>78</sup> Since 2014, HPCs have worked with 368 partners representing health, education, sport and recreation, and other sectors to support school or community-based health initiatives targeting children and youth. The majority of HPC partnerships were with stakeholders from the education sector (43%) and health sector (34%).<sup>78</sup></p> <p>Public Health Dietitians working for Alberta Health Services are registered dietitians located in communities across the province. They collaborate with stakeholders representing sectors involved in child and youth health, including childcare centres, schools, and communities, to support healthy eating environments, policy development, research, and health education. The tools and resources they develop for sectors (childcare, school, and community), families, and individuals are available on their website: <a href="http://www.healthyeatingstartshere.ca">www.healthyeatingstartshere.ca</a>.<sup>281</sup></p> <p>In addition, through Health Link, Alberta’s 24-hour health advice and information line, Albertans can speak with registered dietitians about their nutrition concerns. Albertans who call Health Link with complex nutrition concerns have the option for a registered dietitian to call them back to provide specialized nutrition advice and information. This service can be accessed by contacting Health Link Alberta, speaking with a registered nurse, and requesting follow-up from a registered dietitian.<sup>417</sup></p>	
<p><b>Collaborative for Healthy Eating Environments in Recreation Settings (CHEERS)</b>, is a multi-sectoral collaborative of organizations and individuals in Alberta seeking to foster healthy eating environments in community recreation settings. CHEERS aims to facilitate healthier eating environments in recreation centres through the implementation of effective practices and policies by providing a platform for stakeholders to share information and resources and engage in collaborative and coordinated action. Current CHEERS participants include:</p> <ul style="list-style-type: none"> <li>• Alberta Recreation and Parks Association (ARPA)</li> <li>• Alberta Association of Recreation Facility Personnel (AARFP)</li> <li>• Alberta Health – Health and Wellness Promotion Branch</li> <li>• Alberta Health Services – Nutrition Services (AHS)</li> <li>• Alberta Policy Coalition for Chronic Disease Prevention (APCCP)</li> <li>• Ever Active Schools (EAS)</li> <li>• Be Fit for Life Network</li> <li>• PhD Candidate with University of Alberta School of Public Health / Eat Play Live study</li> <li>• Champions from recreation departments or recreation facilities</li> </ul>	
<p><b>Communities ChooseWell<sup>388</sup></b></p> <p>This ARPA initiative promotes and supports the development of programs, policies, and partnerships that foster community wellness through active living and healthy eating.</p>	<p><b>Comprehensive School Health Working Group<sup>428</sup></b></p> <p>This group, led by the Healthy Child and Youth Team, gathers, reviews, and evaluates an inventory of CSH education resources that are used provincially.</p>
<p><b>School Nutrition Integrated Working Group<sup>426</sup></b></p> <p>The School Nutrition Integrated Working Group, led by Nutrition Services registered dietitians and including members from various organizations, uses the full range of population health promotion strategies to develop and evaluate evidence-based initiatives and products, based on the Alberta Nutrition Guidelines for Children and Youth. Their goal is to improve nutritional knowledge and practices amongst children and youth.</p>	<p><b>Healthy Eating Environments in Child Care Working Group<sup>429</sup></b></p> <p>The Healthy Eating Environments in Child Care Working Group is led by registered dietitians in Nutrition Services, AHS. The goal is to promote and facilitate healthy eating environments in childcare settings. Using the full range of population health promotion strategies, the group collaborates with stakeholders including researchers, childcare educators and operators, regulators, accreditors, and NGOs, to develop and evaluate tools and resources based on the Alberta Nutrition Guidelines for Children and Youth.</p>



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## 📌 POLICIES/SYSTEMIC PROGRAMS

The above are systemic programs

## ★ RECOMMENDATIONS

### Practice

- Increase the capacity of public health dietitians to assist public and private sectors.
- Integrate supports to assist the public and private sectors to comply with nutrition policies at the system level for more strategic action.



