POWER UP

ALBERTA'S 2016 NUTRITION REPORT CARD

On Food Environments for Children & Youth

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Healthy Eating in Canada

Why is Healthy Eating Important?

Many studies highlight the benefits of healthy eating for children and youth. In fact, healthy diets can help to prevent childhood obesity and chronic disease.[2-4] Eating patterns established early in life are often sustained into adulthood,[5-7] and children with overweight or obesity are more likely to have unhealthy body weights into their adult lives.[8]

Nearly one-third (approximately 1.6 million) of Canadian children between the ages of five and 17 years were classified as overweight or obese between 2009 and 2011.[9] In the past, obesity-related chronic diseases were usually seen only in older adults. Now, these diseases are becoming more common in children as well.[4]

> *Since 1980, there has been a three-fold increase in the proportion of children with obesity*[10]

It's about more than simple food choices.

Healthy eating is more than an individual choice and may be influenced by the environments in which we live.[11] For example, the community nutrition environment, defined as the number, type, location, and accessibility of food stores, can influence individuals' food choices, for better or for worse.[12] 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.[11-15]

How can we improve children's wellbeing?

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.[13,16] Although policies and actions can be difficult to change due to competing interests,[13,17] governments have the ability to ensure environments provide and encourage healthy food choices, thereby protecting and promoting child health.[4,16]

Alberta's 2016 Nutrition Report Card on Food Environments for Children and Youth contributes to understanding the current status and impact of nutrition-related policies and actions in Alberta by highlighting where we are succeeding, and where more work may be needed to support the health of children and youth.[1]

Alberta's 2016 Nutrition Report Card on Food Environments for Children and Youth

What is Alberta's 2016 Nutrition Report Card on Food Environments for Children and Youth ?

The Report Card is the second annual assessment of how Alberta's current food environments and nutrition policies support or create barriers to improving children's eating behaviours and body weights.

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 Report Card.[1]

In 2016, an Expert Working Group of 13 academic experts and representatives from non-governmental organizations (NGOs) from across Canada with expertise related to childhood obesity, eating behaviours, food environments, and nutrition policy convened to evaluate the available evidence for Alberta's second Report Card. Slight adjustments were made to the 2015 grading scheme to better capture Alberta's food environments. Thirty-three indicators were graded in 2016's Report Card.

What does the Report Card measure?

The Report Card assesses how Alberta's current food environment and nutrition policies help or hinder children's eating behaviours and health.

How can the Report Card improve children's wellbeing?

Our aim through this assessment is to increase public, practitioner, and policy maker awareness of the relevance and status of food environments for children and youth, with a focus on health promotion and obesity prevention. The Report Card serves as a tool for all levels of government and NGOs, researchers, corporations, and foundations to support and develop enhanced programming and policies, as well as to identify areas that require further action.

4

The purpose of the Report Card is to:

MONITOR

We have outlined a set of policy-relevant benchmarks that can be used to gauge the state of children's food environments and progress in developing policies over time.

ENGAGE

We hope to stimulate a provincial and national dialogue on the state of children's food environments and related policies.

INFORM

We communicate findings of the Report Card to the public, practitioners, and decision makers to increase awareness of how current food environments and policies limit or support children's opportunities to enjoy healthy foods.

STUDY

We have outlined a policy-relevant research agenda related to children's food environments. We gather evidence and resources, and produce toolkits on obesity-related policy specific to Canada, and share what we learn.

Framework and Organization

The Report Card used the conceptual framework developed by Brennan and colleagues[18] as an overall guide. This framework depicts how policies and environments can interact and shape health-related behaviours and body weights of children. The framework suggests there are four micro-environments (physical, communication, economic, and social) that each have embedded policies and actions. To understand the infrastructure that supports policies and actions within micro-environments, the political macro-environment was also examined.[1,13] The figure below depicts the different types of food environments that may influence the eating behaviours of children and youth,[1,14,18] and lists examples of each.[1]

MICRO-ENVIRONMENTS

Physical

The physical environment refers to what is available in a variety of food outlets[13] including restaurants, supermarkets,[19] schools,[20] worksites,[21] as well as community, sports and arts venues.[22,23]

Communication

The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing,[24,25] 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.[13] 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,[26] financial support for health promotion programs,[25] and healthy food purchasing policies and practices through sponsorship[22] can affect food choices.[13]

Social

The social environment refers to the attitudes, beliefs and values of a community or society.[13] It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models,[13] 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.[1,25]

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

Economic Categories

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

Social Categories

- Weight bias
- Corporate responsibility
- Breastfeeding support

Political Categories

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

FIGURE 1. Adapted conceptual framework highlighting key categories embedded within each environment[1,14,18]

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.[27] Examples of each subdivision are described below.

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

Selection of Indicators and Benchmarks

Indicators are key areas from each of the environments in the theoretical framework where it is important to take action to improve children's eating behaviours. Indicators were selected based on the following key considerations.[1] Indicators had to:

- Relate to policies or actions with the potential to influence eating behaviours and/or body weights of children, their families, and communities
- Be policy-relevant and amenable to government influence
- Be feasible targets for data collection, and be quantifiable and replicable across settings
- Be supported by evidence of effectiveness and population-level impact (e.g. peer-reviewed studies showing the indicators influence eating behaviours and/or body weights of children)
- Highlight opportunities for intervention and research

Benchmarks[1] are specific targets that can be taken for each indicator. They are goals that may help to improve children's eating behaviours if they are met. Benchmarks are not intended to fully measure all aspects of each indicator. Rather, they are intended to provide standards that are:

- Measurable and realistically achievable
- Understandable by non-academic audiences
- Accurate at gauging the strength of current policies and actions
- Capable of highlighting opportunities for intervention and research

Grading Scheme

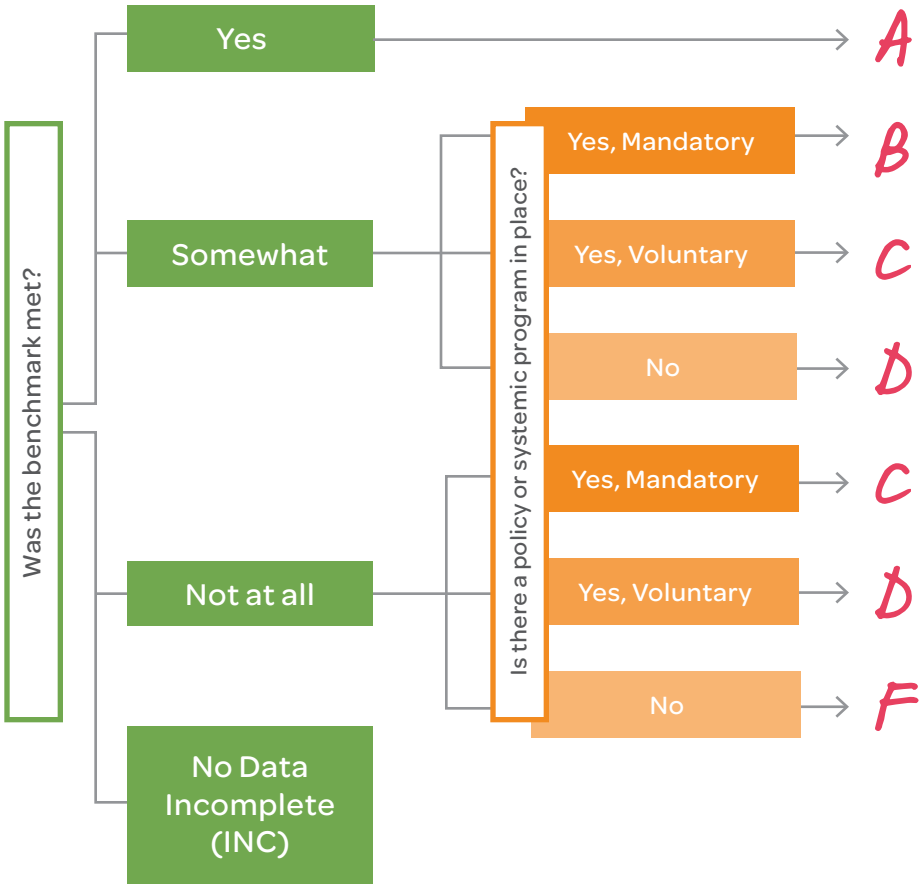
Based upon the best available scientific knowledge and data on policies, programs, and actions relevant to each indicator, the 2016 Expert Working Group used the revised (when compared to 2015) grading scheme illustrated below to assign a grade to each indicator. The grading scheme followed a series of four 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?



For grades A to F, consider whether the policies, programs, or actions address high risk groups such as Aboriginal, minority, and low socioeconomic status groups.

If yes, add: " + "

A "-" can be assigned based upon judgment by the Expert Working Group in cases, for example, when supports and/or monitoring systems existed, but were discontinued in recent years.

FIGURE 2. Grading system flow-chart[1]

The Grading Process

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

STEP 1: Has the benchmark been met?

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

TABLE 1: Example of a Benchmark

A minimum excise tax of $0.05/mL is applied to sugar-sweetened beverages sold in any form
A jurisdiction that levies a $0.05/100mL tax on sugar-sweetened beverages meets the benchmark.
A jurisdiction that levies a $0.03/100mL tax on sugar-sweetened beverages does not meet the benchmark.

STEP 2: Are policies/systemic programs in place? If so, are they mandatory or voluntary?

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

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

STEP 3: Are high-risk groups addressed?

High-risk groups include the following groups: Aboriginal, minority, and socioeconomically disadvantaged groups.

Alberta's 2016 Nutrition Report Card:

The grades are in!

What final grade did Alberta receive on the 2016 Nutrition Report Card?

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

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POWER UP

POWER UP! is a team of researchers, practitioners and decision makers who have come together to gather and share evidence on chronic disease prevention with Canadians. We provide leadership, tools and support to decision makers, researchers, practitioners, and the public, with the aim of supporting policy for a healthy Canada. We are a Coalitions Linking Action & Science for Prevention (CLASP) initiative of the Canadian Partnership Against Cancer (CPAC).

POWER UP! partners played a critical role in the research, development, and communication of Alberta's 2016 Nutrition Report Card on Food Environments for Children and Youth.

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

APCCP
Alberta Policy Coalition for Chronic Disease Prevention

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

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UNIVERSITY OF ALBERTA
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To subscribe to our newsletter, email us at: powerup@ualberta.ca

HELP US DO OUR JOB BETTER

The POWER UP! Nutrition Report Card is based on the best available data on food environments and nutrition from the previous calendar year. If you have data not currently in the Report Card that could inform the grade for one or more indicators, please contact us.

GET A COPY

A summary of Alberta's 2016 Nutrition Report Card is also available online at: www.powerupforhealth.ca, Canada's one stop shop for resources and tools on obesity and chronic disease prevention.

POWER UP!

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Physical Environment

This environment refers to the types of foods and beverages available in different outlets[13] such as restaurants, supermarkets,[19] schools,[20] worksites[21] and community sports and arts venues.[22, 23]

OVERALL GRADE

D

CATEGORY	GRADE
Food Availability Within Settings	C
Neighbourhood Availability of Restaurants and Food Stores	D
Food Composition	F

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
High Availability of Healthy Food in School Settings.	C
High Availability of Healthy Food in Childcare Settings.	INC
High Availability of Healthy Food in Recreation Facilities.	D

WHAT RESEARCH SUGGESTS

Consumption of sugar-sweetened beverages,[28-31] fast food,[32-35] and energy-dense, nutrient poor foods (e.g. deep fried foods, high-fat snack foods, candy)[36,37] is associated with poor nutrition, and increased overweight and obesity.[33] Community food environments influence eating behaviour by facilitating access to healthy nutrient-rich foods, or by creating obesogenic environments that promote consumption of unhealthy foods.[33]

Healthy food and beverage policies and programs within children's environments, such as school, childcare and community settings can positively influence eating behaviours.[38-43] The likelihood of children selecting healthy food and beverage items tends to decrease in the presence of tasty, less healthy options.[36,44-49] In fact, students who have no (or limited) access to unhealthy foods and beverages through snack bars,[50-52] vending machines,[52-54] convenience stores or fast-food restaurants[54] have better eating behaviours compared to unrestricted students. Introducing nutrition policy standards to increase the availability of healthier foods and beverages and reduce availability of less healthy items has shown promise for positive behaviour change.[52,55-58] A World Health Organization (WHO) report cited initiatives to increase availability of fruits and vegetables as among promising interventions for childhood obesity prevention.[59] Furthermore, targeted intervention programs in schools have been shown to increase access to fruits and vegetables for vulnerable populations, such as families with low household incomes.[41]

Examples of Recommended Policies and Practices

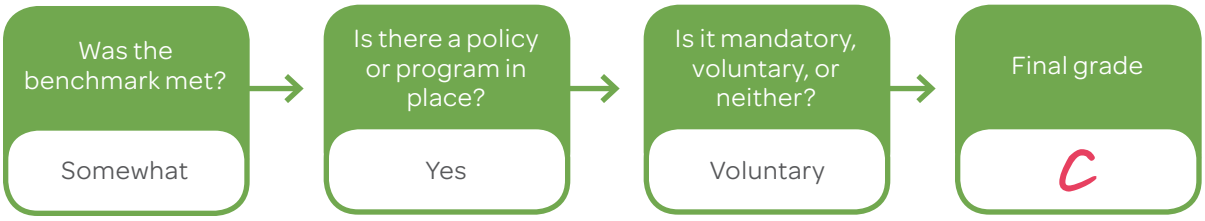
- The Ontario Healthy Kids Panel recommended that school food and beverage policies apply to all publicly funded, subsidized or regulated settings where children learn and play, including childcare settings and community sport and recreation facilities.[60]
- In the United States, the Centers for Disease Control's (CDC) Prevention Status Reports requires that state nutrition policies for foods and beverages sold/provided by state government agencies apply to at least 90% of agencies and provide quantifiable, minimum nutrition standards for all foods sold/provided to achieve a green rating.[61] Specific to secondary schools, the Prevention Status Report's green rating requires that ≥ 66.6% of secondary schools do not sell 5 types of less nutritious foods and beverages (chocolate, candy, salty high fat snacks, cookies and other baked high fat goods, soda or fruit drinks) in selected venues.[61]

1 INDICATOR

High Availability of Healthy Food in School Settings

BENCHMARK

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



KEY FINDINGS

1. The Healthy School Planner (HSP) is a collaborative effort between the Pan-Canadian Joint Consortium for School Health and the Propel Centre for Population Health Impact team at the University of Waterloo. The HSP is a free tool schools across Canada can use to assess the health of their school and build a plan for improvements.[62] The HSP is based on the Pan-Canadian Joint Consortium for School Health (JCSH) Comprehensive School Health framework,--an internationally recognized framework for supporting improvements in students achievement while addressing school health in a planned, integrated, and holistic way.[63]

   Based on responses to the assessment questions, schools are given a level within the 4-point scale on the rubric for each indicator.

TABLE 2: Summary of Healthy Eating Detailed Module Data from schools in Alberta (n=22 schools; January 1, 2013 to June 8, 2016)

NOTE: any school completing this module would have already identified healthy eating as an area of need – it therefore does not include those schools that are doing well with healthy eating

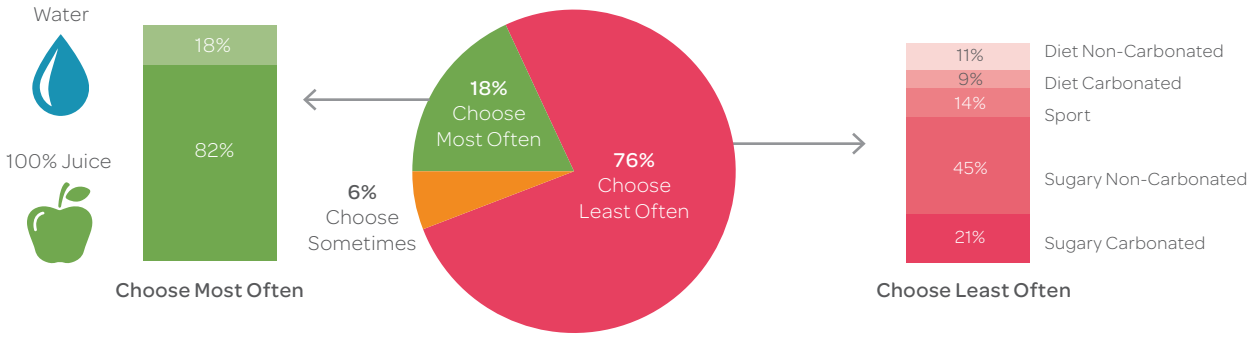
SCHOOL AND PHYSICAL ENVIRONMENT				
The school offers healthier foods and beverages (lower fat, sugar and sodium; higher fibre) more often than unhealthy foods and beverages.	Our school offers unhealthy foods and beverages more often than healthy foods and beverages.	Our school rarely offers healthier foods and beverages more often than unhealthy foods and beverages.	Our school sometimes offers healthier foods and beverages more often than unhealthy foods and beverages.	Our school only offers healthy foods and beverages.
	4 (18.2%)	4 (18.2%)	4 (18.2%)	4 (18.2%)

The majority of schools indicate that the food offered is "mostly" or "only" healthy. However, a small study showed that less healthy foods, like sugary drinks, were commonly found in school vending machines.

