

Healthy Food Environments and Nutrition for Children and Youth



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WHO WE ARE

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):









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

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

Association pour la santé publique du Québec (ASPQ) is an autonomous multidisciplinary organization that helps promote, improve and maintain the health and well-being of people living in Québec. ASPQ strives to create consensus and supports policies geared to bringing about environmental changes that will foster sound eating habits, physical activity and healthy social norms. www.aspq.org

The Government of the Northwest Territories (GNWT) supports the development of strong individuals, families and communities who will share the benefits and responsibilities of a unified, environmentally sustainable and prosperous Northwest Territories. Specific goals include a strong and independent North built on partnerships; an environment that will sustain present and future generations; healthy, educated people free from poverty; sustainable, vibrant, safe communities and effective and efficient government. www.choosenwt.com

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The views expressed herein represent the views of the authors and do not necessarily represent the views of Health Canada or the Canadian Partnership Against Cancer.

We would like to acknowledge Active Healthy Kids Canada/ParticipAction whose work on the Physical Activity Report Card for Children and Youth provided a model that contributed to the development of the Report Card on Healthy Food Environments and Nutrition for Children and Youth, as well as their guidance throughout this initiative.



Alberta's **2015** Report Card on Healthy Food Environments and Nutrition for Children and Youth

POWER UP! partners played a critical role in the research, development and communication of Alberta's 2015 Report Card on Healthy Food Environments and Nutrition for Children and Youth.









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A summary of the 2015 Report Card is also available online at: <u>www.powerupforhealth.ca</u>, Canada's one stop shop for resources and tools on obesity and chronic disease prevention.



HELP US DO OUR JOB BETTER

The POWER UP! 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.

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PHYSICAL ENVIRONMENT

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ALBERTA'S 2015 REPORT CARD ON HEALTHY FOOD ENVIRONMENTS AND NUTRITION FOR CHILDREN AND YOUTH

Poor nutrition and obesity are major health concerns facing Canadian children and youth. The 2015 Report Card is the first 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 review of the literature to identify indicators relevant to children's food environments was undertaken and a grading system was developed. Over 20 of Canada's top experts in nutrition and physical activity worked together with decision makers and practitioners to develop the Report Card.¹

In 2015, an Expert Working Group of academics and representatives with expertise related to childhood obesity, eating behaviours, food environments, and nutrition policy from non-government organizations from across Canada discussed and graded the best available data for 41 indicators across 16 categories. Detailed grades of each of the 41 indicators can be found in this long-form report. A summary report is also available.

Our aim through this assessment is to increase public, practitioner and decision 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 will serve as a tool for all levels of government and non-government organizations, researchers, corporations and foundations to support and develop enhanced programming and policies, as well as identify areas that require further action.

This year, the purpose of the Report Card was to:



Monitor

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

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.



Engage

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



Study

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

The Report Card begins by highlighting the importance of food environments and nutrition for children and youth in terms of health promotion and obesity prevention, including a theoretical overview of different types of food environments. The Report Card then provides grades for 41 indicators across 5 types of environments in Alberta.



HEALTHY EATING IN CANADA

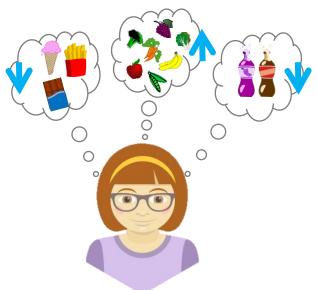
Why is Healthy Eating Important?

Many studies highlight the benefits of healthy eating behaviours for children and youth. In fact, healthy eating can help prevent childhood obesity and chronic disease.^{2,3} Eating behaviours and patterns established in early years are often sustained into adulthood,⁴⁻⁶ and children who are overweight are more likely to have unhealthy body weights into their adult lives.⁷ Nearly one-third (approximately 1.6 million) of Canadian children between the ages of 5 and 17 years were classified as overweight or obese between 2009 and 2011.⁸

Healthy eating is more than an individual choice and may be influenced by the environments in which we live. 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.⁹ Living in a community with predominantly unhealthy food stores,

Obesity rates in Canadian children and youth has been on the rise since the 1970s⁸

for instance, has been found to increase consumption of unhealthy foods because these items are more accessible and are heavily promoted.⁹⁻¹²



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To improve children's eating behaviours and body weights, it is helpful to understand how current food environments and policies may act as barriers or facilitators to healthy eating.^{10,13} Although policies and actions can be difficult to change due to competing interests,^{10,14} governments have the responsibility to ensure environments provide and encourage healthy food choices, thereby protecting and promoting child health.¹³

The Report Card on Healthy Food Environments and Nutrition for Children and Youth contributes to understanding the status and impact of current nutrition-related policies and actions in Alberta. It highlights where we are succeeding and where more work is needed to support the health of children and youth.¹

FRAMEWORK AND ORGANIZATION

The 2015 Report Card used the conceptual framework developed by Brennan and colleagues¹⁵ 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 have policies and actions embedded within each. To understand the infrastructure that supports policies and actions within micro-environments, the **political macro-environment** was also examined.^{1,10} The figure below depicts the different types of food environments that may influence the eating behaviours of children and youth,^{1,11,15} and lists examples of each.¹

Types of Environments

MICRO-ENVIRONMENTS			
PHYSICAL	The physical environment refers to what is available in a variety of food outlets ¹¹ including restaurants, supermarkets, ¹⁶ schools, ¹⁷ worksites, ¹⁸ as well as community, sports and arts venues. ^{19,20}		
	The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing, ^{21,22} as well as the availability of point-of-purchase information in food retail settings, such as nutrition labels and nutrition education.		
	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, ²⁵ financial support for health promotion programs, ²⁴ and healthy food purchasing policies and practices through sponsorship ²¹ can affect food choice. ¹³		
SOCIAL	The social environment refers to the attitudes, beliefs and values of a community or society. ¹¹ It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models, ¹¹ 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-ENVIRONMENT		
	The political environment refers to a broader context, which can provide supportive infrastructure for policies and actions within micro-environments. ^{1,22}		

Physical Categories

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

Economic Categories

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

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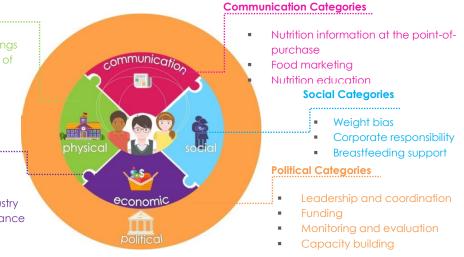


Figure 1: Adapted conceptual framework highlighting key categories embedded within each environment^{1,11,15}

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.²⁴ 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 available foods are healthy in schools

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 potential to influence the eating behaviours and/or body weights of children aged 3-18 years, their families, and communities

Be policy-relevant and amenable to government influence

Be feasible targets for data collection, quantifiable and replicable across settings

Be supported by evidence of effectiveness and population-level impact (e.g., peerreviewed studies showing that the indicators influence the eating behaviours and/or body weights of children)

Highlight opportunities for intervention and research

Benchmarks¹ 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 were not intended to fully measure all aspects of each indicator. Rather, they were intended to provide standards that are:



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Measurable and realistically achieved

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 Expert Working Group used the grading scheme illustrated below to assign a grade to each indicator. The grading scheme followed a series of four key decision steps:

- i. Has the benchmark been met?
- ii. Are supports in place?
- iii. Is monitoring in place?
- iv. Are high risk groups (e.g. aboriginal, minority, and socioeconomically disadvantaged groups) addressed?

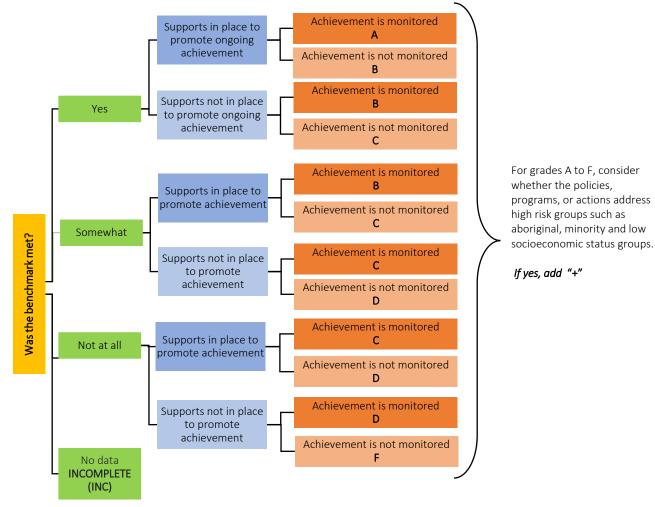


Figure 2: Grading system flow-chart¹

Although a "+" grade is added to indicate a high-risk population is addressed, a "-" can be assigned based upon judgment by the Expert Working Group in cases, for example, when supports and/or monitoring systems existed previously, but were discontinued in recent years.

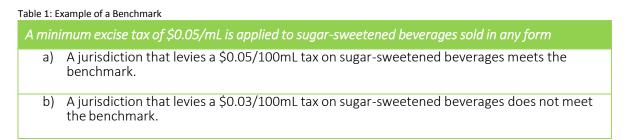


The Grading Process

The next 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):



Step 2: Are supports in place?

Next, the Expert Working Group considered whether supports were in place to support achievement of the benchmark. Supports can include, but are not limited to:



Step 3: Is monitoring in place?

Monitoring involves formal evaluation by government that is documented, and involves consequences for noncompliance. In the case of the political environment, monitoring can also include efforts by arms-length government agencies, non-government organizations or other organizations to hold the government accountable for its actions.

Step 4: Are high-risk groups addressed?

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



O V E R A L L G R A D E	PHYSICAL ENVIRONMENT This environment refers to the types of foods and beverages available in different outlets ¹¹ such as restaurants, supermarkets, ¹⁶ schools, ¹⁷ worksites ¹⁸ and community sports and arts venues. ^{19,20}		
	CATEGORY	GRADE	
	Food Availability Within Settings	С	
	School Settings	С	
	Childcare Settings	INC	
	Community & Recreation Settings	D	
	Neighbourhood Availability of Restaurants and Food Stores		
	Food Composition	С	



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).

SETTING	HIGH AVAILABILITY OF HEALTHY FOOD IN SETTINGS	LIMITED AVAILABILITY OF UNHEALTHY FOOD IN SETTINGS
SCHOOL	С	С
CHILDCARE	INC	INC
COMMUNITY	D	D
M/h at Data analy C	and the second	

What Research Suggests

Consumption of sugar-sweetened beverages,²⁵⁻²⁷ fast food,²⁸ and energy-dense, nutrient poor foods (e.g. deep fried foods, high-fat snack foods)²⁹ is associated with poor eating behaviours and/or increased body weights. Similarly, fast food consumption is associated with increased weight³⁰ and calorie intake.³¹ Choices at fast-food restaurants are typically high-calorie foods,³² served in large portions.³³

Food and beverage policies in place within children's environments, such as school, childcare and community settings can influence eating behaviours.³⁴ The likelihood of children selecting healthy food and beverage items tends to decrease in the presence of tasty, less healthy options.³⁵⁻⁴⁰ In fact, students who have no (or limited) access to unhealthy foods and beverages through snack bars,⁴¹⁻⁴³ vending machines,⁴³⁻⁴⁵ convenience stores or fast-food restaurants⁴⁵ 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 behavior change.^{43,46-49} A recent WHO report cited initiatives to increase availability of fruits and vegetables as among the interventions for which evidence shows that availability and cost are promising factors in relation to childhood obesity prevention.⁵⁰ Moreover, the creation and adoption of healthy procurement policies is considered an effective, feasible and low-cost means for municipal governments to improve the nutritional quality of foods purchased and served by public agencies.⁵¹

Examples of Recommended Policies and Practices

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- 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.⁵²
- In the United States, the Centers for Disease Control's 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.⁵³ 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.⁵³

FOOD AVAILABILITY WITHIN SCHOOL SETTINGS



- Comprehensive School Health initiatives are in place in Alberta schools, which are expected to contribute to
 physical environments that support healthy behaviours and increase the proportion of schools with healthy food
 policies.^{54,55}
- COMPASS assessed food and beverages offered in 10 Alberta schools.⁵⁶
 - Seven of eight schools with a cafeteria had daily healthy specials, but these were more expensive than less healthy options.
 - Chips and chocolate bars were the most common items in snack vending machines, representing 48% and 16% of all snack vending machine products, respectively. None offered fruits or vegetables.⁵⁶
 - The pie chart in Figure 4 highlights the contents of beverage vending machines in relation to the Alberta Nutrition Guidelines for Children and Youth (ANGCY; description on page 14). The bar graphs on either side further breakdown the type of beverage offered aligning with either the "Choose Most Often" or "Choose Least Often" category.

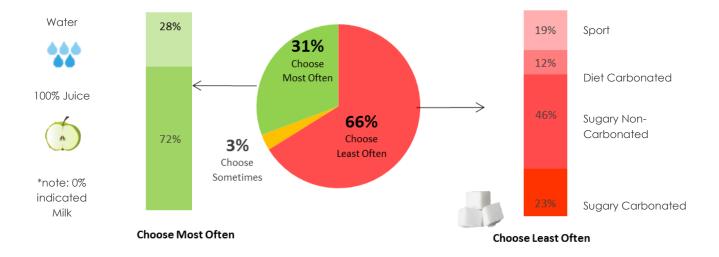


Figure 4: Proportion of Beverages by the ANGCY in School Vending Machines⁵⁶

*"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.



PHYSICAL ENVIRONMENT

- A survey of school principals, undertaken by REAL (Raising healthy Eating and Active Living) Kids Alberta,⁵⁷ found that 91% of principals reported using the ANGCY to guide at least some or most of the foods they offered to children in their schools.
- However, 63% of principals reported incorporating the ANGCY into school nutrition policies and only 66% reported that foods and beverages were mainly healthy (Figure 5).