# Abbreviations

<b>AHS</b>	Alberta Health Services
<b>AHSCWF</b>	Alberta Healthy School Community Wellness Fund
<b>ANGCY</b>	Alberta Nutrition Guidelines for Children and Youth
<b>APCCP</b>	Alberta Policy Coalition for Chronic Disease Prevention
<b>ASC</b>	Advertising Standards Canada
<b>BFHI</b>	Baby-Friendly Hospital Initiative
<b>CAI</b>	Canadian Children's Food and Beverage Advertising Initiative
<b>CALM</b>	Career and Life Management
<b>CBC</b>	Canadian Broadcasting Corporation
<b>CCHS</b>	Canadian Community Health Survey
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CLASP</b>	Coalitions Linking Action & Science for Prevention
<b>CPAC</b>	Canadian Partnership Against Cancer
<b>CSH</b>	Comprehensive School Health
<b>FOP</b>	Front-of-package
<b>HIA</b>	Health Impact Assessment
<b>HiAP</b>	Health-in-All-Policies
<b>HPC</b>	Health Promotion Coordinators
<b>HSP</b>	Healthy School Planner
<b>JCSH</b>	Joint Consortium for School Health
<b>INFORMAS</b>	International Network for Food and Obesity/non-communicable Diseases Research, Monitoring and Action Support
<b>MEND</b>	Mind, Exercise, Nutrition...Do it!
<b>mRFEI</b>	modified Retail Food Environment Index
<b>NGO</b>	Non-governmental organization
<b>PHAC</b>	Public Health Agency of Canada
<b>POWER UP!</b>	Policy Opportunity Windows: Enhancing Research Uptake in Practice
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>WHO</b>	World Health Organization

# Acknowledgements

We would like to thank all of the individuals that contributed toward the development of the 2017 Nutrition Report Card by facilitating access to relevant data and information:

**Malek Batal, PhD**

Professor, Université de Montréal

**Jeff Bath**

Senior Manager Wellness Education, Alberta Education

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**A special thank you to our wonderful nutrition student volunteers:**

Ting Yang, Truc Tran, and Kyra Parayko



## UNIVERSITY OF ALBERTA SCHOOL OF PUBLIC HEALTH

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](http://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](http://www.abpolicycoalitionforprevention.ca)



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

A summary of Alberta's 2017 Nutrition Report Card on Food Environments for Children and Youth is also available online at: <https://www.ualberta.ca/faculties/centresinstitutes/centre-for-health-nutrition/research>

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

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**Publication Date: September 2017**

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## Physical Environment

OVERALL GRADE



INDICATOR	GRADE	RECOMMENDATIONS
<p><b>1) High availability of healthy food in school settings</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Approximately ¾ of foods available in schools are healthy.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>The new Alberta School Nutrition Program has provided over 5000 students in need (grades K to 6) a daily healthy meal or snack.</p> <p>Of the school districts (n = 38) representing almost 1000 schools and individual schools (n=18) reporting, over half have healthy eating policies. Schools with policies report offering mostly healthy foods.</p>	C+	<p><b>Research</b></p> <p>Monitor school food policies and foods offered on an annual basis.</p> <p><b>Practice</b></p> <p>The 2013 Heart &amp; Stroke position statement recommends:<sup>430</sup></p> <ul style="list-style-type: none"> <li>• Introducing nutrition standards for foods and beverages provided in schools</li> <li>• Providing appropriate portion sizes</li> <li>• Removing unhealthy food and beverages from school vending machines and cafeterias</li> <li>• Monitoring adherence to healthy eating policies/guidelines</li> </ul> <p><b>Policy</b></p> <ul style="list-style-type: none"> <li>• Implement mandatory rather than voluntary healthy eating policies for improved effectiveness.<sup>431</sup></li> <li>• Develop healthy food procurement contracts that adhere to nutrition standards, encompassing all food and beverages served in schools, including third-party vendors (e.g. franchising, fundraising)<sup>432</sup>.</li> </ul>
<p><b>2) High availability of healthy food in childcare settings</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Approximately ¾ of foods available in childcare settings are healthy.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Data on the foods served in childcare is urgently needed for proper assessment in this area. The Expert Working Group was unable to assign a grade for this indicator.</p>	INC	<p><b>Research</b></p> <p>There is an urgent need to collect data on the availability of healthy food in childcare settings across Alberta and make it accessible to the public.</p>
<p><b>3) High availability of healthy food in recreation facilities</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Approximately ¾ of foods available in recreation facilities are healthy.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Most food and beverages offered in central Alberta recreation facilities vending machines and food service outlets are not considered healthy. A large portion of recreation facilities do not have healthy eating policies in place.</p>	D	<p><b>Research</b></p> <p>Explore effective implementation strategies to improve food available in recreation facilities.</p> <p><b>Practice</b></p> <p>Continue to support and educate facility and concession managers about the Alberta Nutrition Guidelines for Children and Youth (ANGCY) and provide context-specific strategies for implementation.</p> <p><b>Policy</b></p> <p>Mandate and provide incentives for implementing the ANGCY in recreation facilities.</p>