2. The COMPASS study assessed food and beverages offered in 9 Alberta schools in the 2014-15 school year.[64]

- Six of seven schools with a cafeteria had daily healthy specials. Healthy food choices cost the same as unhealthy food choices in five of these seven schools. Healthy food choices cost more than unhealthy food choices in two of seven 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. One vending machine at one school offered fruits and vegetables.
- The pie chart in Figure 3 highlights the contents of beverages sold in vending machines in relation to the Alberta Nutrition Guidelines for Children and Youth (ANGCY). The bar graphs on either side further breakdown the type of beverages offered aligning with either the "Choose Most Often" or "Choose Least Often" category.

FIGURE 3: Proportion of Beverages by the ANGCY in School Vending Machines[64]



*"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.

3. APCCP Principals' Perceptions of the School Food Environment in Alberta.[65]

Objective: "To capture the current landscape of school food in the province of Alberta during the 2014/15 academic year". Questions were asked about school food programs/services, school food policies and administrative procedures, and school demographic information.

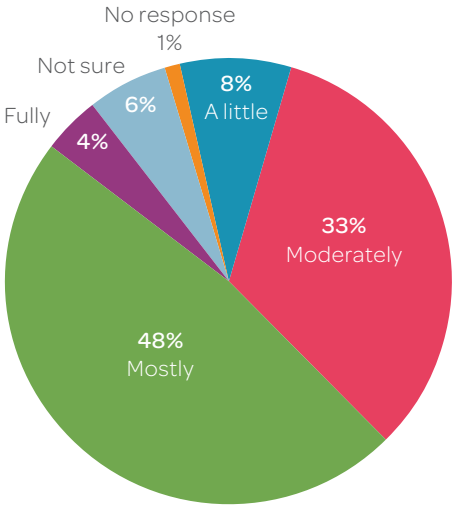
Data collection methods: 54 school boards across Alberta were contacted and the survey was sent to 1350 school principals of K-12 public, separate, and Francophone schools. The response rate was 27% (363 completed surveys).

- 40% (144) of participants reported that they mandate the ANGCY.
- 33% (119) of participants reported that selling unhealthy food is restricted at school events.
- 55% (199) of participants reported that there is a restriction of sugar-sweetened beverages sold at the school.

1

FIGURE 4: Principals' perception of food environment in schools in Alberta

What percent of foods* in your school meet the definition of "Choose Most Often" foods based on the ANGCY? (n-365)



A little: >25% of foods are "Choose Most Often"

Moderately: >50% of foods are "Choose Most Often"

Mostly: >75%of foods are "Choose Most Often"

Fully: 100% of foods are "Choose Most Often"

POLICIES/SYSTEMIC PROGRAMS

TABLE 3. Examples of available mandatory or voluntary policies and systemic programs applicable across settings

Type of Policy or Systemic Program	Setting Applicable			
	Mandatory / Voluntary / Neither	School	Childcare	Community
Alberta Nutrition Guidelines for Children and Youth[66] Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food.[66] [View Here]	Voluntary policy across all settings	✔	✔	✔
Communities ChooseWell[67] Capacity-building initiative that promotes and supports the development of community programs, policies and partnerships that foster wellness through healthy eating and active living.[67] [View Here]	Voluntary systemic program			✔
Health Promotion Coordinators (HPC)[68] Dedicated personnel supporting plans and activities to promote health in school-aged children through eating well and being physically activity where they live, learn, and play.[68] [View Here]	Mandatory program	✔		
Alberta Healthy School Communities Wellness Fund[69] Provides financial and facilitated support for school communities to create healthy environments for their students.[69] [View Here]	Voluntary systemic program	✔		
Framework for Comprehensive School Health (CSH) approach[70] 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 Assess school food environments on an annual or regular basis.

Practice Monitor compliance to food and beverage policies/guidelines.

Policy Mandate ANGCY in all Alberta schools and encourage continued government funding for Comprehensive School Health Approach.

2 INDICATOR

High Availability of Healthy Food in Childcare Settings

BENCHMARK

Approximately 3/4 of foods available in childcare settings are healthy.

Was the benchmark met?	Final grade
Incomplete Data	INC

Due to the limited information on the foods served in childcare settings the Expert Working Group was unable to provide a grade for this indicator.

KEY FINDINGS

Nutrition is not addressed in detail in the Alberta Child Care Accreditation Standards other than the statement: "Respect children's dietary requirements for individual and cultural needs".[71]

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…."[72]

One 2012 study evaluated the meals and snacks provided to children over 2-5 weeks at 2 childcare centres. This study used the ANGCY to classify foods.[73] Out of 332 foods, 82% of the foods offered in the 2 childcare centres were "Choose Most Often."[73] Although positive, findings are limited to 2 childcare centres and generalizations cannot be made.

We are not aware of any more recent data on the availability of healthy foods in childcare settings. However, a cross sectoral 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 childcare providers; and increase the positive role modelling by child care staff, as well as parents in the home." (Healthy Eating Environments in Childcare Provincial Advisory Committee).

POLICIES/SYSTEMIC PROGRAMS

See table 3 pg. 19

RECOMMENDATIONS

Research	Document the availability of healthy and unhealthy foods in childcare settings.
Practice	Educate managers and staff regarding implementation of the ANGCY.
Policy	Mandate or create incentives for implementation of the ANGCY in all Alberta childcare settings.

3 INDICATOR

High Availability of Healthy Food in Recreation Facilities

BENCHMARK

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

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

KEY FINDINGS

Eat, Play, Live: Recreation Facility Project

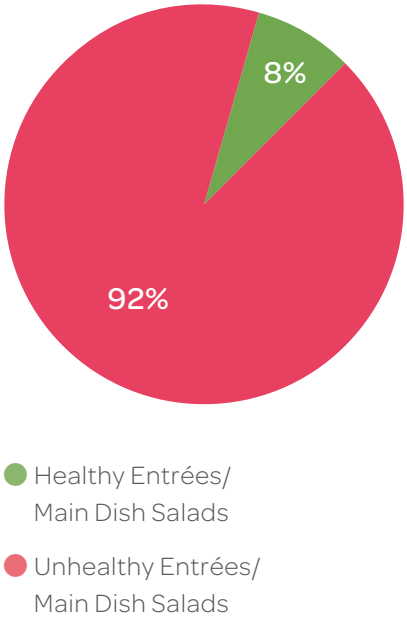
The Eat Play Live (EPL) Project is a cross-Canada research study investigating the impacts of provincial nutrition guidelines and capacity-building on food environments in recreation facilities. EPL aims to integrate healthy food approaches into the day-to-day business of recreation facilities and encourage the sale of healthy food and beverages.

From February to April 2016, the Alberta EPL research team used observational audits to collect baseline data on the types of foods and beverages sold in concessions and vending machines in 11 publically funded recreation facilities.

Concessions

- Researchers recorded entrées and main dish salads available in 13 concessions in 9 facilities (2/11 facilities had 0 concessions).
- The healthfulness of the entrees and main dish salads were assessed using the following criteria:
- To be counted as healthy entrée, it must: (1) be whole grain (if bread, pasta, or rice is part of the dish), (2) have a protein that is baked, broiled, boiled, grilled, or roasted, (3) have 1 serving of vegetables, and (4) have no added high fat sauce or ingredients.
- To be counted as a healthy main dish salad, it must: (1) have a non-fried protein, (2) be dressed with low fat/no fat dressing, or not dressed, with low fat dressing available, and (3) have no more than 2 high fat additions (e.g. avocado, bacon). Mayonnaise based salads, salads with fried meat, or in a fried shell did not count.

FIGURE 5: Healthfulness of foods (n=147) in Alberta recreation facilities



3

Vending Machines

- Researchers recorded food and beverages for sale in 25 randomly selected vending machines in 11 facilities.
- In each facility, up to 5 vending machines (2 beverage, 2 dry snack, and 1 frozen snack) were randomly selected to be audited per facility depending on the total number of vending machines in the facility.
- Foods and beverages in each randomly selected machine were recorded during a site visit. The products were subsequently analyzed according to the ANGCY using nutrition ingredient information from the Brand Name Food List, product labels, and Canadian product websites.

FIGURE 6: Healthfulness of vending machine beverages (n=249) in 11 recreation facilities in Alberta

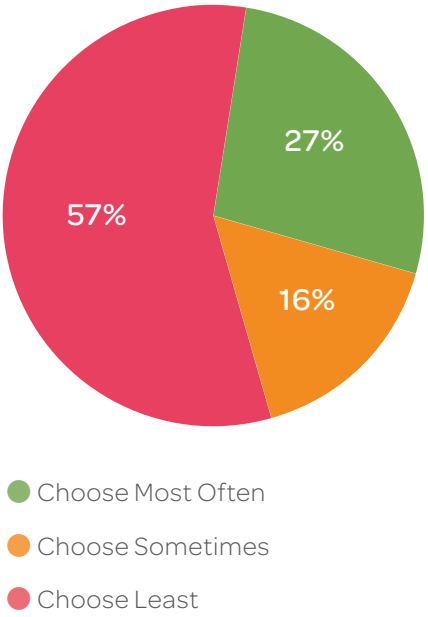
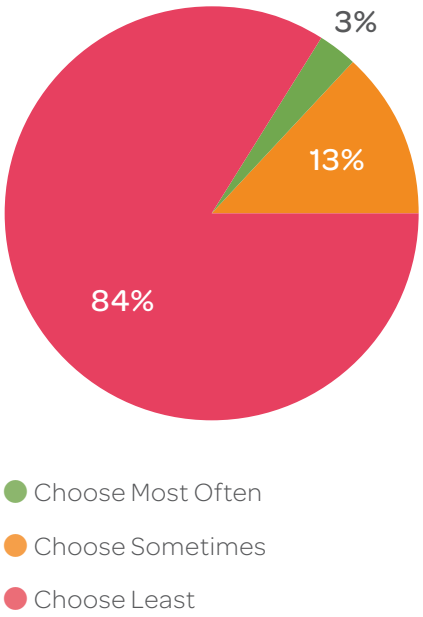


FIGURE 7: Healthfulness of vending machine snacks (n=443) in 11 recreation facilities in Alberta



Most food and beverages offered in Alberta recreational facilities, concessions, and vending machines are not considered healthy.

3

Manufacturer Packaged Beverages and Foods Sold at Concessions

- Researchers recorded manufacturer packaged food and beverages sold at 13 concessions in 9 facilities (2/11 facilities had 0 concessions). These products are items that could be sold in vending machines.
- The products were subsequently analyzed according to the ANGCY using nutrition ingredient information from the Brand Name Food List, product labels, and Canadian product websites.

FIGURE 8: Healthfulness of beverages (n=263) sold in concession in recreation facilities in Alberta

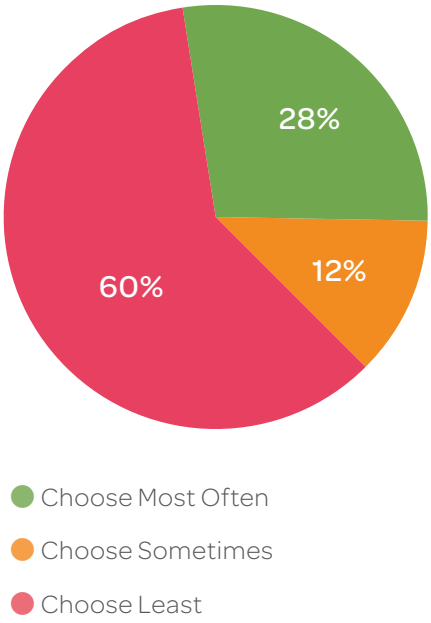
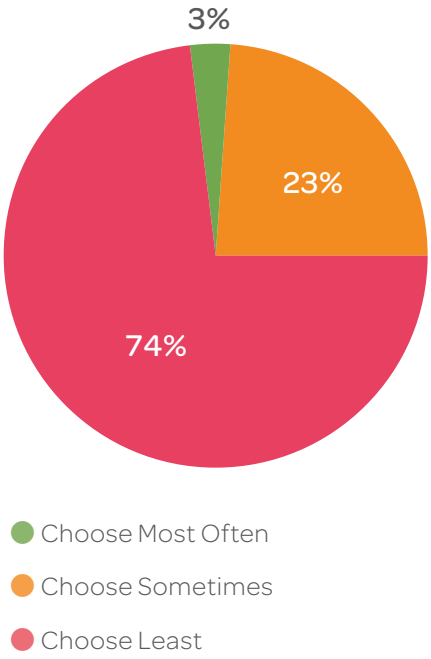


FIGURE 9: Healthfulness of foods (n=147) sold in concession In recreation facilities in Alberta



POLICIES/SYSTEMIC PROGRAMS

See table 3 pg. 19

RECOMMENDATIONS

Research	Research effective strategies to improve the food environment in recreation facilities.
Practice	Educate facility and concession managers about the ANGCY and provide strategies for implementation.
Policy	Mandate and provide incentives for implementing the ANGCY in recreation facilities.

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
High availability of food stores and restaurants selling primarily healthy foods.	D
Limited availability of food stores and restaurants selling primarily unhealthy foods.	D

WHAT RESEARCH SUGGESTS

Evidence suggests that community food environments, including availability of healthy and unhealthy foods within neighbourhoods, influence individual eating behaviours,[33,74,75] and odds of obesity[33]. Several studies have found that availability of healthy foods is higher in grocery stores than in convenience stores.[12,76,77] However, unhealthy foods are widely available in both types of food stores,[78] often with a higher proportion of unhealthy foods.[79] Furthermore, disparities exist in the availability of and access to healthy food stores in neighbourhoods depending on race and ethnicity,[79-83] socioeconomic status (SES) and income level,[79,81-83] and urbanicity[78,79,81] (urban, suburban, rural). Lower neighbourhood availability and access to healthy food was associated with racial and ethnic minority groups,[83] such as Black[79-81], Hispanic[79,81], and Aboriginal communities[82]; low income[79,81,83], and low SES neighbourhoods;[82] and rural[78] and urban (compounded by race, ethnicity, and SES)[81], compared to suburban[79] neighbourhoods. These disparities are often associated with food deserts (areas with low access to affordable healthy foods from grocery stores and supermarkets), and food swamps (areas with an abundance of unhealthy snack foods from convenience stores and fast-food outlets).[82]

Clear differences between the availability of healthy and unhealthy foods in fast food and sit-down restaurants are not as evident,[84] although fast food menus typically have high-calorie,[85] nutritionally poor[86] foods served in large portions.[87] Furthermore, consumption of fast-foods is associated with adverse health outcomes[32,33], and evidence suggests that high fast-food outlet density is associated with increased BMI, while density of sit-down restaurants is negatively associated with obesity.[88]

To improve community food environments, studies have shown the effectiveness of interventions to increase the availability of healthy foods in grocery stores and restaurants in rural communities[89], and in corner stores across urban centres.[90] That said, convenience, grocery, and independent food store owners in rural and low income communities around schools face barriers to providing healthy food.[91,92] Financial and technical assistance,[91] and stakeholder engagement with vendors and schools[92] are strategies suggested to improve availability of healthy foods in these small food stores.

Importantly, children and youth are susceptible to poor eating behaviours[75,93,94] and health outcomes[95,96] based on the community food environment around their homes and schools. Many schools are surrounded by unhealthy food outlets[75,94,95,97] with low availability of healthy food sources.[98] In particular, one study found that over 60% of urban schools had a convenience or fast food outlet within 800

metres.[97] As well, Canadian youth from neighbourhoods with a moderate or high density of chain fast-food outlets (within 1 km of their school) were more likely to be excessive fast-food consumers than were youth from neighbourhoods with no chain fast-food outlets.[93]

A report by Health Canada found that the majority of published Canadian data indicate that there is a significant association between geographic food access and diet-related health outcomes.[99] More specifically:

- Children attending schools in Montreal, Québec located in neighbourhoods with more unhealthy than healthy food establishments had poorer dietary outcomes[100]
- In Edmonton, Alberta, the shorter the distance to healthier food sources from one's residence, the lower the likelihood of obesity.[101]
- In London, Ontario, the proximity of convenience stores to students' homes and the proximity of convenience stores and fast-food outlets to schools were all significantly associated with poorer diet quality.[102]

Examples of Recommended Policies and Practices

- A 2011 Canadian consensus conference recommended using incentives (tax shelters) and constraints (zoning by-laws) to influence the location and distribution of food stores, including fast-food outlets and suppliers of fruits and vegetables.[103]
- 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)."[13]
- INFORMAS also provided an optimal approach to assessment that would involve a comprehensive assessment of the relative density of all food outlets, their proximity to schools and homes and availability/accessibility of healthy and unhealthy foods and beverages within stores.[74]
- The City of Detroit prohibits building fast-food outlets within 500 feet of schools,[104] while South Korea's 'Green Food Zones' restrict sales of unhealthy foods within a 200 metre radius of schools.[105]
- L'Association pour la santé publique du Québec produced the report "The School Zone and Nutrition: Courses of action for the municipal sector", which provides potential data sources and policy options for improving school food environments.[106]

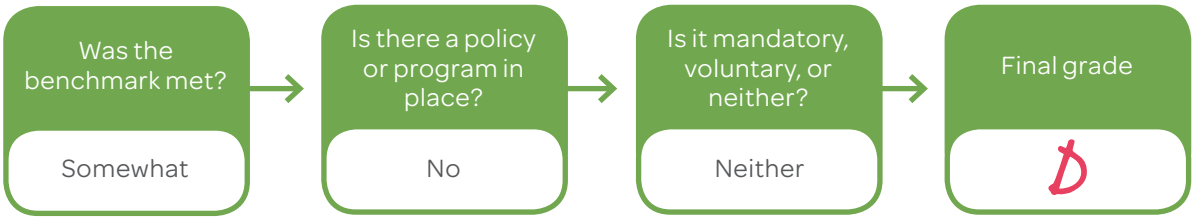
4 INDICATOR

High Availability of Food Stores and Restaurants Selling Primarily Healthy Foods

BENCHMARK

The modified retail food environment index across all census areas is ≥ 10; and

The modified retail food environment index across impoverished census areas is ≥ 7.