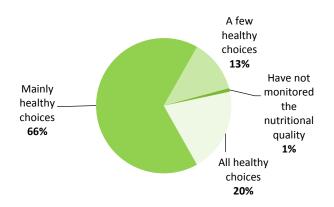


Figure 5: Principals' responses to "How do you rate the nutritional quality of the food and beverages that are served or available for sale in your school?" (n=122) $^{\rm 57}$

Developed in 2008, the ANGCY is a resource that helps the province to, "create an environment which provides and promotes healthy food choices and healthy attitudes about food."⁵⁸ The guide aims to support and equip facilities and organizations with the tools and resources to be able to provide children with healthy food choices in childcare settings, schools, in recreation facilities, at special events and in wider community context.⁵⁸

Alberta Nutrition Guidelines for Children and Youth ⁵⁸				
School Facilities	Childcare Facilities	Recreation Facilities		
SCHOOLS may	CHILDCARE	RECREATION		
choose to offer	FACILITIES might only	FACILITIES could		
affordable and	offer food from the	ensure that healthier		
healthy school snack	"Choose Most Often"	food options are		
and lunch options	category	convenient,		
based on Canada's		attractively packaged		
Food Guide and the		and prominently		
"choose" Rating		displayed		
System				

SUPPORTS

Examples can be found in Table 2 on page 15.

MONITORING

There are no monitoring systems is in place at this time.

RECOMMENDATIONS

Research

• Annual surveys to monitor current state of school food environments.

Practice

Greater implementation of ANGCY and compliance to adopted food and beverage policies.

Policy

• Mandate and monitor ANGCY in all schools.



Table 2: Examples of available supports to increase availability of healthy foods and limit availability of unhealthy foods in school, childcare and community settings.

Type of Support	Description	School	Setting Applicable Childcare	Community
Examples of guidelines, informationa	l, financial, and human resources			
Alberta Nutrition Guidelines for Children and Youth (ANGCY) ⁵⁸ [<u>View Here]</u>	Nutrition guidelines to support Albertans in applying concepts of healthy eating to create environments that promote healthy food choices and attitudes about food. ⁵⁸	V	V	V
Healthy U ⁵⁹ [View Here]	Public campaign providing information on healthy eating and active living to support and encourage Albertans to lead healthier lives. ⁵⁹	V	V	V
Snacktivity Box ⁶⁰ [View Here]	Resource kit provided by Healthy U with activities to support caregivers in creating a healthy environment for children aged 3-5 years through promoting physical activity and healthy eating. ⁶⁰		V	
Communities ChooseWell ⁶¹ [View Here]	Capacity building initiative that promotes and supports the development of community programs, policies and partnerships that foster wellness through healthy eating and active living. ⁶¹	V		v
Health Promotion Coordinators ⁶² [View Here]	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. ⁶²	V	v	v
Wellness Fund for Healthy School Communities ⁶³ [View Here]	Provides financial support for school communities to create healthy environments for their students. ⁶³	V		

FOOD AVAILABILITY WITHIN CHILDCARE SETTINGS

HIGH AVAILABILITY OF HEALTHY FOOD IN CHILDCARE SETTINGS

Benchmark: Approximately ¾ of available foods are healthy in childcare settings.



KEY FINDINGS

One study evaluated the meals and snacks provided to children over 2-5 weeks at two childcare centres. This study used the ANGCY to classify foods.⁶⁴

- Out of 332 foods, 82% of the foods offered in the two childcare centres were "Choose Most Often."⁶⁴
- Although positive, findings are limited to two childcare centres and generalizations cannot be made.

SUPPORTS

Examples can be found in Table 2 on page 15.

MONITORING

No formal programs in place to monitor the availability of healthy and unhealthy foods in childcare settings.

RECOMMENDATIONS

Research

• Document the availability of healthy foods and unhealthy foods in childcare settings.

Practice

• Increase awareness, importance and strategies for implementation of ANGCY among managers and staff within childcare settings.

Policy

• Include adherence to the ANGCY as criteria for meeting benchmarks.

LIMITED AVAILABILITY OF UNHEALTHY FOOD IN CHILDCARE SETTINGS

Benchmark: Deep fried foods, high-fat snack foods and sugar-sweetened beverages represent approximately less than ¼ of available options in childcare settings.

YEAR GRADE

Data unavailable to determine if this benchmark was achieved in childcare settings.

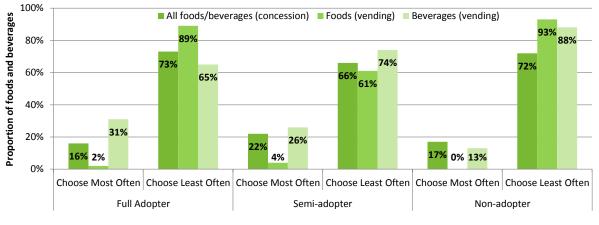


FOOD AVAILABILITY WITHIN COMMUNITY SETTINGS



KEY FINDINGS

- A study evaluated the foods and beverages available in 5 concessions and 36 vending machines in 6 recreation facilities based on the ANGCY and found⁶⁵:
 - Only 11-22% of the foods and beverages sold in concessions were "Choose Most Often."
 - 4/5 concessions and 0/36 vending machines in recreation facilities sold fruits or vegetables.
 - Most foods and beverages (61-93%) available at concessions and in vending machines were "Choose Least Often."
 - Figure 6 highlights the proportion of foods available in recreation facility concessions and vending that were "Choose Most Often" and "Choose Least Often" by facilities that fully, somewhat, and did not adopt the ANGCY. "Choose Sometimes" foods are not included in the graph, but would represent the remaining percentages.



Recreation facility by level of ANGCY adoption

Figure 6: Proportion of "Choose Most Often" and "Choose Least Often" foods and beverages in recreation facility concessions and vending machines⁶⁵

SUPPORTS

Examples can be found in Table 2 on page 15.



MONITORING

No formal programs are in place to monitor the availability of healthy foods in recreation facilities. Private food vendors were often responsible for implementing the ANGCY in recreation facilities. Monitoring implementation of the ANGCY in recreation facilities was minimal.⁶⁵

RECOMMENDATIONS

Research

• Research effective strategies to improve food environments and monitor the availability of healthy and unhealthy foods in recreation facilities.

Practice

- Increase awareness, importance and strategies for implementation of the ANGCY among managers and staff within recreation facilities.
- Improve coordination of resources and supports for implementation of the ANGCY in recreation facilities. **Policy**
- Mandate and monitor the ANGCY in recreation facilities frequented by children and youth.
- Provide incentives to recreation facilities for adopting and implementing the ANGCY.



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	HIGH AVAILABILITY OF FOOD STORES AND RESTAURANTS SELLING PRIMARILY HEALTHY FOODS	LIMITED AVAILABILITY OF FOOD STORES AND RESTAURANTS SELLING PRIMARILY UNHEALTHY FOODS
GRADE	С	С

What Research Suggests

Evidence suggests community food environments, including availability of healthy and unhealthy foods within neighbourhoods, influence individual eating behaviours.⁶⁶ Several studies have found that availability of healthy foods is higher in grocery stores than in convenience stores.^{9,67,68} Clear differences between the availability of healthy and unhealthy foods in fast food and sit-down restaurants are not as evident,⁶⁹ although fast food menus have been shown to be nutritionally poor⁷⁰ and consumption of fast foods is associated with adverse health outcomes.²⁸

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.⁷¹ More specifically:

- Children attending schools in Montreal, Québec located in neighbourhoods with more unhealthy than healthy food establishments had poorer dietary outcomes.⁷²
- In Edmonton, Alberta, the shorter the distance to healthier food sources from one's residence, the less the likelihood of obesity.⁷³
- In London, Ontario, the proximity of convenience stores to students' homes and the proximity of schools to convenience stores and fast food outlets were all significantly associated with poorer diet quality.⁷⁴

The fast-food retail environment that youth live and go to school is an important contributor to their eating behaviours.⁷⁵ Canadian youth from neighbourhoods with a moderate or high density of chain fast-food restaurants, within 1km of their schools, were more likely to be excessive fast-food consumers than were youth from neighbourhoods with no chain fast-food restaurants.⁷⁵

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.⁷⁶
- The INFORMAS (International Network for Food and Obesity/non-communicable Diseases Research, Monitoring and Action Support) 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)."¹⁰



- 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.⁶⁶
- The City of Detroit prohibits building fast food restaurants within 500 feet of schools,⁷⁷ while South Korea's 'Green Food Zones' restrict sales of unhealthy foods within a 200 metre radius of schools.⁷⁸
- L'Association pour la santé publique du Québec produced, "The School Zone and Nutrition: Courses of action for the municipal sector" report, which provides potential data sources and policy options for improving school food environments.⁷⁹



HIGH AVAILABILITY OF FOOD STORES AND RESTAURANTS SELLING PRIMARILY HEALTHY FOODS

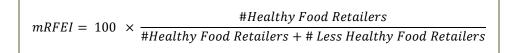
Benchmark:

- The modified retail food environment index across all census areas is ≥ 10; and
- The modified retail food environment index across impoverished census areas is \geq 7.



KEY FINDINGS

The Centers for Disease Control and Prevention (CDC) procedure was used to calculate the modified Retail Food Environment Index (mRFEI)⁸⁰⁻⁸² for each census tract within Edmonton and within Calgary. The mRFEI is calculated for each census tract using the following formula:



From the total number of food stores and restaurants considered healthy (e.g. supermarkets) or less healthy (e.g. fast food outlets) in a census tract, the mRFEI represents the percentage that are healthy. For example, a mRFEI score of ≥ 10 means that at least 10% of food stores and restaurants were likely to offer healthy foods, such as fruits and vegetables, meats, dairy and whole grain products.^{80,82} In urban areas, unhealthy food stores and restaurants tend to outnumber those that are considered healthy and, therefore, achieving a score of ≥ 10 is considered high access.

- As highlighted in Figure 7, 26% of all census tracts in Edmonton and 33% all census tracts in Calgary met the mRFEI score of ≥ 10.
- Within impoverished census tracts, 28% in Edmonton and 35% in Calgary met the mRFEI score of ≥7 (Figure 7).

POWER UP

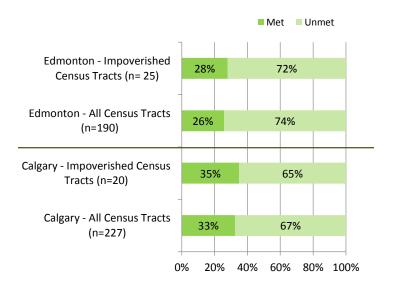


Figure 7: Percentage of Census Tract that met the benchmark modified Retail Food Environment Index score

SUPPORTS

Many groups are advocating for zoning standards in Canadian communities will help to increase access to healthier food sources:

- Federation of Canadian Municipalities
- Canadian Institute of Planners
- Canadian Council on Social Development

MONITORING

The following sources provide publically accessible data that can be used to monitor the availability of food stores and restaurants selling primarily healthy foods:

Alberta Health Services Environmental Public Health — Safe Food ⁸³ [View Here]	 Maintains up-to-date information on public food facilities in Calgary and Edmonton.⁸³
Census Tract – Canadian National Household Survey ⁸⁴ [View Here]	 Provided and updated by Statistics Canada every 5 years and provides information at various levels of geography.⁸⁴ National Household Survey data topics include: immigration and ethnocultural diversity; aboriginal peoples; education and labour; mobility and migration; language of work; income and housing. Census data tract topics include: population and dwelling counts; Age and sex; Families, households and marital status; Structural type of dwelling and collectives; and Language.
Health Canada [View Here]	• Measuring the Food Environment in Canada – document released in 2013 summarizing Canadian research on understanding food environments. ⁷¹

RECOMMENDATIONS

Practice and Policy

Integrate public health principles with municipal zoning policies to help improve food environments at the local scale paying attention to high needs areas, such as around schools and impoverished census tracts.⁷⁶



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 500m of schools.



KEY FINDINGS

Street addresses for all of the schools and all of the food retailers in Edmonton and Calgary were geocoded. The modified Retail Food Environment Index (mRFEI) formula and the 2012 North American Industry Classification (Canada) System (NAICS) was used to identify fast food restaurants and convenience stores.⁸¹ We consider these to be sources of primarily unhealthy foods.

Figure 8 highlights the number of convenience stores and fast food restaurants located within 500 metres of schools (assumed to sell primarily unhealthy foods). Most schools in Edmonton (63.8%) and Calgary (79.7%) have at least one convenience store or restaurant within 500 metres.

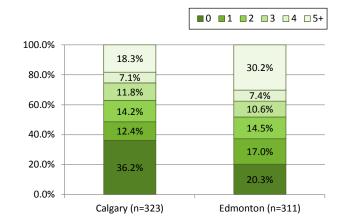


Figure 8: Proportion of schools with 0 to 5 or \ge 5 unhealthy food retailers within 500 metres

SUPPORTS

Many groups are advocating for zoning standards in Canadian communities that increase access to healthier food sources:

- Federation of Canadian Municipalities
- Canadian Institute of Planners
- Canadian Council on Social Development

MONITORING

In Alberta, the types of food stores located in proximity to schools are not monitored.

RECOMMENDATIONS

Research

• Evaluate the extent to which students visit local convenience stores during the school day, including on their way to and from schools.

Practice

• Explore the potential for mobile units to sell healthy foods close to schools (e.g. food trucks).

Policy

- Consider zoning policies that limit the availability of stores that sell primarily unhealthy foods around schools.⁸⁵
- Provide incentives to stores that sell primarily healthy foods to locate near schools.⁸⁶



FOOD COMPOSITION

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

INDICATOR	FOODS HAVE HEALTHFUL NUTRIENT PROFILES	FOODS CONTAIN HEALTHFUL INGREDIENTS
GRADE	A-	F
What Resear	rch Suggests	

Consumption of industrially produced trans fatty acids is associated with an increased risk of cardiovascular disease, diabetes and some cancers.^{87,88} Removal of artificial trans fats has been described as a simple and effective public health intervention to reduce chronic disease.⁸⁹ National bans have been shown to virtually eliminate artificial trans fats from the food supply.⁹⁰

Public health and food industry initiatives aim to increase breakfast consumption among children, particularly through increased consumption of ready-to-eat cereals. However, children's cereals may contain more energy, sugar and sodium, and less fibre and protein compared to non-children's cereals.⁹¹

- Ready-to-eat cereals are the second most heavily marketed food product to children behind fast food,⁹² and most of these ads promote high sugar cereals.⁹³
- 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.⁹¹
- 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).⁹⁴

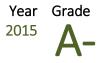
Examples of Recommended Policies and Practices

• INFORMAS (International Network for Food and Obesity/non-communicable Diseases Research, Monitoring and Action Support) provided a proposed 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)."¹⁰



FOODS HAVE HEALTHFUL NUTRIENT PROFILES

Benchmark: All commercially prepared foods are free of artificial trans fats.