INDICATOR	GRADE	RECOMMENDATIONS
<p><b>4) High availability of food stores and restaurants selling primarily healthy foods</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>The modified retail food environment index across all census areas is <math>\geq 10</math>.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Due to the prevalence of fast food restaurants and convenience stores, retailers more likely to sell unhealthy foods greatly outnumber those likely to sell healthful options in both Edmonton and Calgary.</p>	<b>D</b>	<p><b>Practice</b></p> <p>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<sup>433</sup>.</p> <p><b>Policy</b></p> <p>The province of Alberta mandate municipal zoning policies to address poor retail food environments at the local level.</p>
<p><b>5) Limited availability of food stores and restaurants selling primarily unhealthy foods</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Traditional convenience stores (i.e., not including healthy corner stores) and fast food outlets not present within 500 m of schools.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Most schools in Edmonton (80%) and Calgary (74%) have at least one convenience store or fast food restaurant within 500 metres.</p>	<b>D</b>	<p><b>Research</b></p> <p>Explore facilitators and barriers in decreasing the proximity of unhealthy food stores to schools.</p> <p><b>Practice</b></p> <p>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>Encourage municipalities to decrease access to unhealthy choices through the establishment of appropriate zoning by-laws and other applicable policies<sup>1</sup>.</p> <p><b>Policy</b></p> <p>Require municipal zoning policies to work towards decreasing poor food retail outlets within 500m of schools.</p>
<p><b>6) Foods contain healthful ingredients</b></p> <p>➔ <b>BENCHMARK:</b></p> <p><math>\geq 75\%</math> of children's cereals available for sale are 100% whole grain and contain <math>&lt; 13\text{g}</math> of sugar per 50g serving.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Only 20% of children's cereals on the market are 100% whole grain AND <math>&lt; 13\text{g}</math> of sugar per 50g serving.</p>	<b>F</b>	<p><b>Practice</b></p> <ul style="list-style-type: none"> <li>Encourage industry to reformulate children's cereals to reduce sugar and increase whole grain content.</li> <li>Urge store owners to stock healthier cereals, such that 75% of children's cereals available for sale are 100% whole grain and contain <math>&lt; 13\text{g}</math> of sugar per 50g serving.</li> </ul> <p><b>Policy</b></p> <p>Urge Health Canada to create policies such as Front-of-Package warning labels that encourage industry to reformulate children's cereals that contain <math>&lt; 13\text{g}</math> of sugar per 50g serving are 100% whole grain.</p>



## Communication Environment

OVERALL GRADE



INDICATOR	GRADE	RECOMMENDATIONS
<p><b>7) Menu labelling is present</b></p> <p>→ <b>BENCHMARK:</b></p> <p>A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>While some restaurants may provide nutrition information, menu labelling is not mandatory in Alberta.</p>	<b>D</b>	<p><b>Research</b></p> <p>Assess the impact of legislating menu labelling on consumer food choices.</p> <p><b>Policy</b></p> <p>Mandate menu labelling in restaurants with ≥ 20 locations.</p>
<p><b>8) Shelf labelling is present</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Alberta lacks a simple and consistent government approved shelf labelling program.</p> <p>Some chains have their own programs but this accounts for only 32% of stores in Alberta.</p>	<b>D</b>	<p><b>Research</b></p> <p>Continue to examine the effectiveness of shelf labelling systems in identifying healthy foods.</p> <p><b>Practice</b></p> <p>Promote government engagement with stakeholders to determine how to provide consumers with easy-to-understand, useful nutrition information to identify healthy food at point of purchase.</p> <p><b>Policy</b></p> <p>Initiate a simple and consistent government-approved shelf labelling system across Alberta.</p>
<p><b>9) Product labelling is present</b></p> <p>→ <b>BENCHMARK:</b></p> <p>A simple, evidence-based, government-sanctioned front-of-pack food labelling system is mandated for all packaged foods.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Labels are not provided front-of-package; however, Canada's Healthy Eating Strategy is planning for this in the near future.</p>	<b>F</b>	<p><b>Research</b></p> <p>Identify the most effective front-of-package food-labelling system.</p> <p><b>Practice</b></p> <p>Develop a nutrient profiling system to identify unhealthy foods and beverages to support the creation of a consumer-friendly front-of-package food-labelling system.</p> <p><b>Policy</b></p> <p>Mandate a simple, standardized front-of-package food-labelling system for all packaged foods in Canada.</p>
<p><b>10) Product labelling is regulated</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Strict government regulation of industry-devised logos/branding denoting 'healthy' foods.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Although regulations exist for nutrition labelling and health claims, there is potential for misinterpretation of industry devised logos because there are no rules requiring they be applied consistently across all products.</p>	<b>D</b>	<p><b>Practice</b></p> <p>Enforce existing regulations regarding industry-devised logos/branding.</p> <p><b>Policy</b></p> <p>Implement clear and strict regulations regarding industry-devised logos/branding.</p>
<p><b>11) Government-sanctioned public health campaigns encourage children to consume healthy foods</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Child-directed social marketing campaigns for healthy foods.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>There are few active, sustained, educational, and media-based public health campaigns directed specifically at children to promote healthy food consumption.</p>	<b>D</b>	<p><b>Practice</b></p> <p>Develop a sustained and targeted social marketing program to encourage healthy food consumption.</p>