KEY FINDINGS

Street addresses for all of the food retailers in Edmonton and Calgary were geocoded. The modified Retail Food Environment Index (mRFEI)[107] formula was calculated according to the proportion of food retailers identified as "healthy" (grocery stores, fruit and vegetable retailers, and 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.[108]

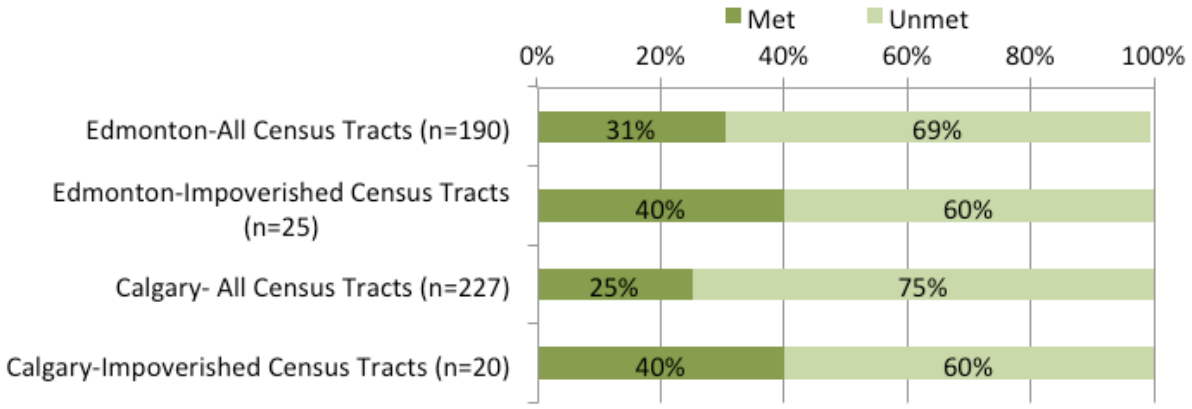
$$\text{mRFEI} = 100 \times \left(\frac{\text{\# Healthy Food Retailers}}{\text{\#Healthy Food Retailers+\# Unhealthy Food Retailers}} \right)$$

Across census tracts with ≤20% low income households,[109] the benchmark was met with an mRFEI of 10 or more. For census tracts with ≥20% low income households,[109] the benchmark was met with an mRFEI of 7 or more. These benchmarks are based on the median modified retail food environment indexes in the US for overall and impoverished census tracts[107]

As highlighted in Figure 10, 31% (n=58) of all census tracts in Edmonton and 25% (n=57) of all census tracts in Calgary met the mRFEI score of ≥ 10. Within impoverished census tracts, 40% (n=10) in Edmonton and 40% (n=8) in Calgary met the mRFEI score of ≥7.

4

FIGURE 10. Percentage of Census tract that met the benchmark modified Retail Food Environment Index score.



POLICIES/SYSTEMIC PROGRAMS

None

RECOMMENDATIONS

Policy	Require municipal zoning policies to address poor retail food environments at the local scale.

Due to the prevalence of fast food restaurants and convenience stores, Edmonton and Calgary do not meet the benchmark for healthy food retailers.

5 INDICATOR

Limited Availability of Food Stores and Restaurants Selling Primarily Unhealthy Foods

BENCHMARK

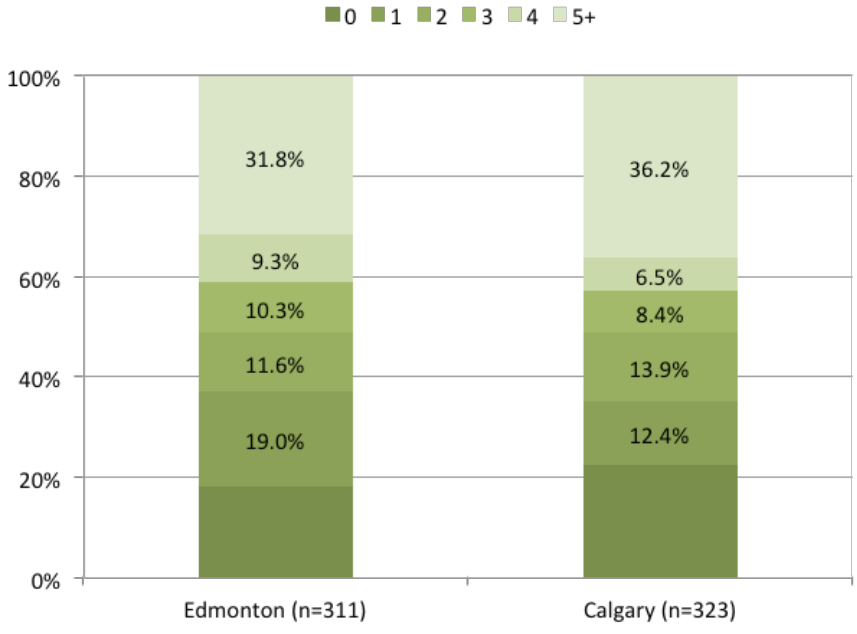
Traditional convenience stores (i.e. not including healthy corner stores) and fast-food outlets not present within 500 m of schools.

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

KEY FINDINGS

Street addresses for all of the schools and all of the food retailers in Edmonton and Calgary were geocoded. Using geostatistical software,[110] we calculated the number of "unhealthy" food retailers (limited-service eating places and convenience stores) according to the mRFEI formula[107] within a 500 m radius of each school.

Figure 11 highlights the number of convenience stores and fast-food restaurants located within 500 m of schools (assumed to sell primarily unhealthy foods). Most schools in Edmonton (81.7%) and Calgary (77.4%) have at least one convenience store or restaurant within 500 metres.



5

POLICIES/SYSTEMIC PROGRAMS

Alberta does not specifically regulate the types of food stores located in proximity to schools.

RECOMMENDATIONS

Research	Determine extent to which proximity of unhealthy food stores influences children's eating behaviours.
Practice	Continue to work with schools to identify strategies to keep students on grounds during breaks, while offering healthy choices at school.
Policy	Require municipal zoning policies to address poor food retail environments around schools.

Most schools in Edmonton (81.7%) and Calgary (77.4%) have at least one convenience store or fast food restaurant within 500m.

Food Composition

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

INDICATOR	GRADE
Foods contain healthful ingredients.	F

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.[111] Evidence suggests that there are many health benefits for children and youth that regularly consume breakfast cereals, including micronutrient intake,[112,113] fruit and milk consumption,[112] reduced fat consumption,[113] healthy eating behaviours (e.g. not skipping breakfast),[112] and decreased likelihood of overweight[112,113] and obesity.[113] Consumption of certain cereals is associated with lower cholesterol (oat-, barley-, or psyllium-based cereals), and improved bowel function (high-fibre, wheat-based cereals).[113] There is some evidence to suggest that consumption of whole-grain or high-fibre breakfast cereals is associated with decreased risk of diabetes and cardiovascular disease.[113]

However, cereals marketed to children often contain more energy, sugar, and sodium compared to non-children's cereals.[111,114] There are differing reports on the fibre and protein content of children's cereals, with some studies suggesting less[111] and some suggesting more[114] 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,[115] and most ads use promotional characters[114] to promote high sugar cereals.[116]
- Increasing whole grain content could improve the nutritional quality of children's cereals, and is a feasible target for intervention given that many companies market cereals on the basis of their whole grain content.[111]
- Fortification of cereal can contribute to intake and adequacy of micronutrients in the diets of children and adolescents.[117] Food composition targets and policies set or endorsed by government are one strategy to improve the healthfulness of children's breakfast cereals.[114]
- The US interagency working group on foods marketed to children designates cereals as high sugar if they contain more than 13 g of sugar per 50 g of product (i.e. 26% of product by weight).[118]

Examples of Recommended Policies and Practices

- INFORMAS proposed a statement of good practice: "There are government systems implemented to ensure that, where practical, processed foods minimize the energy density and the unhealthy nutrients of concern (e.g. salt, saturated and *trans* fats, and added sugars) and maximize the healthy components (e.g. whole grains, fruit and vegetables)."[13]

6

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.

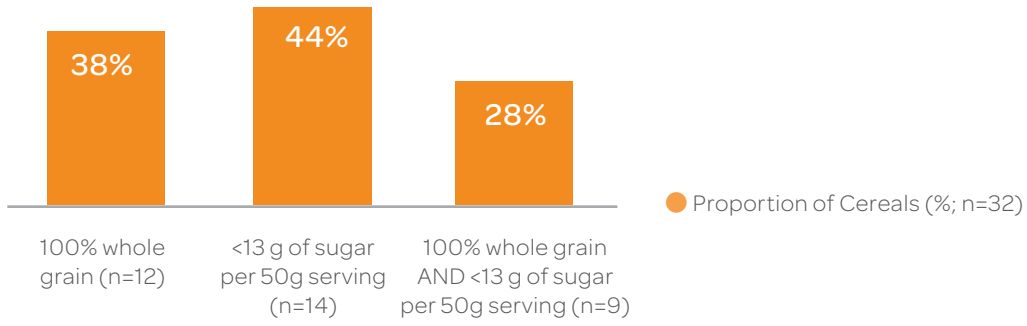
Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
Not at all	No	Neither	F

KEY FINDINGS

A sample of Edmonton supermarkets that offered a full selection of grocery items (the top two supermarkets, by sales in Canada) was chosen.[119] Nutrition Facts tables and ingredient lists were obtained to determine the whole grain and sugar content of all hot and cold children's cereals sold.

Figure 12 illustrates that of 32 child-specific cereals identified, only 28% met the benchmark of being 100% whole grain and having < 13g of sugar per 50g serving.

FIGURE 12. Sugar content and whole grain status of children's cereals in two supermarkets in Canada



POLICIES/SYSTEMIC PROGRAMS

No information for 2016

RECOMMENDATIONS

Practice Monitor and report level of sugar and whole grain content in children's cereals.

Policy Encourage industry to reformulate children's cereals to reduce sugar and increase whole grain content.

Most children's cereals are high in sugar (>13 g of sugar per 50 g serving) and are not 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,[24,25] as well as the availability of point-of-purchase information in food retail settings, such as nutrition labels and nutrition education.

OVERALL GRADE

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

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
Menu labelling is present.	D
Shelf labelling is present.	D
Product labelling is present.	F
Product labelling is regulated.	D

WHAT RESEARCH SUGGESTS

Nutrition labelling is an example of a population-based approach intended to help consumers select healthier foods by providing information about the nutrient content of packaged foods and beverages.[120] Evidence suggests nutrition labelling is a key policy tool to help tackle unhealthy diets, overweight, and obesity.[121]

In Canada, the provision of nutrient and calorie information in a Nutrition Facts table on the back of nearly all pre-packaged foods became mandatory in 2007.[122] Since then, research has shown that consumers have difficulty understanding Nutrition Facts tables.[123] A growing body of evidence suggests simple nutrition labelling systems, such as shelf labelling systems and front-of-pack (FOP) product labelling systems with colour-coded text to indicate nutrient levels, can improve comprehension and product selection.[123-126] Traffic light labelling is a promising example of a simple labelling system that ranks products based on their nutrient and calorie content according to a color-coded scheme (red, amber, and green).[121]

The WHO Global Strategy on Diet, Physical Activity and Health[127] recommends that governments ensure consumers have the information they need to make healthy food choices and that they provide nutrition education programs. With regards to FOP labelling systems, these systems are most effective when they are perceived as credible and as coming from a trusted source.[124] Recently, a 2016 report by the Standing Committee on Social Affairs, Science and Technology on Obesity in Canada recommended mandating an effective FOP labelling approach on pre-packaged foods.[10]

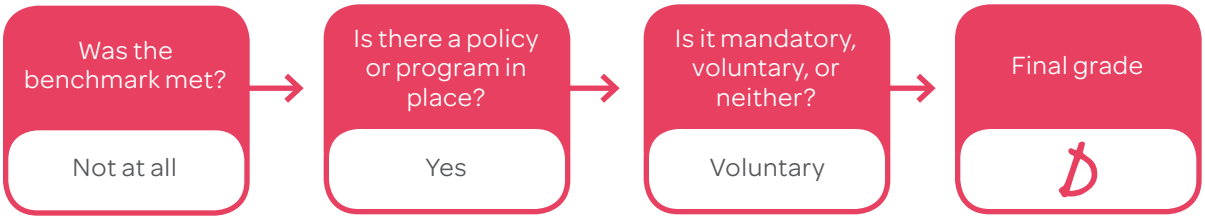
Menu labelling is another example of a population-based approach to help consumers make informed food choices by placing nutrition information on restaurant menus.[128] However, findings with respect to the impact of menu labelling are mixed.[129,130] In comparison with product labelling, reviews on menu labelling cite relatively weak impacts on consumers eating behaviours and report varied results across population sub-groups and retail food settings.[130-132] Some studies found small reductions in caloric intake, others no change, and others a slight increase in caloric intake in response to menu labelling.[132] Nevertheless, there is strong support for menu labelling among the public,[133] likely because it aligns with public values of transparency and has the potential to drive food reformulation, which would benefit all consumers whether the information is read or not.[134] An example of mandated menu labelling is the US Affordable Health Care Act, which requires menu labelling in restaurants and similar retail establishments with ≥ 20 locations nationwide; although full enforcement has been delayed.[135,136] In a Canadian context, the Healthy Menu Choices Act was passed in 2015 by the Government of Ontario and is due to be fully implemented in early 2017.[137] The Act requires that owners and operators of more than 20 food service locations in the province present calorie information on their menus.[137]

7 INDICATOR

Menu Labelling is Present

BENCHMARK

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



KEY FINDINGS

Alberta does not have a menu labelling policy.

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.[138]

POLICIES/SYSTEMIC PROGRAMS

Voluntary Program

INFORMED DINING PROGRAM:[139]

Several national chain restaurants (e.g. Tim Horton's, 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, or electronic tablet.

RECOMMENDATIONS

Research Assess the effectiveness of menu labelling in influencing food choices.

While restaurants may provide nutrition information, menu labelling is not mandatory in Alberta.

8 INDICATOR

Shelf Labelling is Present

BENCHMARK

Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.

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

KEY FINDINGS

Loblaw Companies Limited – Guiding Stars (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.[140]

FIGURE 13. Example of Loblaw Company's Guiding Stars Program[140]

Loblaw Companies Limited's Guiding Star is the only shelf labelling program in Alberta grocery stores. This results in <30% of major Alberta grocery stores having a shelf labelling program.

Less than 30% of major Alberta grocery stores have a shelf labelling program.

8

TABLE 4. Availability of shelf labelling in major grocery stores in Alberta[141-149]

Chain name	Number of stores in AB	Loblaw Chain (Y/N)	Guiding Stars (Y/N)
Real Canadian Superstore	29	Y	Y
Loblaws CityMarket	2	Y	Y
No Frills	35	Y	Y
Your Independent Grocer	4	Y	Y
Box	1	Y	N
Extra Foods	6	Y	N
Safeway	77	N	N
Sobeys	47	N	N
Save on Foods	34	N	N

POLICIES/SYSTEMIC PROGRAMS

Voluntary Program

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

RECOMMENDATIONS

Research Assess the accuracy and effectiveness of industry-led intiatives in providing nutrition information.

Practice Promote government sanctioned initiatives to provide consumers with nutrition information to identify healthy food.

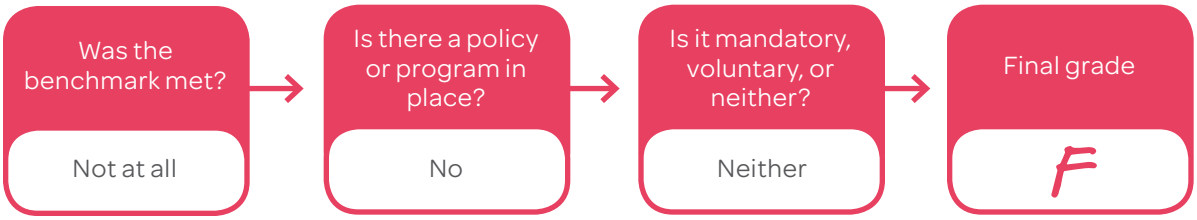
Policy Initiate a simple and consistent government-approved shelf labelling system across Alberta.

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.



KEY FINDINGS

Although a Nutrition Facts table, as seen in Figure 14, is mandated on almost all packaged foods by the federal government,[150] this indicator received a F because a simple label is not provided front-of-package.