KEY FINDINGS

- As of 2010-2011, 97% of restaurant foods in Canada met government-recommended trans fat limits; an increase of 75% from 2005 to 2009.⁹⁵
- Industry has shown significant progress from 2007 to 2009 in voluntarily reducing the trans fat content of foods without increasing levels of saturated fats.⁹⁶
- A large number of foods on the market in most categories are meeting the 2% and 5% trans fat limits of the Trans Fat Task Force in Canada.⁹⁶
- A study found that the level of trans fatty acids significantly decreased in the diets and breast milk of Canadian breastfeeding mothers since Health Canada recommended trans fat limits in 2007.⁹⁷

SUPPORTS

In 2007 the Minister of Health adopted targets recommended by the Trans Fat Task Force (TFTF). These "targets were set based on meeting the trans fat intake goal recommended by the World Health Organization (WHO) of 1% of daily energy."⁹⁸

MONITORING

Health Canada remains committed to evaluating the trans fat intake of Canadians by⁹⁸:

- Being actively engaged with industry in identifying and analyzing technical barriers to reducing trans fatty acids in foods;
- Continuing to recommend that the food industry voluntarily reduce levels of trans fats in the food supply without increasing levels of saturated fat; and
- Developing an updated risk management approach to reducing the trans fat of Canadians.

Health Canada will assess contributing factors to the trans fat intakes of Canadians through the 2015 Canadian Community Health Survey conducted by Statistics Canada.⁹⁸

RECOMMENDATIONS

Research

• Monitor changes in related health status biomarkers commensurate with reductions in trans fat exposures in Canada.

Practice

• Reformulate foods to reduce the trans fat content of processed foods.

Policy

• Reinstate monitoring of trans fat content by the Government of Canada to ensure ongoing achievement of benchmark.



FOODS HAVE HEALTHFUL INGREDIENTS

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



KEY FINDINGS

- A sample of Edmonton supermarkets (the top two supermarkets, by sales) was chosen in Canada that offered a full selection of grocery items: Loblaw Company Limited and Sobeys Incorporated.⁹⁹ Nutritional facts and ingredient lists were obtained to determine the whole grain and sugar content of all hot and cold children's cereals.
- Of 32 child-specific cereals identified, only 30% met the benchmark (Figure 9) of being 100% whole grain and having < 13g of sugar per 50g serving.

Proportion of Cereals (%; n=32) 38%
41%
30%
100% whole grain <13g of sugar per 50g 100% whole grain AND
(n=12) serving (n=13) <13g of sugar per 50g
serving (n=9)

Figure 9: Sugar content and whole grain status of children's cereals in top two supermarkets in Canada

SUPPORTS

Based on available data, conclusions regarding the presence of supports cannot be made at this time.

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time.

RECOMMENDATIONS

Practice

Reformulate children's cereals to decrease sugar content and increase whole-grain content.

Policy

• Instate monitoring of sugar and whole grain content by the Federal Government to ensure benchmark is achieved.



O V E R A L L G R A D E	COMMUNICATION ENVIRONMENT The communication environment refers to food-related messages that may influence children's eating behaviours. This environment includes food marketing, ^{21,22} as well as the availability of point-of-purchase information in food retail settings, such as nutrition labels and nutrition education.		
	CATEGORY	GRADE	
$\mathbf{\Gamma}$	Nutrition Information at the Point-Of-Purchase	D	
	Food Marketing	В	
	Nutrition Education	С	



NUTRITION INFORMATION AT THE POINT-OF-PURCHASE

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



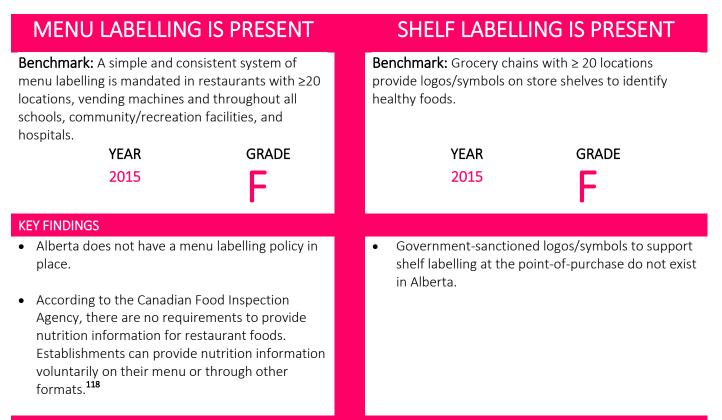
What Research Suggests

Nutrition labelling is an example of a population-based approach intended to assist consumers to select healthier foods by providing information about the nutrient content of packaged foods and beverages.¹⁰⁰ Evidence indicates that consumers often have difficulty understanding nutrition fact tables and simple, front-of-pack product labelling schemes that colour-code text to indicate nutrient levels can improve comprehension and product selection.¹⁰¹⁻¹⁰⁵

Menu labelling is another example of a population-based approach to help consumers make informed food choices by placing nutrition information on restaurant menus. However, findings with respect to the impact of menu labelling are mixed, as some studies show small reductions in caloric intake,¹⁰⁶⁻¹⁰⁸ others no change¹⁰⁹⁻¹¹¹ and others slight increases in caloric intake in response to menu labelling.¹¹² Nevertheless, there is strong support for menu labelling among the public,¹¹³ likely because it accords 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.¹¹⁴ An example of mandated menu labelling is the US Affordable Health Care Act, which requires menu labelling in restaurants and similar retail establishments with \geq 20 locations nationwide.¹¹⁵

Examples of Recommended Point-of-Purchase Policies and Practices

- The WHO Global Strategy on Diet, Physical Activity and Health¹¹⁶ recommends that governments ensure consumers have the information they need to make healthy food choices and that they provide nutrition education programs.
- The Institute of Medicine recommends allocating government funds to develop and support sustained and targeted funding for national social marketing programs; implementing common standards for marketing food and beverages to children and adolescents; ensuring consistent nutrition labelling for the front of packages, retail store menus and shelves and menu boards that encourage healthier food choices; and teaching food literacy in schools.¹¹⁷
- The Ontario Healthy Kids Panel recommends a ban on marketing high-calorie, low-nutrient foods to children under 12 years of age; mandatory menu labelling in restaurants; shelf labelling in grocery stores; and a social marketing program that focuses on healthy eating and education for key professions to support parents in raising healthy kids.⁵²



SUPPORTS

At this time, there are no supports in place.

MONITORING

At this time, there is no monitoring in place.

POWER UP

RECOMMENDATIONS

Research

• Investigate the types of programs that have been implemented in other jurisdictions and their relative effectiveness.

Practice

• Increase awareness, importance and strategies for implementation of a government approved shelf and menu labelling system across all food sectors.

Policy

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

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 10, is mandated on almost all packaged foods by the federal government,¹¹⁹ this indicator received a B- because a simple label is not provided front-of-package.
- Health Canada is currently exploring the development of standardized front-of-package labels.¹²⁰

SUPPORTS

The Government of Canada provides online resources to learn more about the Nutrition Facts table, including an interactive tool to help consumers understand the nutrition facts, the amount of food in one serving and the percent daily value.^{119,121}

1	Nutritio	eat Bread In Facts es (175g)	
Amount			% Daily Value
Calories 140			
Fat 1.5 g			2 %
Saturated 0.3 g + Trans 0.5 g			4 %
Cholesterol 0 mg			
Sodium 290 mg			12 %
Carbohydrate 26 g			9 %
Fibre 3 g		-	12 %
Sugars 2 g		-	
Protein 5 g			
Vitamin A	0 %	Vitamin	C 0%
Calcium	4 %	Iron	10 %

Figure 10: Example of Nutrition Facts table (adapted from the Government of Canada Nutrition Facts table website) $^{\rm 119}$

MONITORING

- 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*.¹²¹ The Compliance Test provides a transparent, science-based system for assessing the accuracy of the nutrient information on food labels in Canada.¹²²
- The Food and Drugs Act¹²³ regulates the labelling of food products in Canada as way to:
 - Make nutrition labelling mandatory on most food labels.
 - Update requirements for nutrient content claims.
 - Monitor diet-related health claims for foods.

RECOMMENDATIONS (*)

Recommendations are provided on page 31 in conjunction with the following indicator: *Product Labelling is Regulated.*



PRODUCT LABELLING IS REGULATED

Benchmark: Strict government regulation of all health and nutrition claims on package labels. Industrydevised logos denoting 'healthy' foods not permitted.



KEY FINDINGS

- The National Food and Drugs Act¹²⁴ in Canada regulates the labelling of all pre-packaged foods, and sets out
 regulations pertaining to ingredient list, nutrition labelling, durable life dates, nutrient content claims, health
 claims and foods for special dietary use.¹²⁵
- 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 to¹²⁴:

EnergyProtein	SodiumPotassium	FibreVitamins and Minerals
FatsCholesterol	CarbohydrateSugars	 The use of the words, "light", "lean" and "extra
	• Sugars	lean"

• Industry-devised logos denoting 'healthy' foods are permitted, thus the benchmark was only partially met.

SUPPORTS

Guidance and support documents are available for companies that wish to apply for approval of health and nutrition claims on package labels at the provincial- and national-level. Examples include:

- The Alberta Agriculture and Rural Development Food and Health Unit's Food Processor's Guide to Creating and Applying Healthy Eating Messages¹²⁶ [View Here]
- Health Canada Guidance Document for Preparing Submission of Food Claims¹²⁷[View Here]
- Food Directorate of Health Canada Food and Nutrition Health Claims Acts and Regulations¹²⁸ [View Here]
- The Canadian Food Inspection Agency
 - Industry Labelling Tool¹²⁹ [View Here]
 - Guide to Food Labelling and Advertising¹³⁰ [View Here]

MONITORING

- 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.¹³¹
- 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."¹³¹



• In 2009, the Health Products and Food Branch of the Food Directorate of Health Canada conducted a stakeholder evaluation of the process of health claim regulation. Findings informed action plans related to improving the governance of food health claims.¹²⁰

RECOMMENDATIONS (*)

Research

• Investigate front-of-pack nutrition ratings systems implemented in other jurisdictions and their subsequent effectiveness.

Policy

• Develop a simple government-sanctioned front-of-pack nutrition rating system.

*Note: Recommendations apply to both "Product Labelling is Present" and "Product Labelling is Regulated" indicators.



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).



What Research Suggests

Evidence shows that commercial marketing of unhealthy foods and beverages contributes to poor eating behaviours in children.¹³² A recent 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.¹³³ 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.¹³³ Even older children remain vulnerable to marketing of unhealthy foods, for reasons such as¹³⁴:

- 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 younger.

Another WHO report⁵⁰ found promising evidence for the effectiveness and cost-effectiveness of interventions that focus on reducing children's exposure to unhealthy food and beverage marketing.⁵⁰ The Alberta Policy Coalition for Chronic Disease Prevention (APCCP) recommends "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."¹³⁵ Recommendations include¹³⁵:

- 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" by prohibiting marketing to 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.



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

Benchmark: Child-directed social marketing campaigns for healthy foods.

Year Grade

KEY FINDINGS

- As part of Healthy U, the Government of Alberta introduced the 5&1 Experiment, which was an educational internet campaign to encourage children (6-12 years) to eat at least 5 fruits and vegetables a day and to be physically active for at least one hour a day.^{55,59,136,137} The campaign was effective between 2012 and 2014.
 - Pre-post evaluation revealed that objectives of this campaign were met given that¹³⁶:
 - The proportion of parents/caregivers who understood their importance in modeling healthy eating and physical activity increased from 82% at baseline to 91% in year 2; and
 - Almost half of parents/caregivers reported increasing their family's healthy eating (46%) and physical activity (53%) over the past year.
- Table 3 provides a list of national social marketing campaigns that promote healthy eating.

Table 3: National-level social marketing campaigns promoting healthy eating

Health Canada

The Nutrition Facts Education Campaign¹³⁸

A campaign to educate Canadians about how to use serving size and the % Daily Value information on food labels. [View Here]

The Eat Well Campaign¹³⁹

A campaign to educate Canadians about Canada's Food Guide and how to choose healthy foods more often. [View Here]

The Canadian Produce Marketing Association, the Heart and Stroke Foundation, the Canadian Public Health Association and the Canadian Cancer Society Partnership¹⁴⁰

5 to 10 a day/ Fruits & Veggies! Half Your Plate

Provides information and resources to encourage consumption of more fruits and vegetables. This campaign includes a "Just for Kids" section with kid-friendly recipes.



SUPPORTS

Informational Supports	Financial Supports
Raising Children¹⁴¹ Government of Alberta website directed at parents that provides information on how to raise children from 0-6 years. Provides links to Healthy U and other healthy eating information. [View Here]	The Healthy Weights social marketing campaign was funded by Alberta Health at a cost of \$2 million per year for 3 years (2006-08). Funding has since ended. ¹⁴⁴
Healthy Eating Toolbox ¹⁴² 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 ¹⁴³ Alberta Health Services website providing supportive resources for healthy eating where adults and children live, work, learn and play. [View Here]	

MONITORING

Evaluations of campaigns are being conducted to monitor process, impact and effectiveness. Evaluation of the campaigns (provincial and national-level) are ongoing.^{59,145}

RECOMMENDATIONS

Practice

• Develop and support a sustained, targeted nutrition social marketing program.¹¹⁷



COMMUNICATION ENVIRONMENT

RESTRICTIONS ON MARKETING UNHEALTHY FOODS TO CHILDREN

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



Although Alberta does not have official initiatives and policies to limit food marketing to children, national broadcast initiatives and policies exist. These are described in Table 4.

Year Grade

2015

Table 4: Broadcast initiatives, purpose, and adherence

	Canada's Food and Beverage Advertising Initiative ¹⁴⁶⁻¹⁴⁸	Broadcast Code for Advertising to Children (Children's Code) ¹⁴⁹ [except QC]	Policy 1.3.8: Advertising Directed to Children Under 12 Years of Age ¹⁵⁰ [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 promote foods and beverages to children consistent with nutrition guidelines Core principles of CFBAI are to¹⁴⁶: 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 food or beverages in elementary schools (pre-K to grade 6). 	The purpose of the <i>Children's Code</i> is, "to guide advertisers and agencies in preparing commercial messages that adequately recognize the special characteristics of the children's audience." ¹⁴⁹	The 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." ¹⁵⁰
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.	In effect across Canada, with the exception of Quebec who have authority over prohibiting broadcast advertising to children. ¹⁴⁹	In effect in all of Canada, except Quebec where advertising to children is not permitted.