INDICATOR	GRADE	RECOMMENDATIONS
<p><b>12) Restrictions on marketing unhealthy foods to children</b></p> <p>→ <b>BENCHMARK:</b></p> <p>All forms of marketing unhealthy foods to children are prohibited.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Despite growing concerns, Alberta does not have official policies in place to prohibit the marketing of unhealthy food to children. There is movement toward restrictions at the Federal level.</p>	<b>D</b>	<p><b>Research</b></p> <p>Determine the level of children's exposure to food and beverage marketing in local contexts.</p> <p><b>Practice</b></p> <p>Encourage adoption of voluntary self-regulatory initiatives following government-approved guidelines subject to independent audits<sup>434,435</sup>.</p> <p><b>Policy</b></p> <p>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<sup>436</sup>.</p>
<p><b>13) Nutrition education provided to children in schools</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Nutrition is a required component of the curriculum at all school grade levels.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Students in Grades 10-12 do not have any nutrition-specific outcomes within the current curriculum framework; however, curriculum redesign is underway.</p>	<b>B</b>	<p><b>Practice</b></p> <p>Monitor and advocate for the delivery of nutrition education to children at all grade levels.</p> <p><b>Policy</b></p> <p>Mandate nutrition education within the school health and wellness curriculum for grades 10-12.</p>
<p><b>14) Food skills education provided to children in schools</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Food skills are a required component of the curriculum at the junior high level.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Many districts are offering food skills education for Grades 7-9 students, but this is not mandatory or available in all schools.</p>	<b>D</b>	<p><b>Practice</b></p> <ul style="list-style-type: none"> <li>• Monitor and advocate for the delivery of food skills education to all children at the junior high level.</li> <li>• Make food preparation classes available to children, their parents, and child caregivers<sup>434</sup>.</li> </ul> <p><b>Policy</b></p> <p>Make food skills education mandatory at the junior high level.</p>
<p><b>15) Nutrition education and training provided to teachers</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Nutrition education and training is a requirement for teachers.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Alberta does not require teachers to participate in nutrition education training; however, changes are coming in at least one University.</p>	<b>D</b>	<p><b>Practice</b></p> <p>Encourage all post-secondary institutions to begin integrating nutrition education into teacher training.</p> <p><b>Policy</b></p> <p>Mandate nutrition-specific training and Community School Health as part of all new teachers' training and ongoing professional development in Alberta.</p>
<p><b>16) Nutrition education and training provided to childcare workers</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Nutrition education and training is a requirement for childcare workers.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Alberta does not require childcare workers to participate in nutrition education training.</p>	<b>D</b>	<p><b>Policy</b></p> <p>Mandate nutrition-specific training as part of training and ongoing professional development of childcare workers in Alberta.</p>