Health Canada is currently exploring the development of standardized front-of-package labels.[151]

FIGURE 14. Example of a Nutrition Facts table (adapted from the Government of Canada Nutrition Facts table website).[150]

Whole Wheat Bread

Nutrition Facts
Per 2 slices (175 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 %

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 one serving and the percent daily value.[150,152]

The Food and Drugs Act[153] 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.[152] The Compliance Test provides a transparent, science-based system for assessing the accuracy of the nutrient information on food labels in Canada.[154]

Minister of Health Mandate Letter – Priority[155]

"Promote public health by…improving food labels to give more information on added sugars and artificial dyes in processed foods." [155]

RECOMMENDATIONS

Research	Identify the most effective front-of-package food labelling system.
Practice	Develop a consumer friendly front-of-package food labelling system.
Policy	Mandate a simple front-of-package food labelling system for all packaged foods.

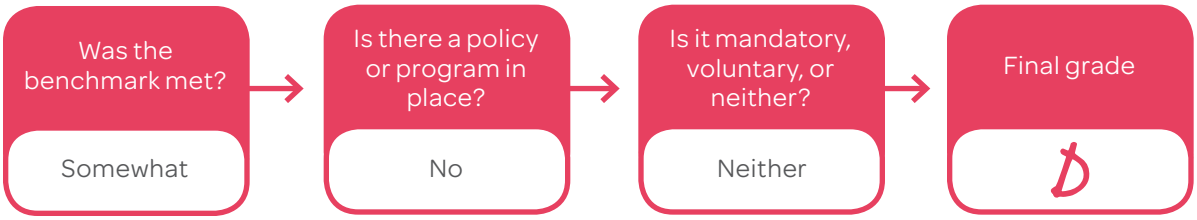
Although a Nutrition Facts table can be found on almost all packaged foods, currently no FOP food labelling system is mandatory.

10 INDICATOR

Product Labelling is Regulated

BENCHMARK

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



KEY FINDINGS

- The National Food and Drugs Act[153] in Canada regulates the labelling of all pre-packaged foods, and sets out regulations pertaining to ingredient lists, nutrition labelling, durable life dates, nutrient content claims, health claims, and foods for special dietary use.[156]
- 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:[152]

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

- 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[157] [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.[158]
- 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."[158]
- Health Canada – Guidance Document for Preparing Submission of Food Claims[159] [View Here]

RECOMMENDATIONS

Practice	Enforce existing regulations regarding industry-devised logos/branding.
Policy	Implement clear and strict regulations regarding industry-devised logos/branding.

Although regulations exist for nutrition labelling and health claims, they are insufficient to prevent industry from using logos denoting "healthy foods"

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
Government-sanctioned public health campaigns encourage children to consume healthy foods.	D
Restrictions on marketing unhealthy foods to children.	D

WHAT RESEARCH SUGGESTS

Public health campaigns are one example of a policy action to encourage the consumption of healthy foods[160,161] which have demonstrated promising results.[162]

Commercial marketing encompasses traditional communication such as television advertising, as well as new media such as the Internet and mobile devices.[163] Commercial marketing of unhealthy foods and beverages contributes to poor eating behaviours in children.[164,165] A systematic review of the food marketing literature conducted by the WHO found strong evidence to suggest that marketing influences children's food purchases, and modestly impacts their food knowledge, preferences, and consumption, with implications for weight gain.[166] The magnitude of the impact of food marketing on children's body weight was estimated to be at least as significant as that of other important determinants of obesity such as socioeconomic status, family, and peer influences.[166] Even older children remain vulnerable to marketing of unhealthy foods, for reasons such as:[167]

- Their brains remain immature and highly susceptible to marketing messages.
- Their greater independence and higher levels of media consumption.
- Companies have increased marketing of some of the least healthy food and beverage products to children 12 years or older.

Whereas, voluntary 'self-regulatory' advertising initiatives have emerged as a means of reducing the marketing of unhealthy foods and beverages to children,[168,169] they have failed to make substantial changes to the food marketing landscape away from a focus on unhealthy foods.[170] Children continue to be exposed to food advertising through multiple avenues including television and radio, online (e.g. search engines, social media, blogs, and vlogs), print media (e.g. magazines), cinema (e.g. pre-film advertisements), point-of-sale (e.g. checkouts), and outdoors (e.g. billboards, event sponsorship).[168] A 2016 WHO report recommends voluntary self-regulatory initiatives follow government-approved guidelines and be subject to independent audits.[4] The report further suggests that government regulation can help ensure equal protection for all children regardless of socioeconomic status, and require adherence across all local, national, and multinational players.[4]

Promising evidence exists for the effectiveness and cost-effectiveness of interventions that focus on reducing children's exposure to unhealthy food and beverage marketing.[59] We recommend "a national regulatory system prohibiting commercial marketing of foods and beverages to children and suggests that effective regulations must set minimum standards, monitor compliance, and enact penalties for non-compliance."[171]

Recommendations include:[171]

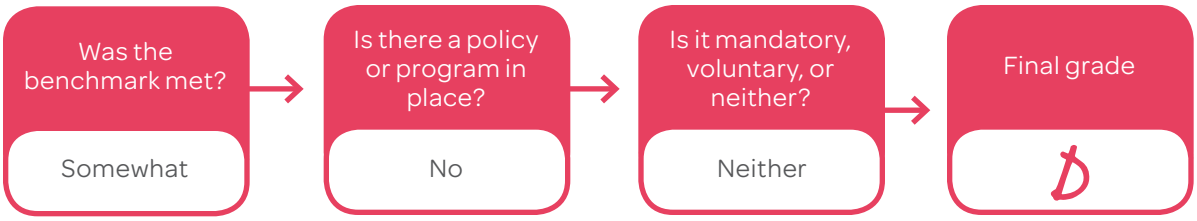
- Adopt a broad definition of marketing that includes, but is not limited to, all media through which children are targeted (e.g. sponsorship, product placement, and brand mascots).
- Require a clear, standardized, nutrient-based profiling system for products subject to the marketing prohibition that enables restriction of the promotion of foods and beverages considered detrimental to children's diets.
- Define "child-directed" as marketing directed toward all children and youth <18 years of age.
- Create an independent body responsible for monitoring compliance, investigating consumer complaints, advocating healthier media influence, and working with industry for compliance.
- Develop regular and determined enforcement with clear penalties for non-compliance.

11 INDICATOR

Government-sanctioned public health campaigns encourage children to consume healthy foods

BENCHMARK

Child-directed social marketing campaigns for healthy foods.



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.

Healthy Eating Toolbox[172]
Component of the federal government's Healthy Eating Awareness and Education Initiative that provides resources for consumers, health professionals, and the media. [View Here]

Healthy Eating Starts Here[173]
Alberta Health Services website which provides supportive resources for healthy eating where adults and children live, work, learn, and play. [View Here]

POLICIES/SYSTEMIC PROGRAMS

Programs listed above.

RECOMMENDATIONS

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

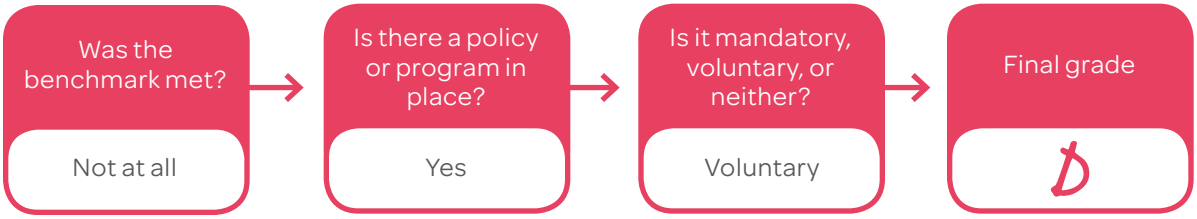
While there are some education resources and websites available, few public health campaigns directed at children's healthy eating exist.

12 INDICATOR

Restrictions on Marketing Unhealthy Foods to Children

BENCHMARK

All forms of marketing unhealthy foods to children are prohibited.



KEY FINDINGS

Alberta does not have official initiatives and policies to limit food marketing to children.

APCCP[174] continues to collaborate with other advocacy groups such as Coalition Poids, the Childhood Obesity Foundation, Chronic Disease Prevention Alliance of Canada, and the Heart and Stroke Foundation to support national action to reduce the marketing of unhealthy foods and beverages to children.

APCCP Priorities for Action:

1. Support national efforts to restrict the marketing of unhealthy foods and beverages to children.
2. Advocate to restrict the marketing of foods and beverages that are inconsistent with the ANGCY to children under the age of 16 in Alberta.

National broadcast initiatives and policies exist. These are described in Table 5.

Despite concerns regarding unhealthy food and beverage marketing, Alberta children continue to be exposed to these messages.

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TABLE 5. Broadcast initiatives, purpose, and adherence

	Canada's Food and Beverage Advertising Initiative [175-178]	Broadcast Code for Advertising to Children (Children's Code)[179] [except QC]	Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age [180] [except QC]
PURPOSE	As part of this program, Canadian food and beverage companies commit to responsible marketing of their products to children under 12 years and to promoting food and beverages to children consistent with nutrition guidelines. Core principles of the Canadian Children's Food and Beverage Advertising Initiative (CAI) are to:[175] Market only healthy foods and beverages through television, radio, print, internet, mobile media, and interactive games intended for children under 12 years; Not place any food or beverage in any program or editorial content directed to children; Not advertise foods or beverages in elementary schools (pre-K to grade 6).	The purpose of the Children's Code is "to guide advertisers and agencies in preparing commercial messages that adequately recognize the special characteristics of the children's audience."[179]	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."[180]
ADHERENCE	To date, 19 companies have committed to the initiative, of which 10 have committed to only advertise healthy alternatives to children under 12 years. Nine have committed to not market at all to children under 12 years. **Uniform Nutrition Criteria White Paper[178]** The CAI adopted new common uniform nutrition criteria that came into effect Dec 31, 2015. The CAI **is a voluntary** initiative by leading food and beverage companies (Participants). "The new uniform criteria will impose substantial challenges on Participants, requiring reformulation of close to 35% of the products they currently advertise to children if they wish to continue advertising them."	In effect across Canada, with the exception of Québec which has authority over prohibiting broadcast advertising to children.[179] No new information for 2016	In effect in all of Canada, except Québec where advertising to children is not permitted. No new information for 2016

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Current industry standards are not sufficient to protect children from the potential negative impacts of the marketing of unhealthy food.[181,182] Signatories to the CAI advertise significantly more foods higher in energy, fat, sugar, and sodium compared to companies that have not signed on to the pledge.[182] A study on whether children's exposure to television food and beverage advertising has changed since the implementation of the CAI 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 since the implementation of the CAI.[183]

The 2014 Compliance Report

Assesses the performance of 18 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, 2014. CAI had been in effect for 7 years when the report was completed (initiated April 2007).

Methods:

"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."

Findings:

- 11/18 did not engage in advertising directed primarily to children under 12 years of age (Coca-Cola, Ferrero, Hershey, Kraft Canada, Mars, McCain, Mondelēz, Nestlé, PepsiCo, Unilever, and Weston Bakeries)
- 7/18 committed to include only products meeting the nutrition criteria outlined in their individual commitments and approved by ASC in child-directed advertising (Campbell Canada, Danone, General Mills, Kellogg, McDonald's, Parmalat, and Post)

These Participants all committed to devote 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.

POLICIES/SYSTEMIC PROGRAMS

See Table 5

RECOMMENDATIONS

Research	Determine the level of children's exposure to food and beverage marketing in multiple contexts.
Practice	Restrict the marketing of foods and beverages that are inconsistent with the ANGCY to children under the age of 16 in Alberta.
Policy	Develop a national regulatory system prohibiting commercial marketing of foods and beverages to children.

Nutrition Education

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

INDICATOR	GRADE
Nutrition education provided to children.	B
Nutrition education and training provided to teachers and childcare workers.	D

WHAT RESEARCH SUGGESTS

Evidence suggests that nutrition education starting from the early stages of life is important to promote lifelong healthy eating behaviours.[185-188] The WHO Global Strategy on Diet, Physical Activity, and Health[127] recommends that governments ensure that nutrition education programs, starting in primary school, are available. 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.[189] For example, provincial guidelines in Ontario support the provision of at least 50 hours of nutrition education at the elementary level.[189] In Saskatchewan, nutrition education is outcome-based to provide adequate time to teach general health and specific nutrition-related skills. Youth are taught how to assess health habits, plan a healthy meal, and understand food labels.[189]

Teacher and childcare worker training is a key component for effective implementation and delivery of curriculum.[190-193] In one study, insufficient information was cited as a contributing factor by teachers who considered but ultimately decided not to implement a nutrition education program;[194] whereas successful implementation was found to be positively associated with teaching experience.[194] A recent qualitative study explored teachers' experiences with nutrition education and noted time, and a lack of resources to support hands-on learning activities were key barriers to education delivery.[195] Another study suggested that the amount of time teachers dedicate to nutrition instruction may be determined by multiple factors including nutrition training, self-efficacy, knowledge, and beliefs.[196] More specifically, the study found that nutrition knowledge predicted self-efficacy for teaching nutrition, but that a belief that nutrition instruction was important did not help to predict time spent teaching nutrition.[196]

Decision makers acknowledge the importance of nutrition education; however, there is a lack of information on strategies to improve the quality and amount of nutrition education provided within schools.[189] 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' educational attainment. The authors further stressed the importance of effective partnerships between health and education sectors.[197] 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 nutrition education delivery[195] and an opportunity for improvement.[198] One study showed promising results following implementation of an integrated food-based science curriculum, including a significant improvement in students' nutrition knowledge.[199]

13 INDICATOR

Nutrition Education Provided to Children

BENCHMARK

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

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

KEY FINDINGS

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."[200,201] Table 6 provides an outline of nutrition-related outcomes by grade level.[200,201]

Nutrition education is delivered to students within mandatory school health courses.

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TABLE 6. Nutrition-related outcomes by grade level of the mandatory health courses in Alberta.[200,201]

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	"apply guidelines from Canada's Food Guide to Healthy Eating to individual nutritional circumstances; e.g. active children eat/drink more" (W-3.5)
4	"analyze the need for variety and moderation in a balanced diet; e.g. role of protein, fats, carbohydrates, minerals, water, vitamins" (W-4.5)
5	"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) "examine the impact of physical activity, nutrition, rest and immunization on the immune system" (W-5.1)
6	"analyze personal eating behaviours—food and fluids—in a variety of settings; e.g. home, school, restaurants" (W-6.5)
7	'relate the factors that influence individual food choices to nutritional needs of adolescents; e.g. finances, media, peer pressure, hunger, body image, activity" (W-7.5)
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

Curriculum is a mandatory policy. Alberta Education is currently moving forward with provincial curriculum development.[202] Nutrition, along with other topics related to wellness education, are being considered, as new K–12 provincial programs of study and new ways to strengthen curriculum are being explored. Timelines for the development of provincial programs of study and provincial implementation have yet to be determined.

RECOMMENDATIONS

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

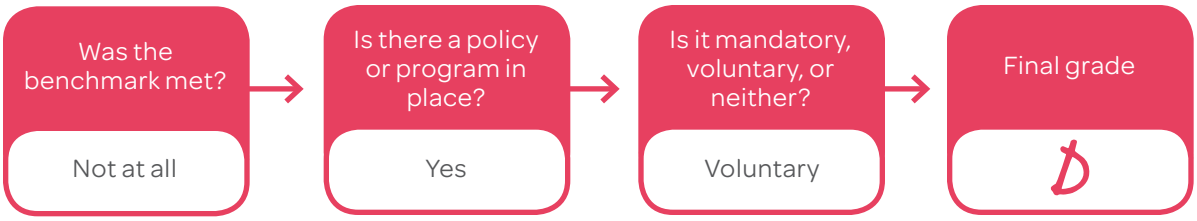
Policy Mandate nutrition education within the school health and wellness curriculum.

14 INDICATOR

Nutrition Education and Training Provided to Teachers and Childcare Workers

BENCHMARK

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



KEY FINDINGS

Alberta does not require teachers and childcare workers to participate in nutrition education training.

"Play, Participation, and Possibilities: An Early Learning and Child Care Curriculum Framework"[203] is currently being pilot tested at Grant MacEwan University, which includes 3-5 hours of nutrition-specific training. It is available free of charge for educators.

POLICIES/SYSTEMIC PROGRAMS

Voluntary Programs and Resources

AHS Nutrition Services offers curriculum-based lesson plans for grades K-9: [View here].[204]

RECOMMENDATIONS

Practice	Determine level of teachers and childcare workers participation in nutrition education/training.
Policy	Mandate nutrition-specific training as part of new teachers' training and the ongoing professional development of teachers and childcare workers in Alberta.

Alberta does not require teachers and childcare workers to participate in nutrition education and training.