Current industry standards are not adequate to protect children from the potential negative impacts of
marketing of unhealthy foods.^{151,152} Signatories to the Canadian Children's Food and Beverage Advertising
Initiative advertise significantly more foods higher in energy, fat, sugar and sodium compared to companies
that have not signed on to the pledge.¹⁵² A study on whether children's exposure to television food/beverage
advertising has changed since the implementation of the Canadian Children's Food and Beverage Advertising
Initiative concluded that although the volume of advertising spots has declined on children's specialty channels,
children's exposure to food and beverage advertising has increased since implementation of the Canadian
Children's Food and Beverage Advertising Initiative.¹⁵³



SUPPORTS

Both Public-Based Television Networks (e.g. Canadian Broadcasting Corporation (CBC)) and the Provincial Public Broadcasting Organizations provide a set of guidelines and regulations that restrict advertising during child-specific programming and provide limits to advertisements during general/family type programming.^{132,154} Examples quoted below:

- Food product advertising addressed to children must be consistent with provisions of the Food and Drugs Act and Regulations, or the Canadian Food Inspection Agency's Guide to Food Labelling and Advertising. This is to ensure that advertisements representing mealtime, "adequately depict the role of the product within the framework of a balanced diet, and snack foods are clearly presented as such, not as substitutes for meals."^{132,154}
- "If an advertisement depicts food being consumed by a person in the advertisement, or suggests that the food will be consumed, the quantity of food shown should not exceed the labelled serving size on the Nutrition Facts Panel (where no such serving size is applicable, the quantity of food shown should not exceed a single serving size that would be appropriate for consumption by a person of the age depicted)."^{132,154}

MONITORING

Advertising Standards Canada stated the following enforcement practices are in place¹⁴⁹:

- **Enforcement & Jurisdiction** The Enforcement body for the *Children's Code* will be the Children's Advertising Section of ASC/Children's Clearance Committee;
- Clearance and Consultation No broadcaster shall broadcast any children's advertising that has not received the prior approval of the Children's Advertising Section. The prior approval is not mandatory for children's advertising that is carried in one market only, but individual broadcasters are responsible for ensuring that such commercial messages conform to the Children's Code;
- **Enforcement Procedure** If the broadcaster/Children's Advertising Section of ASC determines that any children's advertising is in breach of the *Children's Code*, a broadcaster shall not run the offending commercial message and the advertiser and/or its agency and ASC shall be so notified;
- **Compliance Time** The Children's Advertising Section may, at its discretion, allow time for compliance for commercial messages produced prior to the announcement of this edition of the *Children's Code*.

RECOMMENDATIONS

Research

- Monitor the nature and extent of food and beverage marketing to children and youth in multiple contexts. **Practice**
- Implement a nutrition rating system as a common standard for classifying foods and beverages subject to marketing bans for children and youth.¹¹⁷

Policy

- A national regulatory system prohibiting commercial marketing of foods and beverages to children.¹³⁵
- Develop regulations to set minimum standards, monitor compliance and enact penalties for non-compliance.¹³⁵



NUTRITION EDUCATION

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



What Research Suggests

Evidence suggests that nutrition education starting from the early stages of life is important to promote lifelong healthy eating behaviours.¹⁵⁵⁻¹⁵⁷ The WHO Global Strategy on Diet, Physical Activity and Health¹¹⁶ 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.¹⁵⁸ For example, provincial guidelines in Ontario support providing at least 50 hours of nutrition education at the elementary level.¹⁵⁸ 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.¹⁵⁸ Although decision makers acknowledge the importance of nutrition education, there is a lack of information about strategies to improve the quality and amount of nutrition education provided within schools.¹⁵⁸

Teacher and childcare worker training is a key component for effective implementation and delivery of curriculum.¹⁵⁹⁻¹⁶² Specific to nutrition education, one study suggests that multiple factors can determine how much time teachers dedicate to nutrition instruction, such as nutrition training, self-efficacy, knowledge and beliefs.¹⁶³ 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.¹⁶³



COMMUNICATION ENVIRONMENT

NUTRITION EDUCATION PROVIDED TO CHILDREN

Benchmark: Nutrition is a required component in the health curriculum at all grade levels.



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."^{164,165} Table 5 provides an outline of nutrition-related outcomes by grade level.^{164,165}

Table 5: Nutrition-related outcomes by grade level of the mandatory health courses in Alberta^{164,165}

GRADE	NUTRITION-RELATED OUTCOMES
к	 "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) "describe the effects of combining healthy eating and physical activity" (W-2.1)
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) "compare personal health choices to standards for health; e.g., physical activity, nutrition, relaxation, sleep, reflection" (W-7.1)
8	 "evaluate personal food choices, and identify strategies to maintain optimal nutrition when eating away from home; e.g., eating healthy fast foods" (W-8.5)
9	 "develop strategies that promote healthy nutritional choices for self and others; e.g., adopt goals that reflect healthy eating, encourage the placement of nutritious food in vending machines" (W-9.5)
10-12	 Career and Life Management (CALM) outcomes build upon those from K-9, however, there are no nutrition specific outcomes.



SUPPORTS

Various supports are in place to guide educators on delivery of the health curriculum, which are found in Table 6 below:

 Table 6: List of informational resources on health curriculum for educators

Framework for Kindergarten to Grade 12 Wellness Education¹⁶⁶

Provides direction for curriculum design. [View Here]

Wellness Curricula to Improve the Health of Children and Youth: A review and synthesis of related literature¹⁶⁷ Summarizes the evidence behind wellness education in schools. [View Here]

Health and Life Skills Kindergarten to Grade 9: Guide to Implementation (2002)/Career and Life Management: Guide to Implementation (2002)¹⁶⁵

Provides guidance and support for teachers for instructing and assessing students in Health and Life Skills and Career and Life Management. [View Here]

Alberta Education - Authorized Resources Database¹⁶⁸

Provides resources for health and life skills, Career and Life Management, and Career and Technology courses online. [View Here]

MONITORING

At this time, there is no monitoring in place.

RECOMMENDATIONS

Research

• Evaluate the impact of the health curriculum on eating behaviours.



COMMUNICATION ENVIRONMENT

NUTRITION EDUCATION AND TRAINING PROVIDED TO TEACHERS AND CHILDCARE WORKERS

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

Year Grade

KEY FINDINGS

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

SUPPORTS

At this time, Alberta Health Services provides supports to educators in the form of educational resources to deliver in-classroom that support healthy eating within school environments.¹⁴³

MONITORING

At this time, no monitoring is in place.

RECOMMENDATIONS

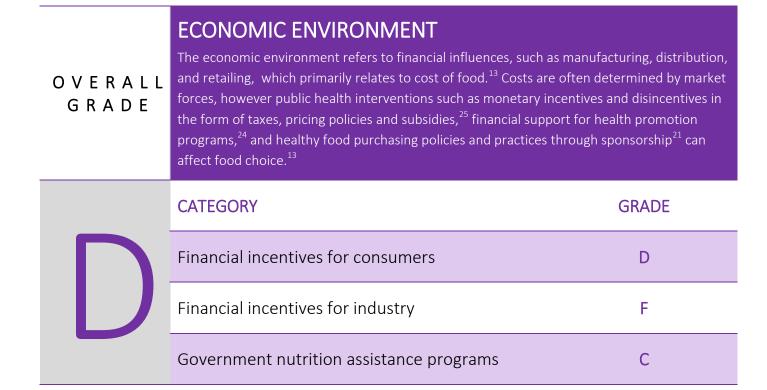
Research

• Monitor availability and participation in nutrition education and training.

Policy

• Mandate nutrition education and training for licensure of all teachers and childcare workers.







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	LOWER PRICES FOR HEALTHY FOODS	HIGHER PRICES FOR UNHEALTHY FOODS
GRADE	C-	D
Will at Deserveds Conserved		

What Research Suggests

Food prices are important determinants of food choices.¹⁶⁹ Differences in the prices of healthy and less healthy foods and diets can contribute to obesity and chronic disease.¹⁷⁰ A recent WHO report cited food taxes and subsidies as a promisingly effective and economical intervention in childhood obesity prevention.⁵⁰

Food Subsidies

There is some evidence that food subsidies may be more effective than taxation.¹⁷¹ Subsidizing healthier foods is an effective means to modify eating behaviours.¹⁷² A 10% reduction in the price of fruits and vegetables has been found to be associated with a 5-7% increase in their consumption.¹⁷³ Lower prices for fruits and vegetables also favourably affect body weights, particularly among low-income families.¹⁷³

Launched in April 2011, the Nutrition North Canada Program¹⁷⁴ is a subsidy program that seeks to improve access to perishable healthy food in isolated northern communities. The subsidies are transferred directly to retailers and suppliers registered with the program. Businesses registered with the program are accountable for passing on the subsidy 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 (e. no permanent road, rail or marine access); and (b) have used Food Mail, the department'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. Foods must be shipped by air. A higher subsidy level applies to the most nutritious perishable foods, such as fresh fruit, frozen vegetables, bread, meat, milk and eggs. A lower subsidy level applies to other eligible foods such as flour, crackers, ice cream and combination foods (e.g., pizza, lasagna).¹⁷⁴

Food Taxes

Financial disincentives for consumers (taxing less healthy foods and beverages) is a public policy strategy that could improve the diets of Canadians.¹⁷⁵ A 10% increase in the price of sugar-sweetened beverages is estimated to reduce intake by 8-10%.¹⁷⁶ Taxes causing a price increase of < 5% is likely insufficient to impact consumption rates.¹⁷⁷ 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.¹⁷⁸



LOWER PRICES FOR HEALTHY FOODS

Benchmark:

- Healthy foods are exempt from point-of-sale taxes;
- Transportation of healthy, culturally appropriate foods to isolated northern communities is subsidized to local consumers to ensure they are affordable for local populations.



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).¹⁷⁹
- According to the "Nutrition and Physical Activity Situational Analysis: A Resource to Guide Chronic Disease Prevention in Alberta,"¹⁸⁰ Alberta has many gaps in nutrition-related policies and legislation, as demonstrated in Table 7. At this time,

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

Alberta is not considering tax credits or incentives as a nutrition policy.¹⁸⁰

No Alberta communities are currently eligible for the Nutrition North Canada Program.¹⁷⁴ 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.⁵⁵

SUPPORTS

There are no supports in place at this time.

MONITORING

There are no monitoring systems in place at this time.

RECOMMENDATIONS

Research

• Monitor taxation of healthy foods.

Practice

• Collaborate with Nutrition North Canada to ensure communities in remote areas of Alberta are eligible to participate in the program.



HIGHER PRICES FOR UNHEALTHY FOODS

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



KEY FINDINGS

• 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.¹⁸⁰

SUPPORTS

- Public health researchers, 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.¹⁷⁸ Sixty percent of Alberta policy influencers support taxing soft drinks and energy drinks.¹⁷⁸
- 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.¹⁷⁸ This recommendation was issued following a review of the
 available evidence, including evidence regarding political feasibility and potential impacts of a tax.¹⁷⁸

MONITORING

There are no monitoring systems in place at this time.

RECOMMENDATIONS

Research

- Monitor the interest, presence and potential impact of sugar-sweetened beverage taxation in Alberta. **Policy**
- Introduce a \$0.05/100 mL tax on sugar-sweetened beverages and consider dedicating a portion of this revenue to health promotion programs.



FINANCIAL INCENTIVES FOR INDUSTRY

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

INDICATOR	INCENTIVES TO PRODUCE/SELL HEALTHY FOODS	DISINCENTIVES TO PRODUCE/SELL UNHEALTHY FOODS	
GRADE	F	F	
What Research Suggests			
Incentives and disincentives can be offered to the food industry to increase the number of healthy foods and beverages and decrease the number of less healthy food products available in the marketplace. ¹⁸¹ The purpose of corporations is to maximize profits and industry is legally bound to attempt to maximize value for its shareholders. 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. ¹⁸² In a similar manner, government subsidies could be used to reduce the costs associated with manufacturing, distributing and retailing healthy foods, providing a powerful 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. Non-financial incentives might include supportive zoning policies, and technical assistance to



reformulate existing products.

INCENTIVES TO PRODUCE/SELL HEALTHY FOODS

Benchmark: The proportion of corporate revenues earned via sales of <u>healthy</u> foods is taxed at a <u>lower</u> rate.



DISINCENTIVES TO PRODUCE/ SELL UNHEALTHY FOODS

Benchmark: The proportion of corporate revenues earned via sales of <u>unhealthy</u> foods is taxed at a higher rate.



KEY FINDINGS

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

SUPPORTS

There are no supports systems in place at this time.

MONITORING

There are no monitoring systems in place at this time.

RECOMMENDATIONS

Research

• Develop and evaluate structures for incentives to produce healthy foods and disincentives to produce unhealthy foods.

Policy

• Establish a corporate tax system to tax the proportion of corporate revenues via sales of healthy foods at a lower rate and unhealthy foods at a higher rate.



GOVERNMENT NUTRITION ASSISTANCE PROGRAMS

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



What Research Suggests

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,¹⁵ can help to prevent childhood obesity.²⁴ 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.¹¹⁶ Food assistance programs in the United States have been found to have an impact on alleviating household food insecurity, especially among low-income children.¹⁸³

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.¹⁸⁴ In the United States, revisions to better align the food packages for the Special Supplemental Nutrition Program for Women, Infants, and Children 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.¹⁸⁵⁻¹⁸⁸ As part of the revisions, the program also now provides a monthly fruit and vegetable cash-value voucher of \$6-\$10 per participant to purchase fruits and vegetables.¹⁸⁹⁻¹⁹¹ Evidence is inclusive in determining whether the vouchers have led to increased fruit and vegetable intake.¹⁸⁹⁻¹⁹¹

Emerging evidence suggests that provision of free or subsidized fruits and vegetables at school can increase their intake.²⁴ Subsidized programs that provide free fruit and vegetables are more effective than paid programs.¹⁹² 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.¹⁹²



REDUCE CHILDHOOD FOOD INSECURITY

Benchmark: Reduce the proportion of children living in households that access food banks by 15% over three years.



KEY FINDINGS

Based on the 2014 Hunger Count report^{193,194} describing food bank use, the number of children and youth between 0-17 years of age assisted by food banks decreased by 16.8% between 2011 and 2014 in Alberta (Figure 11).