## Economic Environment

OVERALL GRADE



INDICATOR	GRADE	RECOMMENDATIONS
<p><b>17) Lower prices for healthy foods</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Basic groceries are exempt from point-of-sale taxes.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Because basic groceries are not taxed, healthy foods are generally exempt.</p>	<b>A</b>	<p><b>Practice</b></p> <p>Continue to exclude basic groceries from point-of-sale taxes.</p>
<p><b>18) Higher prices for unhealthy foods</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>A minimum excise tax of \$0.05/100 mL is applied to sugar-sweetened beverages sold in any form.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Despite support from policy influencers, Alberta does not currently have an excise tax on sugar-sweetened beverages.</p>	<b>F</b>	<p><b>Practice</b></p> <p>Promote public and policy-maker understanding and support of a sugar-sweetened beverages tax.</p> <p><b>Policy</b></p> <p>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><b>19) Affordable prices for healthy foods in rural, remote, and northern areas</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Subsidies to improve access to healthy food in rural, remote, and northern communities to enhance affordability for local consumers.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>There are no provincial initiatives to increase the availability and affordability of nutritious foods in rural, remote and northern areas.</p>	<b>D+</b>	<p><b>Practice</b></p> <ul style="list-style-type: none"> <li>Create provincial initiatives to increase the availability and accessibility of nutritious foods in remote and northern areas.</li> <li>Expand the Nutrition North Canada program to include more remote Alberta communities.</li> </ul> <p><b>Policy</b></p> <p>Provide subsidies directly to consumers increase the affordability of healthy food in rural, remote, and Northern communities.</p>
<p><b>20) Incentives exist for industry production and sales of healthy foods</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>The proportion of corporate revenues earned via sales is taxed relative to its health profile. (e.g. healthy food is taxed at lower rate and unhealthy food is taxed at a higher rate)</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Lower taxation of corporate revenues from healthy food sales is not being used as an incentive for industry to increase production or sales of healthy foods.</p>	<b>F</b>	<p><b>Policy</b></p> <p>Provide incentives via differential taxation of revenues from healthy food sales and unhealthy food sales.</p>
<p><b>21) Reduce household food insecurity</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Reduce the proportion of children living in food insecure households by 15% over three years.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Current household food insecurity data were released too late for analysis and proper assessment in this area. The Expert Working Group was unable to assign a grade for this indicator.</p>	<b>INC</b>	<p><b>Research</b></p> <p>Mandated surveillance of household food insecurity and quicker release of data is urgently needed.</p> <p><b>Policy</b></p> <p>Develop income-based (not food-based) programs and policies to tackle childhood food insecurity in Alberta.</p>



INDICATOR	GRADE	RECOMMENDATIONS
<p><b>22) Reduce households with children who rely on charity for food</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Reduce the proportion of households with children that access food banks by 15% over three years.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>According to the 2016 HungerCount<sup>8</sup>, the number of children and youth between 0-17 years of age assisted by food banks increased by 45.6%.</p>	<b>F</b>	<p><b>Policy</b></p> <ul style="list-style-type: none"> <li>• Increase social assistance rate and minimum wage to ensure income is adequate for healthy foods to be affordable.</li> <li>• Provide low-income households access to benefits currently only available to those on social assistance (e.g. child care subsidies, affordable housing supplements)<sup>437</sup>.</li> </ul>
<p><b>23) Nutritious Food Basket is affordable</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Social assistance rate and minimum wage provide sufficient funds to purchase the contents of a Nutritious Food Basket.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>Money necessary to purchase a Nutritious Food Basket is consumed by other basic living costs such as shelter, childcare, and transportation for many families in Alberta.</p>	<b>F</b>	<p><b>Research</b></p> <p>Measure the cost of a Nutritious Food Basket in remote Alberta communities to determine affordability.</p> <p><b>Policy</b></p> <p>Raise social assistance rates and minimum wage to increase household income to enable purchase of a Nutritious Food Basket.</p>
<p><b>24) Subsidized fruit and vegetable subscription program in schools</b></p> <p>➔ <b>BENCHMARK:</b></p> <p>Children in elementary school receive a free or subsidized fruit or vegetable each day.</p> <p>➔ <b>KEY FINDINGS:</b></p> <p>A universal fruit and vegetable subscription program does not exist in Alberta; however, many initiatives, government and non-government funded, provide healthy food to students at targeted schools.</p>	<b>C+</b>	<p><b>Research</b></p> <p>Assess the impact of existing programs providing subsidized fruit and vegetable in schools in Alberta.</p> <p><b>Practice</b></p> <p>Develop province-wide strategies for providing subsidized fruit and vegetables to elementary students.</p> <p><b>Policy</b></p> <p>Commit sustainable government funding to existing fruit and vegetable subscription programs and designate funding for new programs to increase reach across Alberta.</p>