Economic Environment

The economic environment refers to financial influences, such as manufacturing, distribution, and retailing, which primarily relate to cost of food.[14] 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,[26] financial support for health promotion programs,[25] and healthy food purchasing policies and practices through sponsorship[22] can affect food choices.[14]

OVERALL GRADE

CATEGORY	GRADE
Financial incentives for consumers	D
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
Lower prices for healthy foods.	A
Higher prices for unhealthy foods.	F
Affordable prices for healthy foods in rural, remote, or northern areas.	F

WHAT RESEARCH SUGGESTS

Food prices are important determinants of food choices.[205] Differences in the prices of healthy and less healthy foods and diets can contribute to obesity and chronic disease.[206] 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.[207]

Food Subsidies

There is some evidence that food subsidies may be more effective than taxation.[208] Subsidizing healthier foods is an effective means of modifying eating behaviours.[209,210] 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.[211,212] A 20% reduction in the price of produce was found to be associated with 15% increase in vegetable purchases and a 35% increase in fruit purchases, per household.[213] This finding aligns with earlier research showing that a 10% reduction in the price of fruit and vegetables was associated with a 5-7% increase in their consumption.[214] Lower prices for fruit and vegetables also favourably affect body weights, particularly among low-income families.[214]

High costs associated with transportation, storage, and distribution of food in isolated northern communities negatively impacts the availability and accessibility of perishable healthy foods.[215] To help address this problem, a subsidy program, Nutrition North Canada (NNC), was launched in 2011.[216] The program aimed to improve access to perishable healthy food in isolated northern communities. 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. To be eligible for the program a community must: (a) lack year-round surface transportation (i.e. no permanent road, rail or marine access); and (b) have used Food Mail, the federal government's previous northern transportation subsidy program. The program subsidizes a variety of perishable healthy foods including items that are fresh, frozen, refrigerated, or that have a shelf life of less than one year, and foods that 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).[216] A recent report highlights the subsidization of regionally imported and locally harvested foods as a promising strategy to build food security and increase the amount of healthy foods available and consumed in isolated northern regions.[215]

Food Taxes

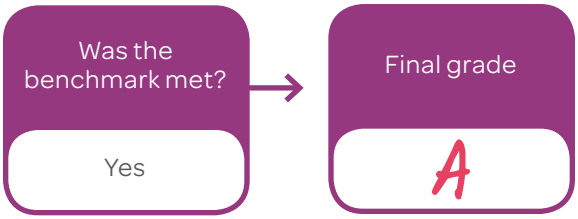
Financial disincentives for consumers (taxing less healthy foods and beverages) is a public policy strategy that could improve the diets of Canadians.[217] A recent report by the WHO on ending childhood obesity recommended a tax on sugar-sweetened beverages as a feasible strategy to reduce consumption.[4] A 10% increase in the price of sugar-sweetened beverages is estimated to reduce intake by 8-10%.[218] Taxes causing a price increase of <5% are likely insufficient to impact consumption rates.[219] 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 in any form and in any setting, with at least half of the revenues generated dedicated to health promotion initiatives.[220] 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.[221]

15 INDICATOR

Lower Prices for Healthy Foods

BENCHMARK

Healthy foods are exempt from point-of-sale taxes.



KEY FINDINGS

The Government of Canada's Excise Tax Act provides information on what foods are subject to and exempt from point-of-sale taxes (Table 7).[222]

At this time, Alberta is not considering tax credits or incentives as a nutrition policy.[223]

Table 7. Overview of Canada's Excise Tax Act[222]

Food Tax Category	Zero-Rated Foods	Taxable Foodstuffs
Examples of foods	Basic groceries (includes most supplies of food and beverages marketed for human consumption)	Carbonated beverages, candies and confectionery, and snack foods
% Tax	0% GST	5% GST or 13% HST

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.

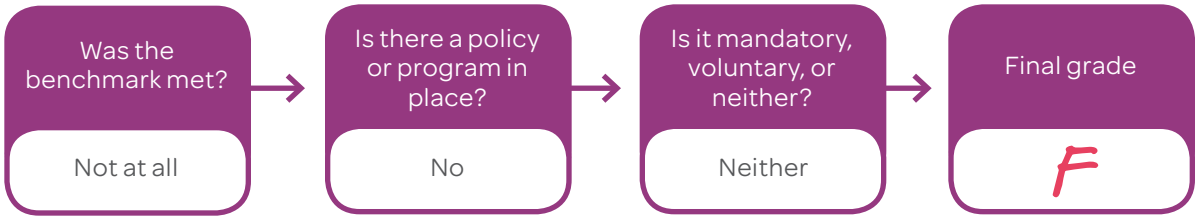
Because basic groceries are not taxed, healthy foods are generally exempt from point-of-sale taxes.

16 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.



KEY FINDINGS

All provinces and territories in Canada have tax credits and incentives (PST/GST exemptions). However, in Alberta there are no formal policies concerning tax credits and incentives to promote healthy eating.[223]

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.[220] Sixty percent of Alberta policy influencers support taxing soft drinks and energy drinks.[220]

Following a consensus conference held in April 2011 with experts from research, policy, and practice, a recommendation to tax sugar-sweetened beverages was suggested as one step towards a multi-sectorial, comprehensive approach to obesity prevention.[220] This recommendation was issued following a review of the available evidence, including evidence regarding political feasibility and potential impacts of such an excise tax.[220]

(NOTE: An excise tax, unlike a sales tax paid directly by the consumer at the point of purchase, is levied on producers or retailers. The tax is indirectly passed onto the consumer by including it in the product's price).

APCCP will support its Canadian partners, such as the Québec Coalition on Weight-Related Problems, to disseminate research and increase public and policy-maker understanding and support for policies to reduce sugar-sweetened beverages sales, marketing, and consumption in Canada. [224]

POLICIES/SYSTEMIC PROGRAMS

Currently no formal policies exist concerning tax credits and incentives to promote healthy eating in Alberta.

Despite support from policy influencers, Alberta does not currently have an excise tax on sugar-sweetened beverages.

RECOMMENDATIONS

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

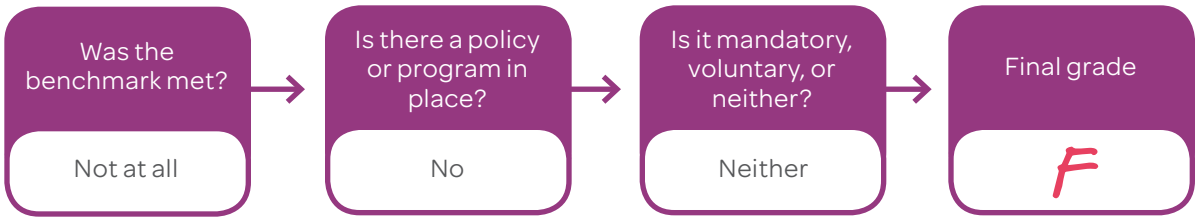
Policy Implement a minimum excise tax of $0.05/100mL on sugar-sweetened beverages. Dedicate a portion of this revenue to health promotion programs.

17 INDICATOR

Affordable Prices for Healthy Foods In Rural, Remote, or Northern Areas

BENCHMARK

Subsidies for transportation and local production of healthy food to rural, remote, or northern communities to ensure affordability for local consumers.



KEY FINDINGS

No Alberta communities are currently eligible for the Nutrition North Canada (NNC) Program, as a community must lack year-round surface transportation (for example, no permanent road, rail or marine access) and have used Food Mail, the department's previous northern transportation subsidy program.[225] Starting October 1, 2016, however, NNC will be expanded to include Fort Chipewan as a result of updates to the community eligibility criteria and additional funding.[226]

As part of its commitment to improve 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.[226]

Alberta currently has no in-province initiatives to increase the availability and accessibility of nutritious foods in remote and northern areas or for vulnerable communities.[227]

POLICIES/SYSTEMIC PROGRAMS

There are no policies or programs in place in Alberta.

The Blood Tribe has unveiled a multi-million dollar project to build a grocery store on the reserve. The 11,000 square foot store will be located in Standoff, next to the old Kainai Industries Building. The Blood Tribe Economic Development Director says the goal of the grocery store is to provide affordable, fresh, healthy food to on-reserve residents who currently have no alternative to convenience store junk food. A Blood Tribe Councillor Speaker says the grocery store will address a need on the reserve and create employment as well. The new Blood Reserve grocery store in slated to open in November of 2016.[228]

RECOMMENDATIONS

Practice	Implement recommendations from the Government of Canada consultation.
Policy	Expand the NNC program to include more remote Alberta communities. Provide subsidies for transportation and local production of healthy foods in remote Alberta communities.

Remote communities in Alberta face challenges to healthy eating as they do not currently receive subsidies for transportation and local production of food.

Financial Incentives for Industry

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

INDICATOR	GRADE
Incentives exist for industry production and sales of healthy foods.	F

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.[229] 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.[230]

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.[230] This would provide a market incentive that would allow industry to remain profitable while advancing public health interests. These subsidies could be provided 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.[231] 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.[232] 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.[233]

The NOURISHING Framework created by the World Cancer Research Fund International highlights the importance of healthy retail food environment incentives as a policy area to focus on.[160] 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 the United States in 2011, the HFFI was piloted over three years and distributed over $140 million in grant funding to states in order to provide financial and other forms of assistance in order to draw healthier retail outlets to underserved communities. In total, 23 US states are cited as having implemented financing initiatives at the time of writing. 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 neigbourhood grocery stores where they are often less available.[160]

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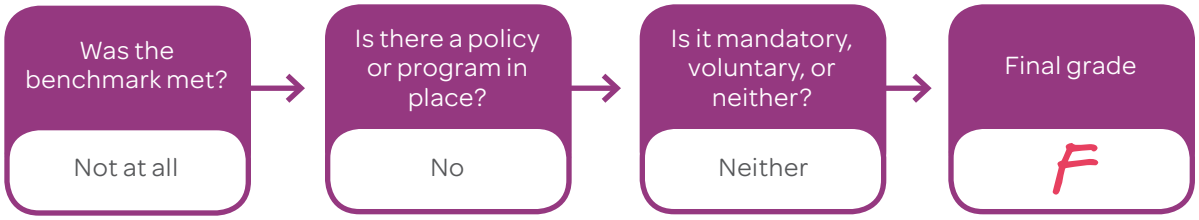
INDICATOR

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).



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

There are no policies or programs in place.

RECOMMENDATIONS

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

Lower taxation of corporate revenues from healthy food sales is not being used as an incentive for industry.

Government Assistance Programs

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

INDICATOR	GRADE
Reduce households with children who rely on charity for food.	F
Reduce childhood food insecurity.	INC
Nutritious food basket is affordable.	F
Subsidized fruit and vegetable subscription program in schools.	D+

WHAT RESEARCH SUGGESTS

Food insecurity is an important public health issue in Canada, especially among indigenous people. It has been estimated that 29% of Aboriginal adults in Canada live in food-insecure households,[234] compared to 8% of Canadian adults.[235] In 2014, 16% of children in Alberta live in food-insecure households.[236] Food insecurity in childhood has been associated with a greater risk of obesity.[237] Some suggest this relationship may be explained by the selection of cheaper foods that are high in calories and low in nutrients.[237] Studies demonstrate that government nutrition assistance programs, such as those that reimburse food vendors to increase the sale and the consumption of healthy foods/beverages and reduce the sale and consumption of unhealthy choices among qualifying lower-income individuals and families,[18] can help to prevent childhood obesity.[27] The WHO's Global Strategy on Diet, Physical Activity and Health states that programs that provide food to individuals with special needs (e.g. low income) should ensure these foods contribute to healthy diets.[127] Food assistance programs in the United States have been found to alleviate household food insecurity, especially among children from low income households;[238,239] however, participants struggle to meet key dietary guidelines more so than non-participants from higher income households.[240]

Market basket surveys assess the affordability of a healthy diet for families based upon established nutrition guidelines and the cost of purchasing foods at retail stores. Health Canada's National Nutritious Food Basket describes the quantity of approximately 60 foods that represent a nutritious diet, in accordance with the Dietary Reference Intakes, Eating Well with Canada's Food Guide, and food consumption data.[241] One study conducted in Nova Scotia suggests a nutritious diet based on the National Nutritious Food Basket likely remains unaffordable for individuals from low-income households and for individuals from households with children, even when taking into account a substantial increase in minimum wages.[242] In the United States, revisions to better align the food packages for the Special Supplemental Nutrition Program for Women, Infants, and Children(WIC) with current dietary recommendations have improved access to healthy foods, increased purchase of whole grains, reduced purchases of juice, and may have contributed to modest reductions in fruit and vegetable prices.[243-246] A study published in 2016 found that the WIC food package revisions were associated with significant improvements in the diet quality of children from low income households participating in the program.[247]

Emerging evidence suggests that the provision of free or subsidized fruit and vegetables at school can increase their intake.[27] Subsidized programs that provide free fruit and vegetables are more effective than paid programs.[248] Programs in the United Kingdom, Netherlands, United States, Denmark, New Zealand, and Norway have all been effective in increasing children's fruit and vegetable intake.[249,250,251]

19 INDICATOR

Reduce Households with Children Who Rely on Charity for Food

BENCHMARK

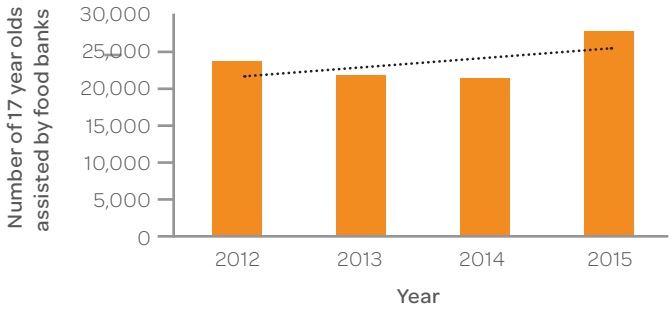
Reduce the proportion of households with children that access food banks by 15% over three years.

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

KEY FINDINGS

Based on the 2016 Hunger Count Report[252] describing food bank use, the number of children and youth between 0-17 years of age assisted by food banks increased by 17.7% between 2012 and 2015 in Alberta (Figure 15).

FIGURE 15. Food bank use by children and adolescents over time



POLICIES/SYSTEMIC PROGRAMS

While some voluntary programs are in place to support reduction of need for food banks, they may not be systemic or address household food insecurity.

For example: Community food security is promoted through collective action by several regional food security networks, including the Community Garden Network, Just Food Edmonton, and the Personal & Community Support Association.[253] The First Nations and Inuit Health Branch of Health Canada continues to support National Aboriginal Organizations in the area of food security through their networks and activities.[254]

RECOMMENDATIONS

Research	Determine effective strategies to reduce household food insecurity.
Policy	Increase social assistance rate and minimum wage to make healthy food more affordable.

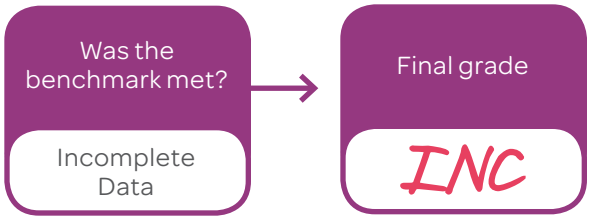
Food bank use by Alberta children and youth increased by 17.7% between 2012 and 2015.

20 INDICATOR

Reduce Childhood Food Insecurity

BENCHMARK

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

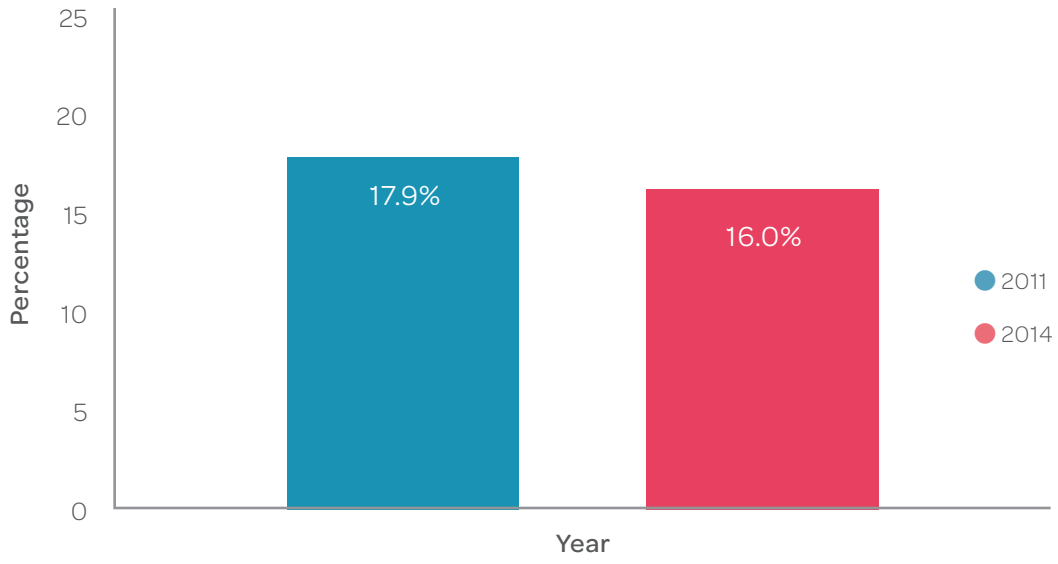


KEY FINDINGS

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 in the Canadian Community Health Survey (CCHS).[236] Whereas the CCHS is administered by Statistics Canada annually, the food security survey module is not always mandatory (i.e. optional) in every cycle of the CCHS. As a result, some provinces opted out of participation and chose not to measure food insecurity. Furthermore, the true prevalence of food insecurity is likely underestimated as the survey does not include segments of the population, most notably individuals living on First Nations reserves.[236]

Based on the latest available data reported by researchers from PROOF,[236,255] the proportion of children living in food-insecure households decreased slightly between 2011 and 2014 in Alberta (Figure 16).

FIGURE 16. Proportion of food-insecure households with children in Alberta in 2011 and 2014



20

POLICIES/SYSTEMIC PROGRAMS

See Indicator 19 Policies/Systemic Programs.