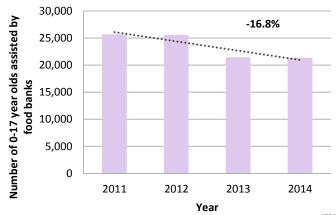


Figure 11: Number of individuals assisted by food banks 0-17 years of age^{193,194}

SUPPORTS

- The Food Security Research Group was established by the "First Nations and Inuit Health Branch of Health Canada to bring National Aboriginal Organizations together with the federal government in equal membership to share information, discuss strategies and opportunities, and plan collective action for improving First Nations and Inuit food security."¹⁴⁸ Biannual meetings were held between December 2005 and January 2011, however meetings have not been held in recent years. 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.¹⁹⁵
- Community food security is promoted through collective action by the several regional food security networks, including the following organizations: Community Garden Network; Just Food Edmonton; and the Personal & Community Support Association.¹⁹⁶

MONITORING

Food Banks Canada monitors and collects annual data on the use of food banks at the national, provincial and territorial levels.¹⁹³

RECOMMENDATIONS

Policy

• Increase social assistance rates to make healthy, nutrient rich foods more affordable for families.



NUTRITIOUS FOOD BASKET IS AFFORDABLE

Benchmark: The nutritious food basket aligns with dietary recommendations and social assistance rates provide sufficient funds to purchase its contents.



KEY FINDINGS

- The Edmonton Nutritious Food Basket assesses the cost of healthy eating based on current national dietary guidelines (e.g. Canada's Food Guide).^{58,197} A food costing tool, funded by the Ministry of Agriculture and Rural Development, was developed to assess food costs in Edmonton retail stores.¹⁹⁸ At this time, there is no publicly available information regarding whether the tool has been evaluated.
- The nutritional adequacy of foods in the Edmonton Nutritious Food Basket was evaluated according to standards in the ANGCY.¹⁹⁹ Of all foods included in the nutritious food basket, 69% were categorized as "choose most often," 5% as "choose sometimes," and 26% as "choose least often" (Figure 12).

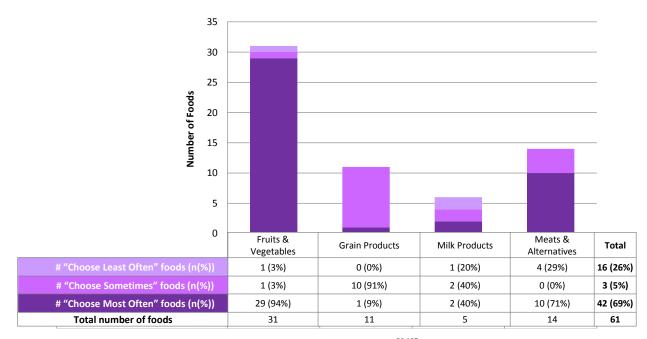


Figure 12: Alignment of the Edmonton Nutritious Food Basket with the ANGCY ^{58,197}



Affordability of Nutritious Food Basket:

- The social assistance rates in Alberta provide insufficient funds to purchase a nutritious food basket. Based on data from the 2013 Edmonton Nutritious Food Basket costs for a family of four*, social assistance from the Government of Alberta that is dedicated to food only covers 48% of the costs for a nutritious food basket.^{198,200}
- Figure 13 compares the costs of the monthly nutritious food basket for a family of four* in 2013 to the dollars provided for food only as part of the monthly social assistance provided by the Government of Alberta.
- 15% of a household income is considered affordable to spend on food, based on a benchmark set in British Columbia and referenced by Alberta^{201,202}



Figure 13: Proportion of monthly nutritious food basket covered by monthly social assistance^{198,200} (Note: * denotes the value of monthly social assistance dedicated for food only provided by the Alberta Government)

SUPPORTS

There are no supports in place at this time.

MONITORING

- The contents of the nutritious food basket are monitored by the Ministry of Agriculture and Rural Development.
- Social assistance rates are determined by provincial government policy, which can be found on the Alberta Health website. [View Here]

RECOMMENDATIONS

Research

 Measure the cost of a nutritious food basket in remote Alberta communities to understand the proportion of average local income that is spent on food.

Policy

 Increase social assistance rates to make healthy, nutrient rich foods and the nutritious food basket more affordable.



FINANCIAL INCENTIVES TO PURCHASE HEALTHY FOODS

Benchmark: Social assistance recipients receive monthly vouchers to purchase fruits and vegetables.



KEY FINDINGS

- Alberta does not provide individuals who received social assistance with monthly vouchers to purchase fruits and vegetables.
- Alberta provides emergency and seasonal food vouchers in some communities through programs such as the Sylvan Lake Christmas Bureau, Family and Community Support Services and Emergency Meals in Vermillion.²⁰³ These food vouchers are unrestricted and can be used to purchase groceries.
- In Spruce Grove, Alberta, the Chipewyan Prairie First Nation Milk and Diaper Voucher Program was developed to, "service income assistance clients with young children who need funds to purchase diapers, milk, and related supplies for newborns, as well as healthy snacks for young children at certain times of the month."²⁰⁴
- The Canadian Prenatal Nutrition Program (CPNP) aims to increase the rate of breastfeeding and decrease the rate of unhealthy birth weights by supporting healthy eating among pre- and post-natal women by providing long-term funding to community groups and coalitions to develop and/or enhance services that address the needs of at-risk pregnant women and their babies.
 - There are currently 330 CPNP sites serving close to 50,000 women (including Indigenous women) annually in 2,000 communities across Canada.²⁰⁵
 - The 2009 Summative Evaluation Report results indicate that CPNP funded sites successfully served those
 pregnant, most at risk women for poor birth outcomes and who are often least likely to participate in
 traditional prenatal programming.²⁰⁵

SUPPORTS

Other than the CPNP, which supports healthy eating among pre- and post-natal at-risk women, there are no other support systems in place.

MONITORING

Other than the CPNP, which supports healthy eating among pre- and post-natal at-risk women, there are no other monitoring systems in place.

RECOMMENDATIONS

Policy

• Implement and monitor a policy to provide all social assistance recipients with monthly vouchers to purchase fruits and vegetables.



SUBSIDIZED FRUIT AND VEGETABLE SUBSCRIPTION PROGRAM IN SCHOOLS

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

Year Grade 2015 D+

KEY FINDINGS

At this time, there is insufficient information on the total number of schools across Alberta that have free or subsidized vegetable programs. Various programs exist that work towards improving fruit and vegetable provision to students within high needs schools that are either free or provided at a subsidized cost (Table 8).

Table 8: External food provision programs serving Alberta schools

Organization ²⁰⁶⁻²⁰⁸	Description	Reach
Breakfast Clubs of Canada ²⁰⁹ [View Here]	Provides healthy breakfast to all students of participating schools.	75 clubs in Alberta.
E4C* ²¹⁰ [View Here]	Snack program provides a healthy mid-morning snack to all students. Lunch program provides a healthy lunch, including at least one serving of fruit or vegetables to all students whose parents have subscribed.	15 schools in high needs locations in Alberta.10 schools in high needs locations in Alberta.
APPLE schools ²¹¹ [View Here]	Some schools offer apples for snacks.	51 schools in high needs locations in Alberta.
Fuel for School ²¹² [View Here]	Breakfast program for all students of participating schools.	19 Fuel for School programs in Calgary.
Brown Bagging for Calgary's Kids ²¹³ [View Here]	Delivers free, healthy lunches to students identified by their teacher as having limited food to eat for the day.	Reaches 2000 students in Calgary.
Food for Thought ^{* 214}	Provides healthy meals and snacks to children of participating schools.	450 students in 13 schools in high needs locations in Edmonton.
ONEXONE First Nations School Breakfast Program ^{214,215} [View Here]	Provides breakfast for children in First Nation schools every day. More specifically, the program provides three of the food groups daily and encourages schools to serve vegetables and fruit more often than juice. Eighty percent of programs in place in Canada are in remote communities experiencing barriers to affordable and accessible food, especially fruits and vegetables.	This program is still active in First Nations schools across Canada, with regular evaluations occurring monthly and annually. Of 22 active programs in Canada, one is in Alberta. ^{215,216}



SUPPORTS

Supports identified included²⁰⁶⁻²⁰⁸:

- Local vegetable producers
- Community kitchens
- Parent Councils

MONITORING

The Ministry of Education does not collect information on fruit and vegetable subscription programs in Alberta schools.²⁰⁶⁻²⁰⁸ Moreover, this information is not collected by the public or Catholic school boards in Edmonton or Calgary.²⁰⁶⁻²⁰⁸

RECOMMENDATIONS

Research

- Monitor the provision of free or subsidized fruits and vegetables to children in elementary schools in Alberta. **Policy**
- Develop a universal school food strategy for all Alberta schools beginning with a fruit and vegetable subscription program for elementary schools.



O V E R A L L G R A D E	SOCIAL ENVIRONMENT The social environment refers to the attitudes, beliefs, and values of a community or society. ¹¹ It also refers to the culture, ethos, or climate of a setting. This environment includes the health promoting behaviours of role models, ¹¹ 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).	
	CATEGORY	GRADE
	Weight Bias	F
U	Corporate social responsibility	D
	Breastfeeding Support	С



WEIGHT BIAS

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

INDICATOR	WEIGHT BIAS IS AVOIDED
GRADE	F

What Research Suggests

Weight-related bias and stigma can interfere with an individuals' identity and may cause individuals to be socially disreputable. The adverse consequences of weight bias and stigma may include, but are not limited to: poor body image, low self-esteem, loneliness, depression, anxiety and even eating disorders.^{63,83} The impact of weight bias and any form of discrimination against individuals with obesity is comparable to racial discrimination.^{63,83} In some cases, weight-bias may perpetuate inequities by influencing individuals' employment, health and access to education. Some negative stereotypes that prevail portray individuals with obesity as lazy, unmotivated, or lacking self-discipline.¹⁰³

Overweight and obese children and youth are often targets of weight-bias and social stigmatization from peers, their educators and even their parents.²¹⁷ In the school setting, 'weight teasing' has been identified as an obstacle to student participation in physical education classes.²¹⁸ One investigation of school staff beliefs regarding obesity revealed that roughly one-fifth viewed obese persons as more emotional, less tidy, less likely to succeed at work, and having different personalities than non-obese persons.²¹⁹ Specific to physical activity teachers, survey findings indicated that overweight children were perceived to have poorer social, reasoning, physical and cooperation skills relative to average-weight children.²²⁰ Just as in adults, such experiences can have an impact on children's and youth's social, emotional and academic well-being, which in turn can translate into health consequences, such as impaired glucose tolerance, insulin resistance and hypertension, to list a few.^{217,221,222} With that said, there is a need to understand weight bias in school and childcare settings, and to develop strategies and policies to protect against its potential adverse effects.



WEIGHT BIAS IS AVOIDED

Benchmark: Weight bias is explicitly addressed in schools and childcare.



KEY FINDINGS

- Alberta schools and childcare curriculum do not offer explicit education regarding weight bias to children.²²³ Instead, schools follow a comprehensive framework, which broadly promotes healthy body images, wellness choices, physical activity, healthy eating choices, healthy relationship choices, anti-bullying practices and overall positive social environments.
- Health Promotion Coordinators of the Alberta Health Services Healthy Weights Initiative have put forth efforts to address weight bias and obesity-stigma within schools including a recent gathering of experts focused on developing weight bias reduction strategies.⁶²

SUPPORTS

There are no supports systems in place at this time.

MONITORING

There are no monitoring systems in place at this time.

RECOMMENDATIONS

Research

• Assess the presence and degree of weight bias within Alberta schools and childcare facilities.

Practice

• Incorporate weight bias sensitivity education into the health curriculum for all grade levels.

Policy

• Mandate weight bias instructional training in school and childcare training certification programs.



CORPORATE SOCIAL RESPONSIBILITY

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

INDICATOR	ALL CORPORATIONS IN THE ACCESS TO NUTRITION INDEX WITH CANADIAN OPERATIONS ACHIEVE A SCORE OF ≥ 5.0 OUT OF 10.0			
GRADE	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 foods and beverages. ²²⁴ Given the level of control food and beverage			
corporations h	corporations have over the food supply, it follows that private sector action can be harnessed to improve the quality of children's food environments. ^{225,226} 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. ²²⁷ Voluntary, industry-led initiatives have produced limited progress. ^{151,152,228}				



CORPORATIONS HAVE STRONG NUTRITION-RELATED COMMITMENTS AND ACTIONS

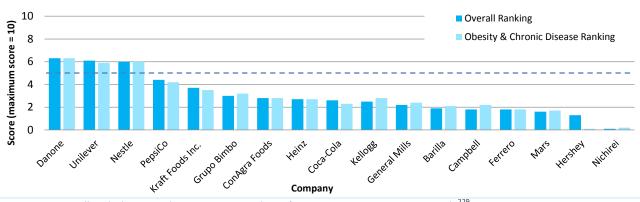
Benchmark: Most corporations in the Access Nutrition Index with Canadian operations achieve a score of \geq 5.0 out of 10.0.



KEY FINDINGS

In 2013, 17 of the 25 food and beverage companies listed on the Access to Nutrition Index, a global index that ranks food and beverage companies based on their nutrition-related commitments, practices, and performance, were companies that operated in Canada.²²⁹

• Of these companies operating in Canada, only 3 companies (18%) achieved a score above 5.0 out of a total possible score of 10.0.



• Most (65%) of the companies that operate in Canada scored < 3.0.

Figure 14: Overall and Obesity & Chronic Disease Rankings for Companies operating in Canada²²⁹

Companies were given scores for 19 indicators in seven criteria (A to G, listed below). Each criterion was given a score based on the commitments, performance, and disclosure of the indicators. The seven criterion scores were combined using a priori category weights to give an overall ranking. The obesity and chronic disease ranking is a sub-ranking based on indicators that specifically measure companies' commitments and actions related to "[delivering] healthy food choices and responsibly [influencing] consumer behavior."²³⁰

- 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

SUPPORTS

Aside from the Access to Nutrition Index,²²⁹ Alberta Agriculture and Rural Development created an informational resource to help food processors create healthy eating messages for their healthy food products (i.e. those that align with Canada's Food Guide and the ANGCY). [View Here]



MONITORING

Other than the Access to Nutrition Index, no other monitoring of this indicator is in place at this time.

RECOMMENDATIONS

Research

 Assess commercial activities related to food environments beyond the Access to Nutrition Index, such as lobbying activities, submissions to public consultations, political donations and philanthropic activities.²³¹

Practice

• Provide incentives to ensure that corporations with Canadian operations achieve a score of \geq 5.0 out of 10.0



BREASTFEEDING SUPPORT

Policies and actions to encourage breastfeeding in community settings.