## Social Environment

OVERALL GRADE **C**

INDICATOR	GRADE	RECOMMENDATIONS
<p><b>25) Weight bias is avoided</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Weight bias is explicitly addressed in schools and childcare.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>The K-9 Health and Life Skills and high school CALM programs allow teachers the flexibility to discuss topics related to weight bias, but it is not a required component of the curriculum.</p>	<b>D</b>	<p><b>Research</b></p> <ul style="list-style-type: none"> <li>Explore the impact of programs aimed at reducing weight bias within school and childcare communities.</li> <li>Involve people with obesity in researching and developing weight bias reduction messages<sup>438</sup>.</li> </ul> <p><b>Practice</b></p> <ul style="list-style-type: none"> <li>Incorporate weight bias education into pre-service teacher and childcare worker education programs.</li> <li>Integrate weight bias reduction strategies into existing programs related to nutrition, physical activity, and bullying in schools and childcare<sup>438</sup>.</li> <li>Promote body size diversity and body inclusivity<sup>438</sup>.</li> </ul> <p><b>Policy</b></p> <p>Incorporate weight bias into the School Act and provincial childcare policies, ensuring that weight bias is addressed in all anti-bullying policies in Alberta.</p>
<p><b>26) Corporations have strong nutrition-related commitments and actions</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Most corporations in the Access to Nutrition Index with Canadian operations achieve a score of <math>\geq 5.0</math> out of 10.0.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Recent data on the Access to Nutrition Index is needed for proper assessment in this area. The Expert Working Group was unable to assign a grade for this indicator.</p>	<b>INC</b>	<p><b>Practice</b></p> <p>Provide incentives to industry to increase commitment and actions related to delivering healthy food choices and responsibility for influencing consumers' behaviour.</p>
<p><b>27) Breastfeeding is supported in public buildings</b></p> <p>→ <b>BENCHMARK:</b></p> <p>All public buildings are required to permit and promote breastfeeding.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>While breastfeeding in public is protected, more public buildings need to promote breastfeeding.</p>	<b>B</b>	<p><b>Research</b></p> <p>Understand ways to reduce stigma and barriers to breastfeeding in public places.</p> <p><b>Practice</b></p> <p>Create a culture where breastfeeding is normalized.</p> <p><b>Policy</b></p> <p>All public buildings have a mandate to promote and permit breastfeeding, so that women wanting to breastfeed can do so comfortably.</p>
<p><b>28) Breastfeeding is supported in hospitals</b></p> <p>→ <b>BENCHMARK:</b></p> <p>All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Only one hospital in Alberta has achieved these standards, although a few are pursuing them.</p> <p>Current professional education strategies align with elements of the WHO Baby Friendly Initiative.</p>	<b>C</b>	<p><b>Research</b></p> <p>Assess barriers to pursuing WHO Baby-Friendly designation in Alberta's hospitals.</p> <p><b>Practice</b></p> <p>Continue to foster a supportive breastfeeding culture in hospitals.</p> <p><b>Policy</b></p> <p>Mandate a province-wide policy that requires hospitals to support breastfeeding, including monitoring and evaluating adherence.</p>