RECOMMENDATIONS

Research	Ensure CCHS Household Food Insecurity Module is completed annually to determine more recent trends (post 2014) in Alberta.
Policy	Develop income-based (i.e. not food-based) programs and policies to tackle childhood food insecurity in Alberta.

A slight decrease in food insecurity occurred between 2011 and 2014, but more recent data is not available.

21 INDICATOR

Nutritious Food Basket is Affordable

BENCHMARK

Social assistance rate and minimum wage provide sufficient funds to purchase the content of a nutritious food basket.

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

KEY FINDINGS

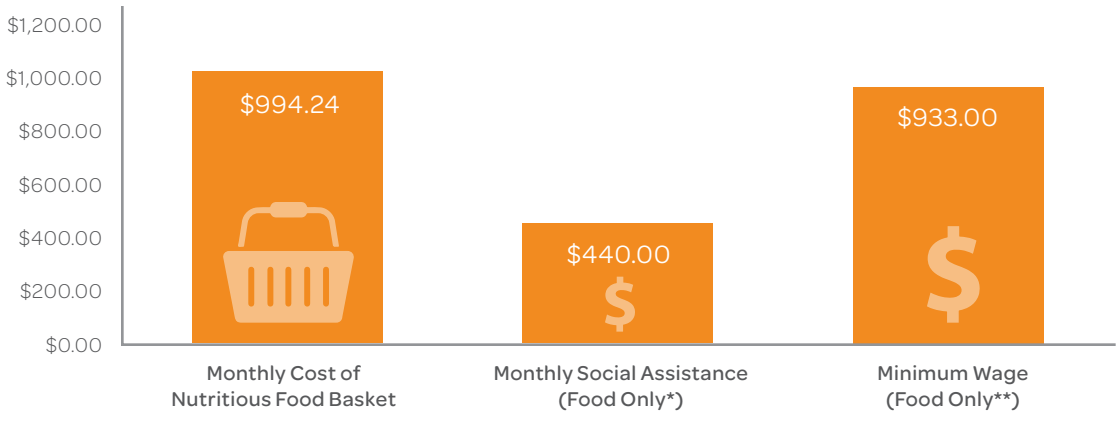
The Alberta Nutritious Food Basket assesses the cost of healthy eating based on current national dietary guidelines (e.g. Eating Well with Canada's Food Guide).[66,256,257] The Nutritious Food Basket is costed in communities across Alberta, including Edmonton, by AHS Nutrition Services with support from the Ministry of Agriculture and Rural Development.

Affordability of Nutritious Food Basket in Edmonton:

The social assistance rates in Alberta provide insufficient funds for Edmontonians to purchase a Nutritious Food Basket. Figure 17 compares the cost of the monthly Nutritious Food Basket for a family of four in 2015 to the dollars provided for food only as part of the monthly social assistance provided by the Government of Alberta, and the earnings available for food of a full time worker on minimum wage.

Between 2014 and 2015, the affordability of the Nutritious Food Basket has decreased. In 2014, social assistance rates covered 48% of the costs for a nutritious food basket, while in 2015 they only covered 44% of the costs.[258-260]

FIGURE 17. Cost of a nutritious food basket in Edmonton vs. monthly social assistance rate



*Denotes the value of monthly social assistance dedicated for food only, provided by the Alberta Government

**Assuming 50% of minimum wage income is spent on food. Calculation based on current minimum wage rate of $11.20/hr (i.e. $11.20/h x 40 h/week x 50 weeks/12 months= $1866.67).

21

The above findings are specific to Edmonton. However, they are supported by several other pieces of unpublished data recently obtained from AHS. A recent study on the Alberta Nutritious Food Basket, showed that a number of household profiles lack sufficient income to afford a basic healthy diet, after accounting for other basic needs such as housing and transportation.[261] Furthermore, similar Nutritious Food Basket costs are found province wide. For example, the provincial average monthly cost for a family of four* in June 2015 was $1089.54 and Red Deer's average monthly cost for a family of four* was $1053.32.

*Average family of four consisting of a male and female aged 31-50 years, a male child 9-13 years, and a female child 4-8 years.

POLICIES/SYSTEMIC PROGRAMS

Mandatory Policies Programs

Nutritious Food Basket – Ministry of Agriculture and Rural Development

Social Assistance

RECOMMENDATIONS

Research	Measure the cost of a Nutritious Food Basket in remote Alberta communities to determine affordability.
Policy	Increase social assistance rate and minimum wage* to align with cost of a healthy diet.

*NOTE: Alberta's general minimum wage will rise by $1.00 to $12.20 per hour effective October 1, 2016. Minimum wage will rise a further $1.40 to $13.60 per hour on October 1, 2017, and by $1.40 to $15 per hour on October 1, 2018. (https://work.alberta.ca/employment-standards/minimum-wage.html)

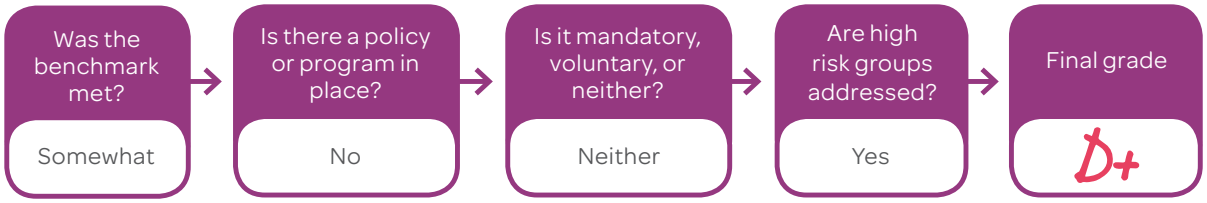
Current social assistance rates and minimum wage make healthy eating unaffordable.

22 INDICATOR

Subsidized Fruit and Vegetable Subscription Program In Schools

BENCHMARK

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



KEY FINDINGS

In 2015, the APCCP Principals' survey was sent to school principals in K-12 schools across Alberta. They were asked about their perceptions of the food services, policies, programs, curriculum, and initiatives currently in place in their schools.[65] Out of 1350 surveys sent, 363 surveys were completed. Just over half of respondents (53%, n=192) indicated that students at their school have access to food programs and/or initiatives at a free or subsidized rate. Only 21% (n=75) of respondents indicated that a vegetable and fruit program exists at their school.

PROGRAMS

Organization[264-266]	Description	Reach
E4C* [267] [View Here]	Snack program provides a healthy mid-morning snack to all students.	15 public and 9 Catholic elementary schools in high needs locations in Edmonton.
	Lunch program provides a healthy lunch, including at least one serving of fruit or vegetables to all students whose parents have subscribed.	10 public and Catholic schools in high needs locations in Edmonton.
APPLE schools[268] [View Here]	CSH program that includes provision of healthy meals or snacks.	51 schools in high needs locations in Alberta. In the 2015-16 school year, there will be 6.5 full-time staff to support the work in these 51 schools, and expand to 10 more schools in Northern Alberta.
Fuel for School [269] [View Here]	Breakfast program for all students of participating schools.	19 Fuel for School programs in Calgary. In 2016, there are 20 elementary schools involved in the Fuel for School program. Each school serves between 20-60 breakfasts each day
Brown Bagging for Calgary's Kids [270] [View Here]	Delivers free, healthy lunches to students identified by their teacher as having limited food to eat for the day.	Reaches 2900 kids each day.
Food for Thought* [271] [View Here]	Provides healthy meals and snacks to children of participating schools.	500 students in 14 schools in high needs locations in Edmonton.
2016: Northland School Division Hot Lunch and Morning Nutrition Program[272] [View Here]	All children received a hot lunch and morning snack at no charge.	This program serves the Northland School Division, which includes 24 schools. 26 school hot lunch programs.

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

22

★ RECOMMENDATIONS

Research Identify existing programs providing subsidized fruit and vegetables in schools in Alberta.

Practice Develop province-wide strategies for providing subsidized fruit and vegetables, focusing on at-risk schools in Alberta.

Various programs provide some children with free or subsidized fruit and vegetables; however, there is no province-wide strategy.

Social Environment

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

D

CATEGORY	GRADE
Weight Bias	F
Corporate Social Responsibility	D
Breastfeeding Support	C

Weight Bias

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

INDICATOR	GRADE
Weight bias is avoided.	F

WHAT RESEARCH SUGGESTS

Weight bias or stigma refers to the negative attitudes held toward an individual because of his or her weight.[273] Weight bias can interfere with a child's identity and may cause individuals to be socially disreputable.[274] The adverse psychological consequences of weight bias may include, but are not limited to: poor body image, low self-esteem, loneliness, depression, anxiety, and even eating disorders.[275,276] In turn, weight bias experiences may translate into poor health outcomes, such as impaired glucose tolerance, insulin resistance, and hypertension.[277-279] In some cases, weight bias may perpetuate inequities by influencing individuals' employment, health, and access to education.[273] Some stereotypes that prevail portray individuals with obesity as lazy, unmotivated, untidy, or lacking self-discipline.[280] Unfortunately, school health promotion efforts surrounding obesity prevention may have unintentionally served to increase weight bias by focusing on the "dangers" of obesity and framing obesity as a personal responsibility.[280]

Children as young as three years of age have been shown to exhibit weight bias,[281] which escalates with age.[282] Children with overweight and obesity are often targets of weight bias and social stigmatization from peers, their educators, and even their parents.[277] In a 2013 cross-national survey conducted in the US, Canada, Iceland, and Australia, weight-based bullying was identified as significantly more prevalent in youth than bullying related to race, sexual orientation, and religion.[283] In the school setting, such weight-related teasing has been identified as an obstacle to student participation in physical education classes.[284] Moreover, teachers have reported that students with obesity are a greater "burden" in the classroom,[280] and often perceive students with obesity as having poorer social reasoning, physical, and cooperation skills, relative to children without obesity.[285,286] Of notable concern is the fact that teacher-assigned grades can directly impact students' futures, given that these grades are critiqued as a key indicator of ability by post-secondary schools.[287]

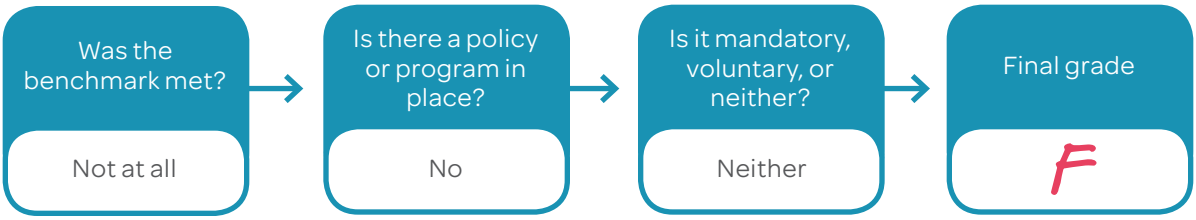
Encouragingly, parents and school staff have recently demonstrated a strong interest in weight bias reduction strategies.[288,289] Such support can catalyze change, both in the school environment and childcare settings, with respect to developing policies to reduce weight bias and prevent its potential harmful effects.

23 INDICATOR

Weight Bias is Avoided

BENCHMARK

Weight bias is explicitly addressed in schools and childcare settings.



KEY FINDINGS

Alberta school and childcare curricula do not offer explicit education regarding weight bias to children.[290] Instead, schools follow a comprehensive framework, which broadly promotes healthy body images, wellness choices, physical activity, healthy eating, healthy relationship, anti-bullying practices, and overall positive social environments.

The Canadian Summit on Weight Bias in Sept 2015:[291] "...recommended that weight bias can be addressed in the context of bullying and mental health which fits nicely with the mental healthcare supports currently being promoted within the schools."

The K-9 Health and Life Skills and high school Career and Life Management (CALM) programs allow teachers the flexibility to discuss topics related to weight bias, but it is not explicitly addressed in the curriculum.[292]

POLICIES/SYSTEMIC PROGRAMS

No policy or program for weight bias in curriculum.

Health Promotion Coordinators – Mandatory policy/program.

Healthy & Life Skills and CALM – voluntary.

While teachers may cover topics such as healthy body image, weight bias is not explicitly addressed in schools and childcare settings.

RECOMMENDATIONS

Research	Conduct weight bias intervention research involving children and youth to determine the most effective weight bias reduction strategies in schools and childcare facilities.
Practice	Incorporate weight bias education into the health and wellness curriculum for all grade levels, and into pre-service teacher and childcare worker education.
Policy	Develop and implement a provincial policy prohibiting weight bias in schools and childcare, which addresses weight-related teasing in anti-bullying policies.

Corporate Social Responsibility

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

INDICATOR	GRADE
Corporations Have Strong Nutrition-Related Commitments And Actions.	D

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.[293-295] The main environments in which the food industry has been found to influence obesity-related eating behaviours in children are schools, retailers, television, internet, the home, and promotional campaigns.[293]

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.[160,296,297] The most effective public-private agreements are those with substantial and financially important incentives, and sanctions to industry for non-participation or failure to meet targets.[298] Voluntary, industry-led initiatives have produced limited results.[181,182,299,300] This may be a result of the fact that companies involved in self-regulation initiatives tend to heavily influence the development of regulatory standards, making it likely that standards will be set at a low level.[300] Improvement with respect to production, sales, and marketing of healthier foods may only be perceived as necessary in the face of strict regulations, with a strong power to ensure that companies comply, or when pressure is applied from civil society.[301] In light of this situation, there has been a call for more robust accountability and monitoring systems[293,302,303] in order 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.[304]

The food industry must acknowledge their health promotion role in addressing the population health issues of obesity and chronic disease [301]. Not only is this is part of corporate social responsibility, but it is also in their best financial and business interests, as consumers are increasingly demanding healthier food.[301,305] Food and beverage manufacturers have recognized this, and have moved away from portraying obesity as a personal choice, towards an image that they wish to be "part of the solution" to the obesity and chronic disease epidemic.[306]

24 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 ≥ 5.0 out of 10.0.

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

KEY FINDINGS

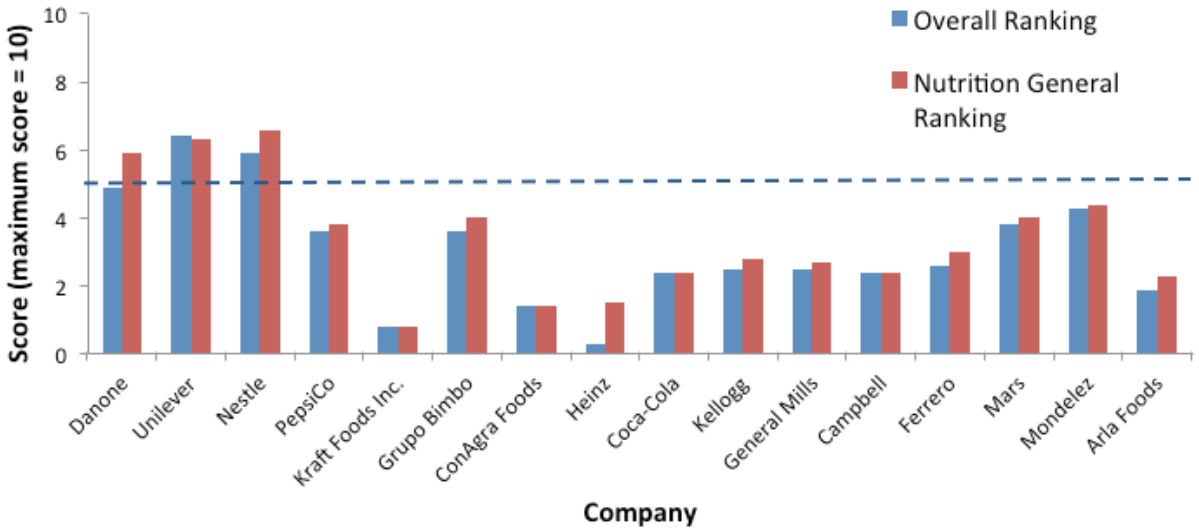
The 2016 Access to Nutrition Index ranked 22 of the world's largest food and beverage companies, 16 of which operate in Canada.[301]

Of these companies operating in Canada, only 2 companies (12.5%) achieved an overall ranking ≥5.0.

Most companies (56%) that operate in Canada scored <3.0 overall.

The sub-ranking Nutrition General Ranking reflects companies' efforts to deliver healthy food choices and responsibly influence consumer behaviour.

FIGURE 18. Access to Nutrition Index score of large food and beverage companies in Canada



24

FIGURE 18. Access to Nutrition Index score of large food and beverage companies in Canada.

Companies were given scores for 18 criteria in seven categories (A to G, listed below). Each criterion was given a score based on the commitments, performance, and disclosure of the indicators. The seven category scores were combined using a priori category weights to give an overall ranking.

A. Governance (12.5%) Corporate strategy, governance, and management

B. Products (25%) Formulation of appropriate products

C. Accessibility (20%) Delivery of affordable, available products

D. Marketing (20%) Responsible marketing policies, compliance, and spending

E. Lifestyles (2.5%) Support for healthy diets and active lifestyles

F. Labelling (15%) Informative labelling and appropriate use of health and nutrition claims

G. Engagement (5%) Engagement with policymakers and other stakeholders

The total number of scored indicators increased from 173 in 2013 to 198 in this Index.[301,307] Many of these are revised versions of the 2013 indicators. A quarter of the scored indicators are completely new (49 questions overall: 33 on nutrition and 16 on undernutrition). In addition, some unscored indicators were included to gather valuable information to create a baseline from which to track future developments, or to provide more depth to the analysis.