INDICATOR	BREASTFEEDING IS SUPPORTED	HOSPITALS SUPPORT AND PROMOTE BREASTFEEDING
GRADE	С	С
What Research Suggests		

Some studies suggest that breastfeeding may protect against the development of overweight and obesity, although the evidence overall is inconclusive.²³² A recent randomized-controlled trial, undertaken in Belarus, found that strategies aimed to increase the duration and exclusivity of breastfeeding were unlikely to curtail overweight or obesity in later years of childhood.²³³

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.²³ Evidence suggests the initiative has helped to improve the likelihood of babies being exclusively breastfed for the first six months of life.²³ The 10 steps to being a designated WHO baby-friendly hospital are listed below²³⁴:

- 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 Baby-Friendly Hospital Initiative was associated with increased breastfeeding initiation and duration among mothers with lower education.²³⁵ According to the Centers for Disease Control and Prevention, 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.²³⁶

Health Canada advocates greater implementation of the WHO's Baby-Friendly Hospital initiative in hospitals and public health centres. The Public Health Agency of Canada commissioned the Breastfeeding Committee of Canada with summarizing the status of the implementation of the initiative across the country.²³⁷ There are also provincial and territorial level breastfeeding committees with representatives from federal/provincial/territorial governments that oversee and support implementation of Baby-Friendly initiatives.²³⁷



BREASTFEEDING IS SUPPORTED

Benchmark: All public buildings are required to permit and promote breastfeeding.



KEY FINDINGS

- A multidisciplinary Alberta Breastfeeding Committee was formed in 2013-14 to advocate for breastfeeding and Baby-Friendly Initiatives in Alberta hospitals and public health centres.^{237,238} This committee includes representation from:
 - Alberta Health and Wellness
 - Alberta Health Services
 - Young Family Wellness
 - Alberta Perinatal Health Program
 - Provincial professional associations
- University and community college educators
- Regional breastfeeding coalitions
- Independent experts
- Consumers
- 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.^{239,240}
- Although the Alberta Human Rights Act protects women from discrimination while breastfeeding in public places,²⁴¹ 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.^{237,242}

HOSPITALS SUPPORT AND PROMOTE BREASTFEEDING

Benchmark: Hospitals with labour and delivery units, all pediatric hospitals and public health centres are designated as WHO baby-friendly hospitals.



 At this time, Alberta does not have any WHO Baby-Friendly designated facilities.^{237,238} However, two public health centres in Fort McMurray and Calgary, as well as one hospital in Edmonton, are undergoing the process of achieving WHO Baby-Friendly Initiative designation.²³⁸



SUPPORTS

Organizational supports are available in relation to breastfeeding within Alberta and nationally. Examples are provided below:

Organization	Description
Alberta Breastfeeding Committee [View Here]	Focus on engaging and adopting Baby-Friendly Initiatives in Alberta hospitals and public health centres, and support Baby-Friendly Initiatives in Alberta facilities ^{237,242}
Breastfeeding Committee of Canada [View Here]	A support body for any facilities wishing to pursue Baby-Friendly Initiative designation in Alberta ^{237,238}
Public Health Agency of Canada [View Here]	Provides the public with educational and informational resources, including The 10 Valuable Tips for Successful Breastfeeding resource guide. ²²

MONITORING

Monitoring systems are in place in relation to breastfeeding support within Alberta and nationally as described below:

Alberta Breastfeeding Committee ⁷ [View Here]	Its data collection sub-committee aims to improve and standardize the collection of data related to breastfeeding in Alberta.
Government of Alberta's Health Information Standards Committee for Alberta ^{7,10}	Monitors infant feeding in Alberta.
Breastfeeding Committee of Canada ²³⁷	 Monitors implementation of Baby-Friendly Initiatives in Canadian hospitals and health centres (except Québec) by: Coordinating BFI Assessments in Canada in collaboration with Provincial and Territorial BFI Committees. Tracking facilities in progress towards BFI designation. Maintaining database of designated facilities. Managing Baby-Friendly Initiative Assessments (Pre-, External and Re-Assessments).
Canadian Perinatal Surveillance System ^{3,21}	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

POWER UP

Research

• Assess progress in implementing the WHO Baby-Friendly Initiative in Alberta and how guidelines can be adapted for use in various settings.

Practice

- Adopt a life-course perspective and promote 6 months of exclusive breastfeeding.¹¹⁶
- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Policy

- Mandate a provincial policy that requires all hospitals with labour and delivery units, pediatric hospitals and public health centres to be designated as WHO baby-friendly hospitals.
- Mandate a provincial policy to promote breastfeeding in public buildings.

O V E R A L L G R A D E

POLITICAL ENVIRONMENT

The political environment refers to a broader context, which can provide supportive nfrastructure for policies and actions within micro-environments.^{1,22}

	CATEGORY	GRADE
B	Leadership & Coordination	С
	Funding	С
	Monitoring & Evaluation	С
	Capacity Building	А



POLITICAL ENVIRONMENT

LEADERSHIP & COORDINATION

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

INDICATOR	CHILDHOOD HEALTHY LIVING AND OBESITY PREVENTION STRATEGY OR ACTION PLAN	POPULATION TARGETS FOR CHILDHOOD EATING BEHAVIOURS AND BODY WEIGHTS	BROAD CONSULTA- TION ON MATTERS RELATED TO CHILD HEALTH	CONFLICT OF INTEREST GUIDELINES FOR MATTERS RELATED TO CHILDREN'S NUTRITIONAL HEALTH	HEALTH-IN- ALL POLICIES
GRADE	С	А	С	F	D

What Research Suggests

Solutions to obesity cannot be achieved without the involvement and cooperation of all sectors.²⁴³ National governments have the primary responsibility and authority to develop policies to create equitable, safe food environments to prevent obesity and chronic disease.^{116,243} 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.²⁴⁴ In order to create healthy food environments and promote nutritional health, the Institute of Medicine states that there must be:

- Strong political support for the "the vision, planning, communication, implementation, and evaluation of policies and actions."¹⁰
- Government structures that "ensure transparency and accountability, and encourage broad community participation and inclusion when formulating and implementing policies and actions."¹⁰
- Coordination "across government departments, levels of government and other sectors (e.g. NGOs, private sector, academia) such that policies and actions in food and nutrition are coherent, efficient and effective."¹⁰

The Ottawa Charter for Health Promotion recommends putting health on the agenda of decision makers in all sectors and at all levels.²⁴⁵ Governments can play a primary role by leading the development, implementation and monitoring of national policies, strategies, and actions to improve diet.¹¹⁶ Government must provide effective legislation, required infrastructure, implementation programs, adequate funding, monitoring and evaluation and ensure research is ongoing to evaluate the impact of its national strategies and policies.¹¹⁶ Processes should be in place to ensure that health impacts are explicitly considered in the development of all government, including non-health sector policies.^{116,10}

Commercial influence on government policy making may be substantial, and therefore accountability structures are needed to protect public health interests.^{224,246-249} The lack of clarity regarding the role of the private sector in public policy-making in relation to the prevention and control of non-communicable diseases (NCDs) is concerning.²⁵⁰ The Conflicts of Interest Coalition calls for a Code of Conduct and Ethical Framework to recognize and distinguish between industries, including business interest non-governmental organizations (BINGOs) and



POLITICAL ENVIRONMENT

public interest non-governmental organizations (PINGOs). Both distinctions are currently under the 'Civil Society' umbrella without distinction. The coalition also calls for the development of a code of conduct that provides a clear framework for interacting with the private sector and managing conflicts of interest, and which differentiates between corporate involvement in policy development and appropriate involvement in its implementation.²⁵⁰ Conflict of interest in Canada can be minimized by using tests²⁵¹ or frameworks²⁴⁹ to inform partnerships with industry by developing conflict of interest guidelines that allow industry to participate in policy implementation, but not in its development.



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CHILDHOOD HEALTHY LIVING AND OBESITY PREVENTION STRATEGY/ACTION PLAN

Benchmark: A comprehensive, evidence-based childhood healthy living and obesity prevention strategy/action plan is endorsed by government.



KEY FINDINGS

- At the provincial level, two programs exist to support healthy living and obesity prevention in children and youth and include:
 - 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.⁵⁵
 - Healthy Kids Alberta: a wellness strategy that supports health promotion initiatives for children and youth.¹⁸⁰
- According to the 2013 Towards a Healthier Canada Progress Report, Alberta was identified as a champion for its comprehensive healthy weights program.⁵⁵
- Nationally, the Public Health Agency of Canada launched *Curbing Childhood Obesity A federal, provincial and territorial framework for action to promote healthy weights* in 2010.²⁵² The three key strategies of the framework that support the Pan-Canadian Healthy Living Strategy are to^{252,253}:
 - 1. Prioritize childhood overweight and obesity prevention in health ministries;
 - 2. Coordinate efforts on supportive environments for healthy eating and physical activity, early prevention/intervention, and access and availability of nutritious foods; and
 - 3. Track and report progress in reducing childhood overweight and obesity to support maintenance of interventions.
- The Canadian Joint Consortium for School Health, a partnership of 25 Ministries of Health and Education across Canada, works to promote student health achievement through Comprehensive School Health approaches.²⁵⁴

SUPPORTS

The Alberta Government provides funding support 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.¹⁴⁴
- Health promotion professionals who support healthy weight and healthy eating initiatives for children and youth across the province.¹⁴⁴

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time.



RECOMMENDATIONS

Research

• Monitor the activities and impacts of childhood healthy living strategies/programs.

Practice

• Implement recommendations of healthy living strategies/programs.

Policy

• Incorporate financial commitment for childhood healthy living strategy and supports into provincial budget.



POLITICAL ENVIRONMENT

POPULATION TARGETS FOR CHILDHOOD EATING BEHAVIOURS AND BODY WEIGHTS

Benchmark: Evidence-based population targets for childhood eating behaviours and body weights exist.

Year Grade

KEY FINDINGS

Nationally, the Healthy Living Strategy set healthy living targets for 2015.²⁵⁵ Within Alberta, the Framework for a Healthy Alberta identifies healthy living targets for residents of Alberta (Table 9).^{255,256}

Table 9: Healthy Living Targets for diet and weight in Alberta and Canada

Target	Proposed Healthy Living Targets			
Areas	Alberta ²⁵⁶	Canada ²⁵⁵		
Healthy Eating	Increase the proportion of Albertans who eat at least 5 to 10 servings of fruits and vegetables each day, from 34% (in 2002) to 50% (in 2012). (p.27)	By 2015, increase the proportion of Canadians who make healthy food choices by 20%, according to the Canadian Community Health Survey, Statistics Canada/Canadian Institute for Health Information indicators (p.19).		
Healthy Weights	Increase the proportion of Albertans with a healthy weight from 47% (in 2002) to 55% (in 2012). (p.27)	By 2015, increase the proportion of Canadians at a "normal" body weight based on a BMI of 18.5 to 24.9 by 20%, as measured by the National Population Health Survey, Canadian Community Health Survey, Statistics Canada/Canadian Institute for Health Information health indicators. (p.19).		

SUPPORTS

Nationally, the Public Health Agency of Canada launched the *Curbing Childhood Obesity – A federal, provincial and territorial framework for action to promote healthy weights* in 2010.²⁵² Provincial programs are in place to encourage achievement of targets (See indicator "*Childhood Healthy Living/Obesity Prevention Strategy/Action Plan*").

MONITORING

- The Pan-Canadian Public Health Network²⁵⁷ collects data from the Canadian Health Measures Survey and the Canadian Community Health Survey for indicators related to children's body weight (e.g. prevalence of overweight and obesity) and eating behaviours (e.g. consumption of breakfast, fruits and vegetables, and sugar-sweetened beverages).²⁵⁷
- As part of the Towards a Healthier Canada Progress Reports, the Pan-Canadian Public Health Network reports on the above indicators every two years. The 2015 progress report is expected to include additional Aboriginalspecific data.²⁵⁷



RECOMMENDATIONS

Research

- Report on achievement of 2012 targets within Alberta and use data to develop evidence-based targets for next 10 years.
- Compare achievements of Alberta against national targets.

Policy

- Create evidence-based population targets for eating behaviours and body weights specific for children to achieve in the next ten years.
- Dedicate funding to support achievement of targets.



BROAD CONSULTATION ON MATTERS RELATED TO CHILD HEALTH

Benchmark: Representatives from all sectors and government departments are active participants in policy development and implementation in matters related to child health. The food industry participates in policy implementation, but not in its development.



KEY FINDINGS

- Based on the 2013 Towards a Healthier Canada Progress Report, Alberta is working towards collaboration through stakeholder engagement on the availability and accessibility of nutritious foods within vulnerable communities.²⁵⁸
- Harmonized Nutrition Standards/Guidelines for schools were developed by a national working group, including representatives from federal, provincial and territorial governments from British Columbia, Alberta, Saskatchewan, Manitoba, Prince Edward Island, Yukon and Northwest Territories.^{55,259,260}
 - Additional national partnerships working towards promotion of student health through a comprehensive school health approach include the Pan-Canadian Joint Consortium for School Health, Health Canada and the Propel Centre for Population Impact.^{253,254,261}
- The influence of the food industry on some aspects of food-related decision making in Canada is described in Table 10, which lists the declared financial conflicts-of-interests of federal food committee/advisory group members.²⁶²

Committee	Memb	Publicly Available		
Committee	Direct	Indirect [‡]	Direct or Indirect [‡]	Minutes
Expert Advisory Committee on the Vigilance of Health Products	3 (23)	8 (62)	10 (77)	Yes
Food Guide Advisory Committee	Not disclosed	Not disclosed	Not disclosed	No
Food Regulatory Advisory Committee *	6 (32)	11 (58)	13 (68)	Yes
Infant Feeding Expert Advisory Group	3 (38)	0	3 (38)	No
Natural Health Products Program Advisory Committee	Not disclosed	Not disclosed	Not disclosed	No
Pediatric Expert Advisory Committee	1 (7)	6 (43)	7 (50)	No
Sodium Working Group	6 (35)	5 (29)	8 (47)	No

Table 10: Declared interests of members of Canadian federal government advisory food committees²⁶²

*Direct financial interests: current employment, investments in companies, partnerships, equity, royalties, joint ventures, trusts, real property, stocks, shares, or bonds with the regulated industry.