## Political Environment

OVERALL GRADE

B

INDICATOR	GRADE	RECOMMENDATIONS
<p><b>29) Healthy living and obesity prevention strategy/action plan exists and includes eating behaviours and body weight targets</b></p> <p>→ <b>BENCHMARK:</b></p> <p>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.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>While some programs exist, sustainable strategies are needed to fulfill the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018<sup>10</sup>.</p>	C	<p><b>Practice</b></p> <p>Continue to fund strategic priority areas identified in the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018<sup>439</sup>.</p> <p><b>Policy</b></p> <ul style="list-style-type: none"> <li>• Create universal, sustainable childhood healthy living programs.</li> <li>• Create population targets for eating behaviours and body weights of children and youth.</li> </ul>
<p><b>30) Health-in-All policies</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>While government departments do not routinely incorporate Health Impact Assessments on policies affecting child health, they have started to test and plan for implementation of such assessments.</p>	D	<p><b>Practice</b></p> <p>Include Health Impact Assessments in all government policies with potential to impact child health.</p> <p><b>Policy</b></p> <p>Require Alberta government departments and agencies to conduct Health Impact Assessments before proposing laws or regulations.</p>
<p><b>31) Childhood health promotion activities adequately funded</b></p> <p>→ <b>BENCHMARK:</b></p> <p>At least 1% of the Alberta provincial health budget is dedicated to implementation of the government's healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>The Government of Alberta funds several nutrition and health-related programs and initiatives; however, it is unclear what proportion of the health budget is spent on childhood healthy living and obesity prevention.</p>	INC	<p><b>Research</b></p> <p>Determine whether 1% of the provincial health budget is dedicated to implementation of the government's healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.</p> <p><b>Practice</b></p> <ul style="list-style-type: none"> <li>• Continue to fund healthy living and obesity prevention strategies.</li> <li>• Create a Health Promotion Foundation such as called for by Wellness Alberta to consolidate and track the amount of funding dedicated to children's healthy living and obesity prevention programs<sup>440,441</sup>.</li> </ul> <p><b>Policy</b></p> <p>Mandate that all government ministries report funds spent on healthy living and obesity prevention for children.</p>
<p><b>32) Compliance monitoring of policies and actions to improve children's eating behaviours and body weights</b></p> <p>→ <b>BENCHMARK:</b></p> <p>Mechanisms are in place to monitor adherence to mandated nutrition policies.</p> <p>→ <b>KEY FINDINGS:</b></p> <p>Alberta does not have mandatory school nutrition policies or a provincial monitoring system in place to track adherence. However, the Alberta Healthy School Community Wellness Fund Reporting and Reflection Tool shows movement toward monitoring.</p>	C	<p><b>Practice</b></p> <p>Engage key stakeholders to participate in reporting practices.</p> <p><b>Policy</b></p> <p>Establish system-wide monitoring of adherence to mandated nutrition policies.</p>

INDICATOR	GRADE	RECOMMENDATIONS
<p><b>33) Children's eating behaviours and body weights are regularly assessed</b></p> <p>→ <b>BENCHMARK:</b> Ongoing population-level surveillance of children's eating behaviours and body weights exists.</p> <p>→ <b>KEY FINDINGS:</b> Alberta Health Services zones conduct surveillance of height and weight measurements for children aged 0-6 years with an aim to increase availability and usage of this data.</p>	A	<p><b>Practice</b> Continue to work toward increasing data visibility/ accessibility so that practitioners and researchers can analyze and report on children's eating behaviours and body weights more regularly.</p> <p><b>Policy</b> Create provincial initiatives to conduct surveillance of height and weight measurements for children aged 7-18 years.</p>
<p><b>34) Resources are available -to support the government's childhood healthy living and obesity prevention strategy/action plan</b></p> <p>→ <b>BENCHMARK:</b> A website and other resources exist to support programs and initiatives of the childhood healthy living and obesity prevention strategy/action plan.</p> <p>→ <b>KEY FINDINGS:</b> Various online resources and media campaigns exist for residents of Alberta that support the childhood healthy living and obesity prevention strategy/action plan.</p>	A	<p><b>Practice</b> Increase public knowledge of resources available.</p>
<p><b>35) Food rating system and dietary guidelines for foods served to children exists</b></p> <p>→ <b>BENCHMARK:</b> There is an evidence-based food rating system and dietary guidelines for foods served to children and tools to support their application.</p> <p>→ <b>KEY FINDINGS:</b> In 2008, the ANGKY were released to support the provision of nutritious foods and beverages in child-oriented settings. To date there is limited mandatory implementation.</p>	A	<p><b>Research</b> Investigate why there are low implementation rates of the ANGKY.</p> <p><b>Practice</b> Increase adoption and implementation of ANGKY by target audiences (ie. schools, recreation facilities).</p> <p><b>Policy</b> Mandate the implementation of existing rating systems and guidelines.</p>
<p><b>36) Support to assist the public and private sectors to comply with nutrition policies</b></p> <p>→ <b>BENCHMARK:</b> Support (delivered by qualified personnel) is available free of charge to assist the public and private sectors to comply with nutrition policies.</p> <p>→ <b>KEY FINDINGS:</b> Various government organizations and NGOs with dedicated personnel exist in Alberta to steward childhood healthy living and obesity prevention action, including support (to schools etc.) to adhere to policies such as the ANGKY.</p>	A	<p><b>Practice</b></p> <ul style="list-style-type: none"> <li>• Increase the capacity of public health dietitians to assist public and private sectors.</li> <li>• Integrate supports to assist the public and private sectors to comply with nutrition policies at the system level for more strategic action.</li> </ul>

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