POLICIES/SYSTEMIC PROGRAMS

Voluntary

RECOMMENDATIONS

Research Comprehensive assessment of all commercial activities, including lobbying activities, political donations, and philanthropic activities.

Practice Provide incentives to industry to increase commitment and actions related to delivering healthy food choices.

Only 2/16 food and beverage companies in Canada met the benchmark for nutrition-related commitments and actions.

Breastfeeding Support

Policies and actions to encourage breastfeeding in community settings.

INDICATOR	GRADE
Breastfeeding is supported in public buildings.	B
Breastfeeding is supported in hospitals.	D

WHAT RESEARCH SUGGESTS

There are numerous benefits to breastfeeding for infants, both in the short and long term.[308] Cognitive development is improved and there is a reduced risk of chronic diseases such as diabetes, hypertension, cardiovascular disease, and hyperlipidemia.[308] Some studies suggest that breastfeeding may protect against the development of overweight and obesity,[309] although the evidence overall is inconclusive.[310-312] The World Cancer Research Fund recommends exclusive breastfeeding for the first six months of life, where exclusive breastfeeding refers to no food or drink, including water, except for breastmilk.[313] It is posited that the protective effects of breastfeeding against cancers may be partially attributed to decreased obesity rates.[308] However, the only randomized-controlled trial concerning breastfeeding and weight status, undertaken recently in Belarus, found that strategies aimed to increase the duration and exclusivity of breastfeeding were unlikely to curtail overweight or obesity later in childhood.[314]

The Baby-Friendly Hospital Initiative (BFHI) was launched by the WHO and UNICEF in 1991 as a global effort to implement practices that protect, promote, and support breastfeeding.[315] Evidence suggests the initiative has helped improve both breastfeeding initiation and duration.[26,316,317] The 10 requirements for being designated as a WHO Baby-Friendly Hospital are listed below:[318]

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.

In the United States, the BFHI was associated with increased breastfeeding initiation and duration among mothers with lower education,[319] who tend to be at a greater risk of not breastfeeding.[320] According to the CDC, breastfeeding rates continue to rise, with 79% of newborns in 2011 being breastfed. However, breastfeeding rates dropped to 49% at 6 months and 27% for 12 months.[321] Unfortunately, much of the research evaluating BFHI is of poor quality, with weak study designs, which makes it challenging to assess its true impact.[322]

Health Canada advocates for greater implementation of the WHO's BFHI in hospitals and public health centres, as hospital practices are known to be strong predictors of exclusive breastfeeding.[323] The Public Health Agency of Canada (PHAC) commissioned the Breastfeeding Committee of Canada with summarizing the status of the implementation of the initiative across the country.[324] There are also provincial and territorial level breastfeeding committees with representatives from federal/provincial/territorial governments that oversee and support implementation.[324]

25 INDICATOR

Breastfeeding is Supported in Public Buildings

BENCHMARK

All public buildings are required to permit and promote breastfeeding.

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

KEY FINDINGS

The Alberta Human Rights Act protects women from discrimination while breastfeeding in public places.[325] There is evidence of some municipalities that 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".[326] Although breastfeeding is permitted, we were unable to identify any evidence of public buildings in Alberta that are actively promoting breastfeeding.

There is no Government of Alberta supported breastfeeding initiative group or committee.[324] Despite this, there are non-governmental groups and organizations in existence in Alberta committed to protecting, promoting, and supporting breastfeeding. The Alberta Breastfeeding Committee is one such group and is made up of a team of health care professionals, breastfeeding experts, and consumers that provide leadership and resources to achieve this aim.[327]

One example of the work of the Alberta Breastfeeding Committee is a campaign initiated in 2013 which included the development and distribution of breastfeeding advocacy cards that informed women of their right to breastfeed in public places. The cards also advised women that being asked to leave a building or cover up was considered discrimination under the Alberta Human Rights Act and the Canadian Charter of Rights and Freedoms.[327] There is evidence of similar groups at the local level, such as the Breastfeeding Action Committee of Edmonton and Calgary Breastfeeding Matters Group Foundation.[328,329]

POLICIES/SYSTEMIC PROGRAMS

Mandatory policy

Alberta Human Rights Act

Breastfeeding in public is protected but public buildings are not actively promoting it.

RECOMMENDATIONS

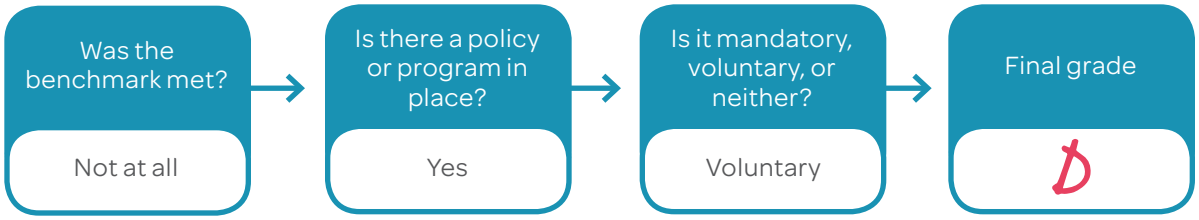
Research	Understand ways to reduce stigma and barriers to breastfeeding in public places.
Practice	Raise public awareness of the benefits of breastfeeding.

26 INDICATOR

Breastfeeding is Supported in Hospitals

BENCHMARK

Hospitals with labour and delivery units, pediatric hospitals, and public health centres are pursuing WHO Baby-Friendly designation.



KEY FINDINGS

A multidisciplinary Alberta Breastfeeding Committee was formed in 2013-14 to advocate for breastfeeding and BFHI in Alberta hospitals and public health centres.[324,330]

This committee includes representation from:

- Alberta Health and Wellness
- AHS
- Young Family Wellness
- Alberta Perinatal Health Program
- Provincial professional associations
- University and community college educators
- Regional breastfeeding coalitions
- Independent experts
- Consumers

Based on the 2012 Canadian Hospitals Maternity Policies Practice Survey, 87% of Alberta hospitals with maternity services having at least 10 births per year had a written breastfeeding policy in place.[331,332]

No health facility in Alberta has achieved a WHO Baby-Friendly designation.[333] Two public health centres in Fort McMurray (Wood Buffalo) and Calgary, as well as two hospitals in Edmonton (Grey Nuns and Misericordia), are undergoing the process of achieving WHO Baby-Friendly Initiative designation.[334,335]

One additional unnamed health centre has committed to the BFHI journey. No public announcements have been made with regards to the progress in achieving BFHI designation at these centres.[336]

The Breastfeeding Committee of Canada indicates that Alberta has no reported breastfeeding education system and has not developed any resources related to Baby-Friendly Initiatives.[324,337]

26

POLICIES/SYSTEMIC PROGRAMS

Various voluntary organizational programs exist to support and monitor BFHI within Alberta and nationally. Examples are provided below:

Organization	Description
Alberta Breastfeeding Committee [View Here]	Focus on engaging and adopting BFHI in Alberta hospitals and public health centres, and supporting BFHI in Alberta facilities[324,337] The Data Collection sub-committee aims to improve and standardize the collection of data related to breastfeeding in Alberta.
Breastfeeding Committee of Canada [View Here]	A support body for any facility wishing to pursue BFHI designation in Alberta [324,330] Monitors implementation of Baby-Friendly Initiatives in Canadian hospitals and health centres (except Québec) by: • Coordinating BFHI Assessments in Canada in collaboration with provincial and territorial BFHI committees. • Tracking facilities in progress towards WHO Baby-Friendly designation. • Maintaining a database of designated facilities. • Managing BFHI assessments (pre-, external, and re-assessments).
Canadian Perinatal Surveillance System[331,332]	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.

RECOMMENDATIONS

Research	Assess barriers to pursuing WHO Baby-Friendly designation in Alberta's hospitals.
Practice	Foster the establishment of a supportive breastfeeding culture in hospitals.
Policy	Mandate a province-wide policy that requires hospitals to support breastfeeding.

Although most Alberta hospitals have breastfeeding policies, none have achieved Baby-Friendly designation to date.

Political Environment

The political environment refers to a broader context, which can provide supportive infrastructure for policies and actions within micro-environments.[1,25]

OVERALL GRADE

CATEGORY	GRADE
Leadership & Coordination	D
Funding	F
Monitoring & Evaluation	D
Capacity Building	B

Leadership & Coordination

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

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

WHAT RESEARCH SUGGESTS

Solutions to obesity cannot be achieved without the involvement and cooperation of all sectors.[4,338] National governments have the primary responsibility and authority to develop policies to create equitable, safe food environments to prevent obesity and chronic disease.[127,338] 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.[339] In order to create healthy food environments and promote nutritional health, the Institute of Medicine (now the National Academy of Medicine) states that there must be:

- Strong political support for the "the vision, planning, communication, implementation, and evaluation of policies and actions."[13]
- Government structures that "ensure transparency and accountability, and encourage broad community participation and inclusion when formulating and implementing policies and actions."[13]
- 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".[13]

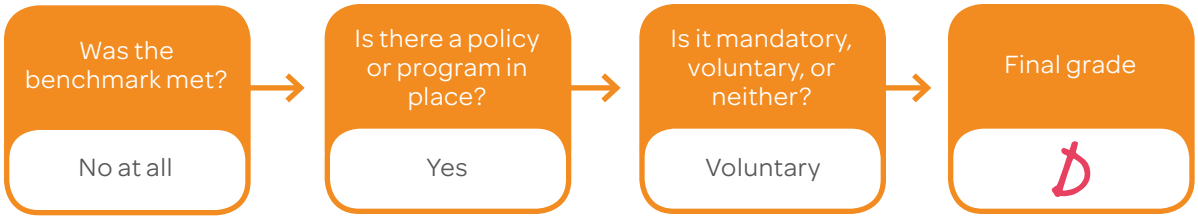
The WHO recommends a whole-of-government approach to preventing and treating childhood obesity.[4] Also known as the Health in All Policies (HiAP) approach, this approach to public policies calls on all sectors to systematically take health into account, seek synergies, and avoid harmful health impacts.[340] Finland has reportedly reduced the proportion of five-year-olds who are overweight or obese by integrating HiAP in their national policies.[341] 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.[342] HIA has not become an established practice in Canada.[342] To promote the practice of HIA throughout Canada, one review suggested integrating HIA in existing regulatory frameworks such as federal and provincial environmental assessments and human health risk assessments among other recommendations.[342]

27 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.



KEY FINDINGS

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

MEND (Mind, Exercise, Nutrition…Do it!): a healthy weights strategy offered in 11 communities in Alberta (Red Deer, Fort McMurray, Paddle Prairie, Edmonton, Medicine Hat, Sherwood Park, Leduc, Ponoka, Calgary, Camrose, and Lethbridge) for children aged 2-13 years and their families.[227]

Healthy Kids Alberta: a wellness strategy that supports health promotion initiatives for children and youth.[223]

Based on the 2015 Towards a Healthier Canada Progress Report, the Government of Alberta has voluntarily taken the role of "Champion" in the areas of: school nutrition guidelines, food guidelines in child daycare settings, and the Comprehensive Healthy Weights program (i.e. MEND).[343]

Nationally, the PHAC launched Curbing Childhood Obesity – A federal, provincial and territorial framework for action to promote healthy weights in 2010.[344] The three key strategies of the framework that support the Pan-Canadian Healthy Living Strategy are to:[344,345]

- Prioritize childhood overweight and obesity prevention in health ministries;
- Coordinate efforts on supportive environments for healthy eating and physical activity, early prevention/intervention, and access and availability of nutritious foods; and
- Track and report progress in reducing childhood overweight and obesity to support maintenance of interventions.

The JCSH, a partnership of 25 Ministries of Health and Education across Canada, works to promote student health achievement through CSH approaches.[346]

Nationally, the Healthy Living Strategy set healthy living targets for 2015.[347] Within Alberta, the Framework for a Healthy Alberta identifies healthy living targets for residents of Alberta.[347,348] However, no new investments have been made, since the target date for achievement has expired.

27

POLICIES/SYSTEMIC PROGRAMS

Mandatory

The Alberta Government provides funding for childhood healthy living/obesity prevention strategies/actions. This funding supports:

- Regional Health Promotion Coordinators for healthy weights. These health promotion professionals facilitate innovative community-based approaches to promote healthy weights for children and youth.[349]
- Health promotion professionals who support healthy weight and healthy eating initiatives for children and youth across the province.[349]

RECOMMENDATIONS

Practice	Increase resources dedicated to health promotion professionals.
Policy	Create sustainable childhood healthy living programs with focus on prevention, not intervention.

While some programs exist, sustainable strategies focused on obesity prevention are lacking.

28 INDICATOR

Health in All Policies

BENCHMARK

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

Was the benchmark met?	Is there a policy or program in place?	Is it mandatory, voluntary, or neither?	Final grade
No at all	No	Neither	F

KEY FINDINGS

At this time, Alberta has not incorporated HIA in all government departments with policies that have potential impact on child health.

The National Collaborating Centre for Public Policy and Health, based in Québec, provides resources to support HIA on broad health policy topics.[350]

POLICIES/SYSTEMIC PROGRAMS

No policy/program in place

RECOMMENDATIONS

Practice Include HIA 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.

Government departments in Alberta do not routinely incorporate Health Impact Assessments into policies affecting child health.

Funding

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

INDICATOR	GRADE
Childhood health promotion activities are adequately funded.	F

WHAT RESEARCH SUGGESTS

Government must act to combat childhood obesity, given its health and economic burden. Although evidence on the lifetime indirect cost of childhood obesity is scant compared to that of adult obesity,[351,352] 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.[351] Given limited resources, government must strategically allocate dedicated and sufficient resources for childhood overweight or obesity treatment and prevention activities. Health economic research on the cost-effectiveness of interventions can assist government in resource allocation decision making.[353]

Growing evidence suggests that investment in primary obesity prevention activities is likely more cost-effective than treatment or secondary prevention interventions.[353] This is consistent with findings that primary prevention activities have the potential to reduce health care costs to a greater degree than the cost of program implementation, and can ultimately reduce obesity prevalence.[354,355] 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. Taxation revenues can be used to fund other health promotion activities.[354]

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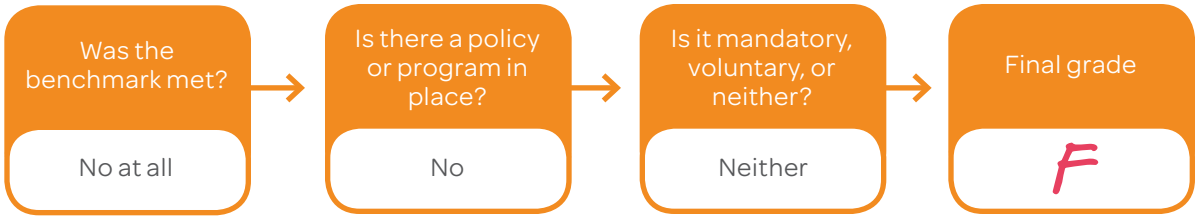
INDICATOR

Childhood Health Promotion Activities are Adequately Funded

BENCHMARK

At least 1% of the 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.



KEY FINDINGS

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 8. The Alberta Government funds health promotion professionals to support healthy weight and healthy eating initiatives for children and youth in the province.[349]

TABLE 8. Alberta government-funded initiatives to improve healthy eating and weights.

Initiative	Description
Alberta Healthy School Communities Wellness Fund	Received $2.3 million in funding for the 2015-16 school year
Communities ChooseWell	Received $500,000 for the 2015-16 fiscal year ending March 31st
Healthy U Alberta	Received $61,000 in funding in 2015-16. This supported a contract to update content on the Healthy U website (healthyalberta.com)

**Note: The Healthy U website officially closed March 31, 2016. Healthy U resources have been transitioned to AHS in order to streamline efficiencies between the Ministry of Health and AHS.

At the national level, the PHAC budgets for strategic outcomes and programs within health promotion and disease prevention.[356] Figure 19 highlights expenditures and planned spending from 2013 to 2019.