Indirect financial interests: (a) Within the past five years, payment from the regulated industry for work done or being done, including past employment, contracts, or consulting; or financial support including research support, personal education grants, contributions, fellowships, sponsorships, and honoraria. (b) Within the past five years, materials, discounted products, gifts, or other benefits, or attendance at meetings where all or part of the travel and accommodation costs were provided by the regulated industry.
(c) Within the last three years, grants or other funding from the regulated industry to any of the organizations where the member is currently employed or participates in internal decision making.

¥ Renamed Food Expert Advisory Committee



SUPPORTS

Conflict of interest guidelines are available. At this time, a few Canadian organizations have endorsed these guidelines.²⁶³

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time. There appears to be no explicit monitoring of whether industry participates in policy development or implementation.

RECOMMENDATIONS

Practice

- Publicize the participating members and meeting minutes from Canadian Federal Government advisory food committees.
- Educate on conflict of interest guidelines.²⁶³



CONFLICT OF INTEREST GUIDELINES FOR MATTERS RELATED TO CHILDREN'S NUTRITIONAL HEALTH

Benchmark: Conflict of interest guidelines restrict commercial influence in matters related to children's nutritional health.



KEY FINDINGS

Although the Industry Canada Values and Ethics Code²⁶⁴ and the Canadian Lobbying Act²⁶⁵ exist as broad guidelines, there are no specific conflict of interest guidelines related to children's nutritional health.

SUPPORTS

Based on available data, conclusions regarding the presence of supports cannot be made at this time.

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time.

RECOMMENDATIONS

Policy

• Establish conflict of interest guidelines to restrict commercial influence in matters related to children's nutritional health.



HEALTH-IN-ALL POLICIES

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



KEY FINDINGS

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

SUPPORTS

The National Collaborating Centre for Public Policy and Health, based in Québec, provides resources to support health impact assessments on broad health policy topics.²⁶⁶

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time.

RECOMMENDATIONS

Practice

• Conduct and incorporate findings of Health Impact Assessments in all government departments on policies with potential to impact child health.

Policy

• Modify Alberta's Public Health Act to require Alberta government departments and agencies proposing laws or regulations to first conduct health impact assessments.



FUNDING

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

INDICATOR	CHILDHOOD HEALTH PROMOTION ACTIVITIES ARE ADEQUATELY FUNDED	HEALTHY EATING AND OBESITY PREVENTION IN CHILDREN IS A PRIORITY FOR RESEARCH FUNDING		
GRADE	С	INC		



CHILDHOOD HEALTH PROMOTION ACTIVITIES ARE ADEQUATELY FUNDED

Benchmark: At least 1% of the health budget is dedicated to implementation of the government's childhood healthy living and obesity prevention strategy/action plan.



KEY FINDINGS

- The Government of Alberta funds several nutrition and/or health-related programs or initiatives. Examples of provincially funded healthy eating and weight initiatives are provided in Table 11.
- Although funding is dedicated towards the government's childhood healthy living and obesity prevention strategy/action plan, based on available data, conclusions cannot be drawn as to whether these amount to at least 1% of the health budget.

Initiative	Description		
Wellness Fund for Healthy School Communities ^{55,57,148,267}	• Since 2012 health and education have provided approximately \$2.5 million per year. ²⁶⁷		
Communities ChooseWell ²⁶⁸	• Since 2006, \$3.5 million has been provided to the Alberta Recreation and Parks Association to support community efforts to enhance healthy eating and active living among residents, including children and youth, through Communities ChooseWell. ²⁶⁸		
Healthy U Alberta ²⁶⁷	• From 2011 to 2014 a total of \$6 million was provided to support information and education initiatives, including the planning and development of materials, implementation, buy-in and evaluation. ²⁶⁷		

 At the national level, the Public Health Agency of Canada budgets for strategic outcomes and programs within health promotion and disease prevention. Figure 15 highlights expenditures and planned spending from 2012 to 2018.²⁶⁹

POWER UP



Figure 15: Public Health Agency of Canada summary for strategic outcome(s) and program(s) (\$ millions)^{269}

SUPPORTS

The Alberta Government funds health promotion professionals to support healthy weight and healthy eating initiatives for children and youth in the province.¹⁴⁴

Over three years (2006-2008), \$2.7 million were dedicated to fund these regional health promotion coordinators for healthy weights.²⁶⁷ Now, they are funded through the Alberta Health Services operational budget.²⁶⁷

MONITORING

There is no systematic monitoring of the percentage of health budget dedicated to implementation of the government's childhood healthy living and obesity prevention strategy/action plan, although data are available through public sources such as those presented above.

RECOMMENDATIONS

Research

• Evaluate the impact of programs and funding on child health.

Practice

• Introduce financial reporting systems to track funds provided for the implementation of the childhood healthy living strategy.

Policy

• Dedicate 1% of the annual provincial health budget to implement the childhood healthy living strategy.



HEALTHY EATING AND OBESITY PREVENTION IN CHILDREN IS A PRIORITY FOR RESEARCH FUNDING

Benchmark: At least 1% of government research funds are dedicated to healthy eating and obesity prevention in children.

Year Grade 2015 INC

KEY FINDINGS

Between 2006-2008, \$97 million annually was invested in obesity research by 23 Canadian research funding agencies.²⁴⁴ The federal government invested \$83.1 million, with \$11.4 million spent on diet and nutrition-related research and \$7.2 million on environmental factors related to obesity.²⁴⁴ Provincial research funding agencies contributed \$8.8 million over the same 3-year period, with Alberta, Québec and British Columbia making the largest investments. Provincial spending was \$1.1 million on diet and nutrition-related research and \$1.1 million on studying environmental factors related to obesity. Alberta Innovates Health Solutions spent \$3.5 million on obesity- related research over the 3-year time frame.

Table 12: Funds of CIHR research grants and awards related to the prevention of childhood obesity²⁷⁰

Year	Research Funds (\$) (\$)		% of CIHR Funds dedicated to Childhood Obesity Prevention	
2008-09	\$8,559,559	\$916,875,687	0.934%	
2009-10	\$7,931,413	\$929,144,803	0.854%	
2010-11	\$8,515,082	\$950,828,661	0.896%	
2011-12	\$9,408,061	\$950,729,984	0.990%	
2012-13	\$10,205,251	\$940,773,074	1.085%	
2013-14	\$6,695,509	\$943,955,267	0.709%	

- Based on available data, it could not be concluded whether at least 1% of government research funds are being dedicated to healthy eating and obesity prevention in children at the provincial level.
- Nationally, the Canadian Institutes of Health Research (CIHR) spent 0.7-1.1% of its research budget on all aspects of childhood obesity and nutrition-related research from 2010-2013 (Table 12). However, this information could not be broken down provincially.²⁷⁰

SUPPORTS

At this time, CIHR no longer includes obesity as one of its priority areas for research.

MONITORING

There is no systematic monitoring of the percent of government research funds dedicated to healthy eating and obesity prevention in children.



RECOMMENDATIONS

Practice

• Improve reporting of funded studies to identify those dedicated to healthy eating and obesity prevention in children.

Policy

• Dedicate 1% of government research funds to healthy eating and obesity prevention in children.



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	IMPACT OF POLICIES AND ACTIONS TO IMPROVE CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHT REGULARLY ASSESSED	SURVEILLANCE OF CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHTS	COMPLIANCE MONITORING		
GRADE	В	В	F		
What Resea	arch Suggests				

Monitoring and surveillance are essential to gauge implementation of national strategies for healthy diets and their impacts on population-level eating behaviours and body weights.¹¹⁶ Government must provide effective legislation, required infrastructure, implementation of programs, adequate funding, and should regularly monitor the implementation of, and impacts of its national strategies and policies. The Institute of Medicine recommends that governments 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.¹⁰ As suggested by International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support (INFORMAS), an optimal approach to monitoring diet quality involves assessing the proportion of ultra-processed products consumed on the basis of data collected using food intake surveys.²⁷¹ Other pre-defined diet quality indices can also be used.²⁷¹



IMPACT OF POLICIES AND ACTIONS TO IMPROVE CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHTS REGULARLY ASSESSED

Benchmark: Ongoing evaluation of the impact of policies and actions associated with the childhood healthy living and obesity prevention strategy/action plan.



KEY FINDINGS

- Beginning in 2008, the Healthy Weights Initiatives completes a bi-annual evaluation in 140 randomly selected schools to measure physical activity, screen time, dietary habits and nutrient intake of more than 9,000 grade 5 students.^{148,272}
- A 3 year evaluation of the MEND initiative was developed and undertaken between 2010 and 2013.²⁷³
- Alberta Healthy School Community Wellness Fund, which began in 2007, undertook an evaluation of the first 102 schools projects to identify emerging practices to promote healthy eating, active living and a positive social environment.²⁷²

SUPPORTS

- Alberta Health Services developed the Health Plan and Business Plan 2012–2015 that encompasses various health promotion actions, such as to: introduce new programs to reduce obesity and promote healthy weight and physical activity in children and youth; implement health promotion programs centered on nutrition and exercise; and establish a surveillance program to monitor rates of obesity to inform policy.²⁷⁴
- Since 2007, the Alberta Healthy School Community Wellness Fund has funded over 150 projects that have reached over 250,000 students in over 750 schools to promote healthy eating, active living and positive social environments.²⁷² As highlighted in key findings, an evaluation of the first 102 healthy school projects was undertaken to identify emerging practices that promote healthy eating, active living and positive social environments.²⁷²

MONITORING

In 2011, Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights' stated that, "Federal/Provincial/Territorial governments will report on established targets for measuring overall progress on the Pan-Canadian Healthy Living Strategy and additional indicators for reporting on efforts taken through the strategies of the Framework."²⁷⁵



RECOMMENDATIONS

Research

• Continue research on the impact of policies and actions associated with the childhood healthy living and obesity prevention strategy/action plan.

Practice

• Publicize the evaluation of the impact of policies and actions associated with the childhood healthy living strategy.

Policy

• Incorporate financial and other support for ongoing evaluation of the impact of policies and actions associated with the childhood healthy living strategy into the provincial budget.



SURVEILLANCE OF CHILDREN'S EATING BEHAVIOURS AND BODY WEIGHTS

Benchmark: There is a biennial population-level surveillance of children's eating behaviours and body weights.



KEY FINDINGS

A list detailing the surveillance of diet and weight for children and youth in Alberta and Canada is provided in Table 13.

Table 12. Curveillance of	abild and youth	diat and waight in <i>i</i>	Nharta and Canada
Table 13: Surveillance of	china ana youth t	ulet and weight in A	Alberta anu Canaua

Survey	Years	Age Range	Description	
Alberta Child Health	ealth Once 2 to 17 years Collects details on determinants of health of children, conditions		Collects details on determinants of health of children, conditions and	
Surveillance ²⁷⁶	2005	disease, as well as health services of Alberta residents.		
Canadian Community	Annual	12 years and	Collects details on health status, health care utilization and health	
Health Survey – Annual	2007-present	older	determinants of the Canadian population through a survey.	
Component ²⁷⁷				
Canadian Community	adian Community Occasional 1 year and Collects details about eating habits, use of vitamin and mi		Collects details about eating habits, use of vitamin and mineral	
Health Survey – 2004; 2014-		older	supplements, as well as other health factors of the Canadian	
Nutrition ²⁷⁸	15		population.	
Canadian Health	Biennial	3 to 79 years	Collects details by means of direct physical measurements, such as	
Measures Survey –	2007-present		blood pressure, height, weight and physical fitness of the Canadian	
270		population.		
· · · · · · · · · · · · · · · · · · ·				

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

SUPPORTS

Provincial surveillance units employ staff to analyze this data.

MONITORING

This indicator is already a form of monitoring.

RECOMMENDATIONS

Policy

• Establish a dedicated surveillance system for quadrennial population-level surveillance of children's eating behaviours and body weights.



COMPLIANCE MONITORING

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

Year Grade

2015

KEY FINDINGS

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

SUPPORTS

Based on available data, conclusions regarding supports cannot be made at this time.

MONITORING

At this time, there are no mechanisms in place for monitoring.

RECOMMENDATIONS

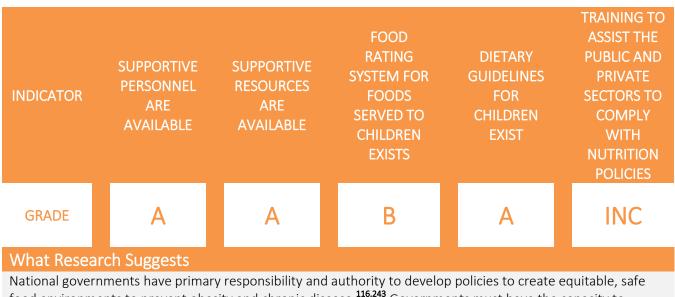
Policy

• Establish and track mandatory mechanisms to monitor adherence to mandated nutrition policies.



CAPACITY BUILDING

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



food environments to prevent obesity and chronic disease.^{116,243} Governments must have the capacity to develop, implement and monitor policies and programs to improve population nutrition and health.¹⁰ Government must provide effective legislation, required infrastructure, implementation programs, adequate funding, monitoring and evaluation and ensure ongoing research to support its national strategy and policies.¹¹⁶



SUPPORTIVE PERSONNEL ARE AVAILABLE

Benchmark: Personnel are in place with responsibility to oversee the childhood healthy living and obesity prevention strategy/action plan.



KEY FINDINGS

Various government and non-government level organizations exist in Alberta to oversee the childhood healthy living/obesity prevention strategy/action and are highlighted in Table 14.

Table 14: Organizations in Alberta providing supportive personnel for childhood healthy living and obesity prevention

Alberta Health – Health Promotion Coordinators¹⁴⁴

• Between 2006 and 2008, Alberta Health allocated \$2.7 million/year to support Regional Health Promotion Coordinators for Healthy Weights to facilitate innovative community-based approaches to promote healthy weights for children and youth.

Alberta Health Services

Healthy Child and Youth Development (HCYD) Team²⁸⁰

- The HCYD team partner with external stakeholders to plan effective and coordinated provincial initiatives to improve the health of children and youth between 6 and 18 years of age.
- The team uses a comprehensive school health approach to support healthy weights through healthy eating, active living, and positive well-being.

Comprehensive School Health Working Group²⁸¹

• The Healthy Children and Youth Team, within Healthy Living, gathers, reviews and evaluates an inventory of comprehensive school healthy education resources that are used provincially.

Other Organizations¹⁸⁰

- Other organizations that work to improve healthy living through nutrition. Listed below are a few examples. Although presented as separate organizations, many often coordinate with each other.
 - Action for Healthy Communities
 - Alberta Coalition for Healthy School Communities
 - Juvenile Diabetes Research Foundation
 - Alberta Recreation and Parks Association

SUPPORTS

Ongoing positions are funded to support personnel.

MONITORING

Each organization monitors their supportive personnel staffing to suit their perceived regional needs.

RECOMMENDATIONS (*)

Recommendations are provided on page 87 in conjunction with the following indicator: "Supportive Resources are Available."



SUPPORTIVE 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 to support childhood healthy living/obesity prevention strategy/action plan. Examples highlighted in Table 15.

Table 15: Examples of online resources and campaigns to support childhood healthy living and obesity prevention

Heathy U^{55,59,282,283}

• Launched in 2002, this website aims to promote and support healthy living in Albertan residents through providing healthy eating and active living informational tools, including⁵⁹: nutrition guidelines, cookbooks, posters, information booklets, meal planning tools, age-specific food guide serving sizes, infant feeding guidelines and personal monitoring tools.²⁸³ [View Here]

Canada's Healthy Eating Toolbox^{55,142,284}

 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, as well as health professionals and educators. [View Here]

Working with Grocers to Support Healthy Eating and Measuring the Food Environment in Canada²⁸⁵

• Describes current evidence linking access to food and diet-related diseases, highlights gaps in research related to understanding how the food retail environment could better promote and support healthy eating. [View Here]

SUPPORTS

Various organizations in Alberta and nationally provide supportive resources for achievement of the childhood healthy living and obesity prevention strategy/action plan. Examples include, but are not limited to ^{180,286}:

- Alberta Centre for Active Living*
- Alberta Health Services
- Alberta Food Matters and the Growing Food Security in Alberta Network (Formerly known as Growing Food Security in Alberta) *
- Active Living Alliance for Canadians with a Disability
- Chronic Disease Prevention Alliance of Canada**
- Canadian Obesity Network
- Dietitians of Canada**
- Health Canada**

- Canadian Association for School Health / Canadian School Health Knowledge Network
- Joint Consortium for School Health Lifestyle Information Network
- National Aboriginal Health Organization
- Physical and Health Education Canada
- Public Health Agency of Canada
- Vision Aboriginal Health Resource Directory

Note: *denotes an organization based in Alberta and either supported or financially sponsored by the government of Alberta; **denotes national organizations that offer support to chronic disease prevention decision-making and practice.^{180,286}



MONITORING

Respective scan results from a provincial Nutrition and Physical Activity Situational Analysis suggest that while nutrition, physical activity, and/or weight management programs and services are currently being offered across the province, very few operate under a mandate of chronic disease prevention.¹⁸⁰

RECOMMENDATIONS (*)

Practice

• Continue to support personnel, website and other resources that exist to achieve the benchmark. **Policy**

• Allocate permanent funding for supportive personnel and resources into the provincial budget.

*Note: Recommendations apply to both "Supportive Personnel are Available" and "Supportive Resources are Available" indicators.



FOOD RATING SYSTEM FOR FOODS SERVED TO CHILDREN EXISTS

Benchmark: There is adoption and dissemination of an evidence-based food rating system for foods served to children and tools to support its application.



KEY FINDINGS

Alberta Nutrition Guidelines for Children and Youth⁵⁸

 In 2008, the ANGCY were implemented to support the provision of nutritious foods and beverages in childoriented settings, such as in schools, childcare centres, recreation facilities, and at community events.⁵⁸

Federal/Provincial/Territorial Harmonized Food Rating System for Schools 55,258,260

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 development⁵⁵ of these harmonized nutrition guidelines, which support the Federal/Provincial/Territorial Framework for Action to Promote Healthy Weights.²⁶⁰

SUPPORTS

Healthy U is an interactive online tool that supports the dissemination and use of the ANGCY.⁵⁹ [View Here]

MONITORING

At this time, there is no formal monitoring of these food rating systems. Some research has been conducted on the adoption and implementation of the ANGCY in schools,²⁸⁷ childcare centres⁶⁴ and recreation centres.⁶⁵

RECOMMENDATIONS

Research

• Evaluate adoption and implementation of ANGCY in schools, childcare and recreation facilities.

Practice

• Develop additional resources to assist with implementation.

Policy

• Mandate the ANGCY as a food rating system in schools, childcare and recreation facilities.



DIETARY GUIDELINES FOR CHILDREN EXIST

Benchmark: There is adoption and dissemination of population-level dietary guidelines for children and resources to support their application.



KEY FINDINGS

Alberta Nutrition Guidelines for Children and Youth⁵⁸

 In 2008, the ANGCY were implemented to support the provision of nutritious foods and beverages in childoriented settings, such as in schools, childcare centres, recreation facilities and at community events.⁵⁸

Eating Well with Canada's Food Guide

• This national guide provides dietary recommendations for Canadians aged 2 and older.²⁸⁸ 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 for children of 2 to 17 years of age.²⁸⁸⁻²⁹⁰

Nutrition for Healthy Term Infants

• Provides evidence-based recommendations for parents of children from birth to two years of age on breastfeeding, breast milk substitutes, complementary feeding and vitamin D supplementation. These resources have been available since 2008 and were revised in 2011.^{291,292}

Healthy Pregnancy Guide

 Provides recommendations for pregnant women on a variety of topics, including prenatal nutrition, folic acid and alcohol use.²⁹³

SUPPORTS

- Healthy U is an interactive online tool that supports the dissemination and use of the ANGCY.⁵⁹ [View Here]
- Health Canada's Office of Nutrition Policy and Promotion has, as part of its mandate, the regular review and update of population level nutrition guidelines.²⁹⁴

MONITORING

- The Canadian Community Health Survey Nutrition assessed the dietary intake of Canadians in 2004. Dietary intake data for 2015 are currently being collected from Canadians across the country and will be released in fall 2016. ^{295,296}
- Through Health Canada, the Canadian Perinatal Surveillance System collects information on 52 perinatal health indicators, including the rate of breastfeeding.²⁹⁷



RECOMMENDATIONS

Research

• Evaluate adherence to dietary guidelines for children and youth.

Practice

- Continue efforts in adoption and dissemination of population-level dietary guidelines for children and resources to support their application.
- Develop additional resources to assist with implementation.

Policy

• Establish timely cycle to review dietary guidelines.



TRAINING TO ASSIST THE PUBLIC AND PRIVATE SECTORS TO COMPLY WITH NUTRITION POLICIES

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



KEY FINDINGS

There are no available findings to suggest that delivery of training is being offered free of charge to assist the public and private sectors to comply with nutrition policies.

SUPPORTS

Alberta Health Services offers the *Nutrition: Healthy Eating Starts Here* program, which supports healthy food environments and provides free resources for school teachers, child educators, parents, and health professionals working in schools and recreation facilities. The tools and resources provide support to implement the ANGCY, as well as manuals and toolkits for teaching children and youth about healthy eating or creating a healthy environment.¹⁴³

MONITORING

Based on available data, conclusions regarding monitoring cannot be made at this time.

RECOMMENDATIONS

Practice

Provide training to assist public and private sectors to comply with nutrition policies.



ABBREVIATIONS	
ANGCY	Alberta Nutrition Guidelines for Children and Youth
APCCP	Alberta Policy Coalition for Chronic Disease Prevention
ARPA	Alberta Recreation and Parks Association
ASC	Advertising Standards Canada
ASPQ	Association pour la santé publique du Québec
BFHI	Baby-Friendly Hospital Initiative
BINGOs	Business interest non-governmental organizations
BMI	Body mass index
CALM	Career and Life Management
CBC	Canadian Broadcasting Corporation
CCHS	Canadian Community Health Survey
CDC	Centers for Disease Control and Prevention
CFBAI	Canadian Children's Food and Beverage Advertising Initiative
CIHR	Canadian Institutes of Health Research
CLASP	Coalitions Linking Action & Science for Prevention
CPAC	Canadian Partnership Against Cancer
CPNP	Canadian Prenatal Nutrition Program
GNWT	Government of the Northwest Territories
HCYD	Healthy Child and Youth Development
INFORMAS	International Network for Food and Obesity / non-communicable Diseases Research,
	Monitoring and Action Support
MEND	Mind, Exercise, NutritionDo it!
mRFEI	modified Retail Food Environment Index
NAICS	North American Industry Classification (Canada) System
NCD	Non-communicable disease
NGO	Non-governmental organization
PHAC	Public Health Agency of Canada
PINGOs	Public interest non-governmental organizations
POWER UP!	Policy Opportunity Windows: Enhancing Research Uptake in Practice
REAL	Raising healthy Eating and Active Living
TFTF	Trans Fat Task Force
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization



	Category	Indicator	Benchmark	F	D	port Cal	В	A
	Food Availability Within Settings	High availability of healthy food in <u>school</u> settings	Approximately ¾ of available foods are healthy in schools.					
		Limited availability of unhealthy food <i>in</i> <u>school</u> settings	Deep-fried foods, high-fat snack foods and sugar- sweetened beverages represent approximately less than ¼ of available options in schools.					
		High availability of healthy food <i>in</i> <u>childcare</u> settings	Approximately ¾ of available foods are healthy in childcare settings.	Incon	nplete			
LN		Limited availability of unhealthy food <i>in</i> <u>childcare</u> settings	Deep fried foods, high-fat snack foods and sugar- sweetened beverages represent approximately less than ¼ of available options in childcare settings.	Incon	nplete			
ONME		High availability of healthy food <i>in</i> <u>community</u> settings	Approximately ¾ of available foods are healthy in community settings.					
ENVIK		Limited availability of unhealthy food in <u>community</u> settings	Deep-fried foods, high-fat snack foods and sugar- sweetened beverages represent approximately less than ¼ of available options in community settings.					
PHYSICAL ENVIRONMENT	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 \ge 10; across impoverished census areas is \ge 7.					
<u>.</u>		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 have healthful nutrient profiles	All commercially prepared foods are free of artificial trans fats.					
		Foods contain healthful ingredients	≥ 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving.					
E	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, vending machines and throughout all schools, community/recreation facilities and hospitals.					
KNMEN		Shelf labelling is present	Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.					
ENVIO		Product labelling is present	A simple, evidence-based, government-sanctioned front-of-package food labelling system is mandated for all packaged foods.					
COMMUNICATION ENVIORNME		Product labelling is regulated	Strict government regulation of all health and nutrition claims on package labels. Industry-devised logos denoting 'healthy' foods not permitted.					
	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, including a ban on inclusion of toys in children's restaurant meals.					



	Nutrition Education	Nutrition education provided to children	Nutrition is a required component in the health curriculum at all grade levels.	
		Nutrition education and training provided to teachers and childcare workers	Nutrition education and training is a requirement for teachers and childcare workers.	
L	Financial Incentives for Consumers	Lower prices for healthy foods	Healthy foods are exempt from point-of-sale taxes. Transportation of healthy, culturally appropriate foods to isolated northern communities is subsidizing to local consumers that ensures they are affordable for local populations.	
1EN		Higher prices for unhealthy foods	A minimum tax of \$0.05/100mL is applied to sugar- sweetened beverages sold in any form.	
ECONOMIC ENVIRONMENT	Financial Incentives for Industry	Incentives to produce/sell healthy foods	The proportion of corporate revenues earned via sales of healthy foods is taxed at a lower rate.	
C ENVI		Disincentives to produce/sell unhealthy foods	The proportion of corporate revenues earned via sales of unhealthy foods is taxed at a higher rate.	
MΝ	Government Nutrition	Reduce childhood food insecurity	Reduce the proportion of children living in households that access food banks by 15% over 3 years.	
NO	Assistance Programs	Nutritious food basket is affordable	Social assistance rates provide sufficient funds to purchase the contents of the nutritious food basket.	
ECO		Financial incentives to purchase healthy foods	Social assistance recipients receive monthly vouchers to purchase fruits and vegetables.	
		Subsidized fruit and vegetable subscription program in schools	Children in elementary school receive a free or subsidized fruit or vegetable each day.	
AENT	Weight Bias	Weight bias is avoided	Weight bias is explicitly addressed in schools and childcare.	
SOCIAL ENVIRONMENT	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 \geq 5.0 out of 10.0.	
∖L E∧	Breastfeeding Support	Breastfeeding is supported	Public buildings are required to permit and promote breastfeeding.	
SOCIA		Hospitals support and promote breastfeeding	All hospitals with labour and delivery units and all paediatric hospitals and public health centres are designated as WHO baby-friendly hospitals	
F	Leadership and Coordination	Childhood healthy living/obesity prevention strategy/action plan	A comprehensive, evidence-based childhood healthy living and obesity prevention strategy/action plan is endorsed by government.	
POLITICAL ENVIRONMENT		Population targets for childhood eating behaviours and body weights	Evidence-based population targets for childhood eating behaviours and body weights exist.	
		Broad consultation on matters related to child health	Representatives from all sectors and government departments are active participants in policy development and implementation in matters related to child health. The food industry participates in policy implementation, but not in its development.	
οιπια		Conflict of interest guidelines for matters related to child health	Conflict of interest guidelines restrict commercial influence in matters related to children's nutritional health.	
ď		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 childhood healthy living and obesity prevention strategy/action plan.	
	Healthy eating and obesity prevention in children is a priority for research funding	At least 1% of government health-related research funds dedicated to healthy eating and obesity prevention in children.	Incomplete
Monitoring and Evaluation	Impact of policies and actions to improve children's eating behaviours and body weights regularly assessed	Ongoing evaluation of the impact of policies and actions associated with the childhood healthy living and obesity prevention strategy/action plan.	
	Surveillance of children's eating behaviours and body weights	Biennial population-level surveillance of children's eating behaviours and body weights.	
	Compliance monitoring	Mechanisms are in place to monitor adherence to mandated nutrition policies.	
Capacity Building	Supportive personnel are available	Personnel are in place with responsibility to oversee the childhood healthy living and obesity prevention strategy/action plan.	
	Supportive 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 for foods served to children exists	Adoption and dissemination of an evidence-based food rating system for foods served to children and tools to support its application.	
	Dietary guidelines for children exist	Adoption and dissemination of population-level dietary guidelines for children and resources to support their application.	
	Training to assist the public and private sectors to comply with nutrition policies	Training (delivered by qualified personnel) is available free of charge to assist the public and private sectors to comply with nutrition policies.	Incomplete



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