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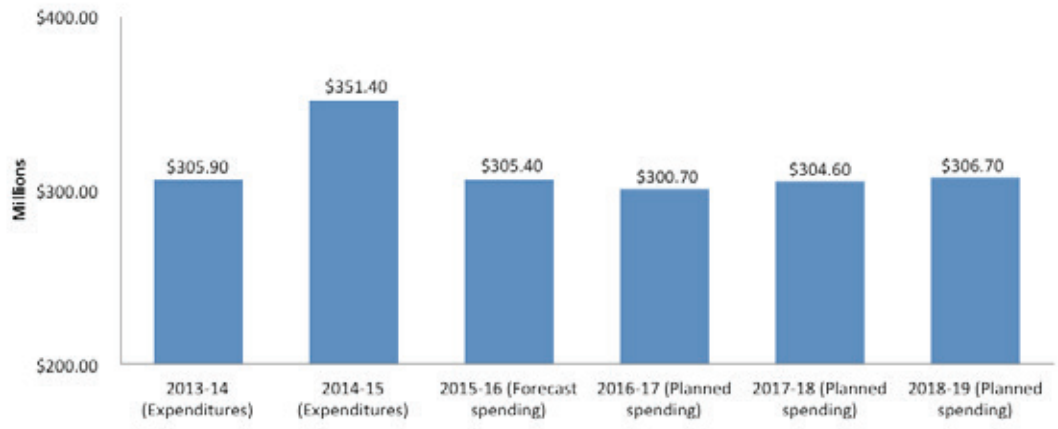
FIGURE 19. PHAC's expenditures and planned spending from 2013 to 2019 for strategic outcomes and programs within health promotion and disease prevention



"The Healthy Living Fund administers $5,388,000 in funding each year to address the conditions that lead to unhealthy eating, physical inactivity and unhealthy weights. The fund is included within the Multi-Sectoral Partnerships to Promote Healthy Living and Prevent Chronic Disease Program, under which the Agency invests approximately $20 million annually to support projects that strive to promote healthy living and prevent chronic disease. The Agency takes an integrated approach to the promotion of healthy living and chronic disease prevention through this initiative, focusing on common risk factors that are most associated with the major chronic diseases, including cancer, diabetes and cardiovascular disease. These common risk factors include physical inactivity, unhealthy eating and smoking."[357]

POLICIES/SYSTEMIC PROGRAMS

The above are examples of systemic programs

RECOMMENDATIONS

Practice	Ensure a strategy with sustained and sufficient funding to support it is in place.
Policy	Dedicate at least 1% of the provincial health budget to the healthy living and obesity prevention strategy/action plan, with a significant portion focused on children.

Although programs exist to support childhood health promotion, a strategy with sustained and sufficient funding is needed.

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
Impact and Compliance Monitoring of Policies and Actions to Improve Children's Eating Behaviours and Body Weights are Regularly Assessed.	D

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.[127] 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.[4,358,359] Policy implementers and the populations targeted by the policies face a variety of barriers to complying with established policies.[360] Evaluating policy compliance can inform new strategies to help increase levels of policy adoption and implementation.[358] A national system that oversees monitoring, surveillance, and evaluation is recommended as this facilitates the standardization of methodology, thus increases the accuracy and representativeness of data.[361] Government must provide effective legislation, required infrastructure, implementation of programs, and adequate funding, and should regularly monitor the implementation and impacts of its national strategies and policies.

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.[362] 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 their inequalities.[13] One approach to monitoring diet quality involves assessing the proportion of ultra-processed products consumed using data collected from food intake surveys.[363] Other pre-defined diet quality indices can also be used.[363] Finally, the WHO takes a life-course approach and recognizes the influence of maternal health on childhood obesity, and recommends monitoring and managing gestational weight gain.[4]

Valid and reliable surveillance tools to support population nutrition monitoring are essential. Health Canada has designed a nutrient profiling tool, called Health Canada's Surveillance Tool Tier System, that will become standard in assessing population dietary adherence to Canada's Food Guide.[364] Some evidence suggests that this tool requires improvement to better capture food product differences, which has implications in guiding food marketing toward children and product reformulation.[365]

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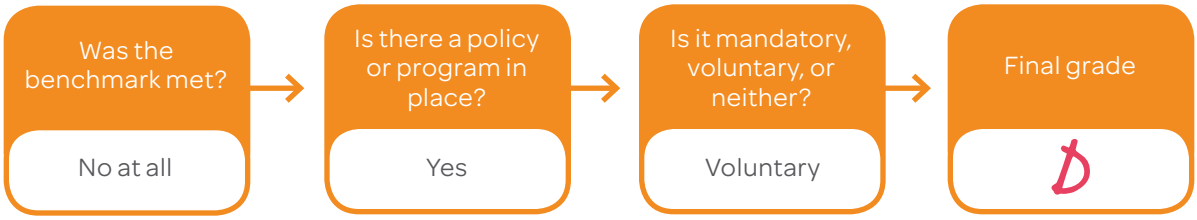
INDICATOR

Impact and Compliance Monitoring of Policies and Actions to Improve Children's Eating Behaviours and Body Weights are Regularly Assessed

BENCHMARK

- *Ongoing evaluation of the impact of policies and actions associated with the childhood healthy living and obesity prevention strategy/action plan, including a biennial population-level surveillance of children's eating behaviours and body weights.*
- *Mechanisms are in place to monitor adherence to mandated nutrition policies.*



KEY FINDINGS

At this time, Alberta does not have a mandatory monitoring system in place to track adherence to mandated nutrition policies.

Since 2013, the Healthy School Community Wellness Fund[343] has tracked the number of schools that have completed the JCSH Planner modules as a way of measuring the implementation of CSH in Alberta.

A list detailing the surveillance of diet and weight for children and youth in Canada is provided in Table 9.

TABLE 8. Alberta government-funded initiatives to improve healthy eating and weights

Survey	Years	Age Range	Description
Canadian Community Health Survey – Annual Component[366]	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[367]	Occasional 2004*; 2014-15	1 year and older	Collects details about eating habits, use of vitamin and mineral supplements, and other health factors of the Canadian population.
Canadian Health Measures Survey – Annual Component[368]	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.

*The 2004 CCHS did not include information related to the eating behaviours of individuals living in the 3 territories.

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POLICIES/SYSTEMIC PROGRAMS

Alberta	Voluntary evaluation exists
Nationally	Mandatory evaluation exists

RECOMMENDATIONS

Policy	Establish a dedicated system for ongoing evaluation of the impact of policies and actions, population-level surveillance of children's eating behaviours and body weights, and monitor adherence to mandated nutrition policies.

Whereas mandatory national surveillance exists, provincial evaluation is voluntary and adherence to nutrition policies is not monitored.

Capacity Building

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

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

WHAT RESEARCH SUGGESTS

Governments have primary responsibility and authority to develop policies that create equitable, safe food environments to prevent obesity and chronic disease.[127,338] Governments must have the capacity to implement and monitor policies and programs to improve population nutrition and health.[13]

The target populations of health strategy and policies may face a variety of barriers to compliance including insufficient incentives, inadequate knowledge, and incompatible attitudes and values.[369] 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 ANGCY), one study found they were not being widely used within recreational facilities.[370] Barriers to the implementation of the ANGCY in recreation facilities included: facility managers' low level of guideline awareness, beliefs that the guideline is incompatible with customers' expectation, and concerns over profit-making ability.[370] The personnel responsible for delivering the policy may lack the skill, knowledge, or resources necessary for implementation. Lessons from past policy failure 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.[371] 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 have limited skills in implementing policy and environmental changes associated with obesity prevention recommendations.[372] Therefore, governments must provide effective legislation, required infrastructure, implementation programs, adequate funding, monitoring and evaluation, and ensure ongoing research to support its health strategy and policies.[127]

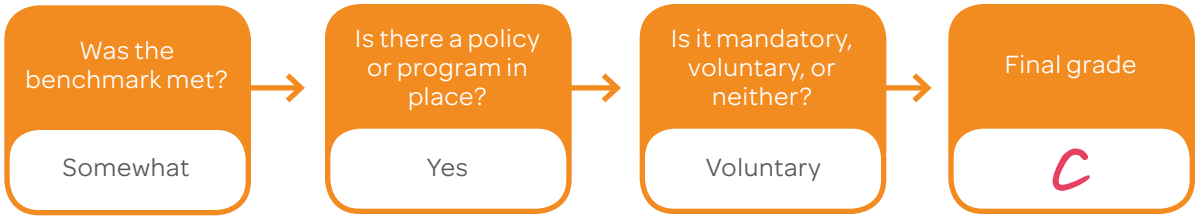
It is not enough that nutrition guidelines and information exist. Guidelines should also contain accurate and appropriate information, and be widely disseminated to people to aid their decision making. The WHO recommends governments develop and disseminate appropriate and context-specific dietary guidelines to reach all segments of the population.[4] 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.[10]

31 INDICATOR

Resources are Available

BENCHMARK

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



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 10.

TABLE 10. Examples of online resources and campaigns to support childhood healthy living and obesity prevention

AHS Healthy Eating Starts Here [373,374] Resources provide individuals, parents, families, child cares, schools, and workplaces more guidance on healthy eating at work, school, childcare centres, and in the community. [View Here]	**Heathy U**[227,375-377] Launched in 2002, this website* aims to promote and support healthy living for Albertan residents by providing healthy eating and active living informational tools, including:[375] nutrition guidelines, cookbooks, posters, information booklets, meal planning tools, age-specific food guide serving sizes, infant feeding guidelines, and personal monitoring tools.[377] [View Here] *Note: Healthy U website officially closed March 31, 2016. Healthy U resources have been transitioned to AHS in order to streamline efficiencies between the Ministry of Health and AHS.
Canada's Healthy Eating Toolbox[172,227,378] Launched in 2012, Health Canada developed a toolbox of online nutrition-related resources to support parents and caregivers of children between the ages of 2 and 12 years. Resources such as fact sheets and promotional media campaign resources are available to support consumers, health professionals, and educators. [View Here]	
Working with Grocers to Support Healthy Eating and Measuring the Food Environment in Canada[379] Describes current evidence linking access to food with diet-related diseases, and highlights gaps in research related to understanding how the food retail environment could better promote and support healthy eating. [View Here]	

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POLICIES/SYSTEMIC PROGRAMS

All personnel and resources are systemic

RECOMMENDATIONS

Practice	Ensure a comprehensive childhood healthy living and obesity prevention strategy/ action plan is in place.
Policy	Allocate permanent funding for sufficient supportive personnel and resources in the provincial budget.

Although supportive resources are available, Alberta would benefit from a comprehensive childhood healthy living and obesity prevention strategy.

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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.

Was the benchmark met?	Final grade
Yes	A

In 2008, Alberta released the ANGCY (Alberta Nutrition Guidelines for Children and Youth). Continued efforts to increase implementation of the guidelines are required.

KEY FINDINGS

FOOD RATING SYSTEMS:

Alberta Nutrition Guidelines for Children and Youth[66]

- 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.[66]

Federal/Provincial/Territorial Harmonized Food Rating System for Schools[227,380,381]

- 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[227] of these harmonized nutrition guidelines, which support the Federal/Provincial/Territorial Framework for Action to Promote Healthy Weights.[381]

DIETARY GUIDELINES:

Eating Well with Canada's Food Guide

- This national guide provides dietary recommendations for Canadians aged 2 and older.[256] 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 aged 2 to 17.[256,382]

Nutrition for Healthy Term Infants

- Provides evidence-based recommendations for parents of children from birth to 2 years of age on breastfeeding, breast milk substitutes, complementary feeding, and vitamin D supplementation. These resources have been available since 2008 and were revised in 2011.[378,382]

POLICIES/SYSTEMIC PROGRAMS

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

RECOMMENDATIONS

Practice	Increase adoption and implementation of ANGCY by target audiences (ie. schools, recreation centres).
Policy	Mandate and provide support to increase adoption and implementation of existing rating systems and guidelines.

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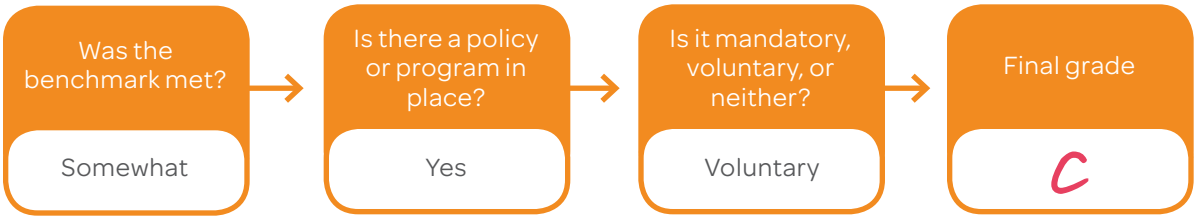
INDICATOR

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.



KEY FINDINGS

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.

Health Promotion Coordinators and Public Health Dietitians facilitate community based approaches to promote healthy living.

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TABLE 11. Organizations in Alberta providing supportive personnel for childhood healthy living and obesity prevention

Alberta Health Services

Health Promotion Coordinators (HPCs) from the AHS Healthy Children and Youth team support school jurisdictions in Alberta in advancing the CSH approach.

There is a key AHS 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. In 2014-2015, HPCs 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 HPCs' partnerships were with stakeholders from the education sector (43%) and health sector (34%).[383]

Public Health Dietitians in Alberta Health Services are registered dietitians and are located in communities across the province. They collaborate with stakeholders representing sectors involved in child & youth health, including childcare, school, and community, 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: www.healthyeatingstartshere.ca[261]

School Nutrition Integrated Working Group

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 ANGCY, with the goal of improving nutritional knowledge and practices of children and youth. Their resources can be viewed here:

http://www.albertahealthservices.ca/nutrition/Page2925.aspx[261]

Comprehensive School Health Working Group[384]

This group is led by the Healthy Child and Youth Team to gather, review, and evaluate an inventory of CSH education resources that are used provincially.

Healthy Eating Environments in Child Care Working Group

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 the child care setting. Using the full range of population health promotion strategies, the group collaborates with stakeholders including researchers, childcare educators and operators, regulators, accreditors and non-profit organizations, to develop and evaluate tools and resources based on the ANGCY. Their resources can be viewed here:

http://www.albertahealthservices.ca/nutrition/Page8941.aspx[261]

POLICIES/SYSTEMIC PROGRAMS

The above are systemic programs

RECOMMENDATIONS

Practice Increase capacity of public health dietitians to assist public and private sectors.

Policy Provide toolkits and support to increase compliance with nutrition policies.

Abbreviations

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

Summary of Indicators

Category	Indicator	Benchmark	2016 Report Card Grades				
			F	D	C	B	A
Food Availability Within Settings	High availability of healthy food in school settings	Approximately ¾ of foods available in schools are healthy.					
	High availability of healthy food in childcare settings	Approximately ¾ of foods available in childcare settings are healthy.	Incomplete				
	High availability of healthy food in community settings: Recreation facilities	Approximately ¾ of foods available in recreation facilities are healthy.					
Neighbourhood Availability of Restaurants and Food Stores	High availability of food stores and restaurants selling primarily healthy foods	The modified retail food environment index across all census areas is ≥ 10; across impoverished census areas is ≥ 7.					
	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.					
Food Composition	Foods contain healthful ingredients	≥ 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving.					
Nutrition Information at the Point-of-Purchase	Menu labelling is present	A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations.					
	Shelf labelling is present	Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.					
	Product labelling is present	A simple, evidence-based, government-sanctioned FOP food labelling system is mandated for all packaged foods.					
	Product labelling is regulated	Strict government regulation of industry-devised logos/branding denoting 'healthy' foods.					
Food Marketing	Government-sanctioned public health campaigns encourage children to consume healthy foods	Child-directed social marketing campaigns for healthy foods.					
	Restrictions on marketing unhealthy foods to children	All forms of marketing unhealthy foods to children are prohibited.					
Nutrition Education	Nutrition education provided to children	Nutrition is a required component in the health curriculum at all school grade levels.					
	Nutrition education and training provided to teachers and childcare workers	Nutrition education and training is a requirement for teachers and childcare workers.					

Summary of Indicators

Category	Indicator	Benchmark	2016 Report Card Grades				
			F	D	C	B	A
Financial Incentives for Consumers	Lower prices for healthy foods	Healthy foods are exempt from point-of-sale taxes.					
	Higher prices for unhealthy foods	A minimum excise tax of $0.05/100 mL is applied to sugar-sweetened beverages sold in any form.					
	Affordable prices for healthy foods in rural, remote, and northern areas.	Subsidies for transportation and local production of healthy food to rural, remote, or northern communities to ensure affordability of local consumers.					
Financial Incentives for Industry	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 lower rate and unhealthy food is taxed at a higher rate)					
Government Assistance Programs	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.					
	Reduce childhood food insecurity	Reduce the proportion of children living in food insecure households by 15% over three years.	Incomplete				
	Nutritious Food Basket is affordable	Social assistance rate and minimum wage provide sufficient funds to purchase the content of a Nutritious Food Basket.					
	Subsidized fruit and vegetable subscription program in schools	Children in elementary school receive a free or subsidized fruit or vegetable each day.		+			
Weight Bias	Weight bias is avoided	Weight bias is explicitly addressed in schools and childcare.					
Corporate Responsibility	Corporations have strong nutrition-related commitments and actions	Most corporations in the Access to Nutrition Index with Canadian operations achieve a score of ≥ 5.0 out of 10.0.					
Breastfeeding Support	Breastfeeding is supported in public buildings	All public buildings are required to permit and promote breastfeeding.					
	Breastfeeding is supported in hospitals	Hospitals with labour and delivery units, pediatric hospitals, and public health centres are pursuing WHO Baby-Friendly designation.					

Summary of Indicators

Category	Indicator	Benchmark	2016 Report Card Grades				
			F	D	C	B	A
Leadership and Coordination	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.					
	Health-in-All policies	Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.					
Funding	Childhood health promotion activities adequately funded	At least 1% of the health budget dedicated to implementation of the government's healthy living and obesity prevention strategy/ action plan, with a significant portion focused on children.					
Monitoring and Evaluation	Impact and compliance monitoring of policies and actions to improve children's eating behaviours and body weights are regularly assessed through surveillance.	Ongoing evaluation of the impact of policies and actions associated with the childhood healthy living and obesity prevention strategy/ action plan, including a biennial population-level surveillance of children's eating behaviours and body weights. Mechanisms are in place to monitor adherence to mandated nutrition policies.					
Capacity Building	Resources are available	A website and other resources exist to support achievement of the childhood healthy living and obesity prevention strategy/action plan.					
	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.					
	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.					

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