ALBERTA'S 2021

NUTRITION REPORT CARD

ON FOOD ENVIRONMENTS FOR CHILDREN & YOUTH







BENCHMARKING FOOD ENVIRONMENTS

WHAT'S STOPPING HEALTHY FOOD ENVIRONMENTS FOR KIDS?

3/4 foods in recreation facilities healthy

Modified retail food environment $\cdots \cdots$ index \geq 10 across all areas

Convenience stores/fast foods not ••••• present within 500 m of schools

Breakfast cereal infant & toddler foods, baked goods meet sodium targets

Menu labelling mandated in \cdots restaurants with \geq 20 locations

Shelf labelling identifying healthy food $\cdots \cdots \cdots$ in grocers with ≥ 20 locations

Recreation facilities free from

3/4 foods in schools healthy

3/4 foods in childcares healthy ••••••

Government regulation of industry's •••• logos/brands denoting healthy foods

Broad-reaching child-directed social marketing healthy food

Nutrition required curriculum component at all school grade levels

Food skills required curriculum component for junior high

Basic groceries exempt from ••••• point-of-sale taxes

Website & resources exist to support programs and initiatives of the childhood healthy living strategy/action plan

Evidence-based food rating system & dietary guidelines for foods served to children + tools to support their application

Qualified personnel is available free of charge to facilitate compliance with •••••••* nutrition policies

* The following benchmarks had incomplete data in 2021:

Reduce proportion of households with children accessing food banks by 15% over 3 years

Elementary school students receive a free/subsidized fruit or vegetable daily

.01% of Alberta budget dedicated to healthy living strategy/action plan, with a significant portion focused on children

Based on Alberta's 2021 Nutrition Report Card on Food Environments for Children and Youth (NRC). The full and summary report are available online at: https://abpolicycoalitionforprevention.ca /evidence/albertas-nutrition-report-card/



VITAMIN

Q Q

Q Q

Minimum exercise tax \$0.05/100 mL sugar-sweetened beverages

Access to healthy food subsidies in rural, remote, or northern communities

- Corporate profits earned via sales is taxed relative to its health profile
 - ••• Reduce proportion of children living in food insecure households by 15% over 3 years
- Social assistance rate & minimum wage provide sufficient funds to meet basic needs including Nutritious Food Basket
- •••••• Weight bias explicitly addressed in schools and childcare settings through policies and practices which promote body size and shape inclusivity
- •• Health Impact Assessments conducted on government policies with potential to impact child health
- •• Mechanisms monitor adherence to mandated nutrition policies
- ** Food procurement contracts/agreements signed by public institutions specify 50% of foods procured are healthy
 - •••• Nutrition education requirement for childcare professionals
 - •••• Most Canadian corporations score ≥ 5.0 out of 10.0 (Access to Nutrition Index)
 - ···· All public buildings permit & facilitate breastfeeding
- •• All delivering/pediatric hospitals & public health centres achieved WHO Baby-Friendly designation/equivalents
- Government- endorsed comprehensive, evidence-based childhood healthy living strategy/action plan promoting healthy eating
- . Provincial-level surveillance of children's eating practices & body weights
- All municipalities 50,000+ have written food policy strategies, focused on access to healthy foods/promoting healthy eating

LET'S GIVE KIDS A GREEN LIGHT FOR HEALTH!

Did Not Meet the Benchmark

ALBERTA

INNOVATES

- Somewhat Met the Benchmark
- Met the Benchmark

BENCHMARKING FOOD ENVIRONMENTS

TABLE OF CONTENTS

4	Background
14	Grading the Nutrition Report Card
17	Acknowledgements
20	Key Findings and Recommendations
20	Physical Environment
27	Communication Environment
36	Economic Environment
42	Social Environment
46	Politcial Environment
54	References



Background

Good food and nutrition are essential to promoting the health of children and youth. Healthy eating promotes child growth and development, learning and even the prevention of diet-related chronic diseases once believed to affect only adults, such as obesity and Type 2 Diabetes (World Health Organization, 2016a).

Poor eating practices learned early in life can track into adulthood (Herman et al., 2009; Terry-McElrath et al., 2014; Chriqui et al., 2014), emphasizing the importance of supporting healthy eating in childhood and youth. Dietary risks rank second only to tobacco as contributors to premature mortality in Canada (Institute for Health Metrics and Evaluation, 2019). There is an urgent need for preventive action to address the challenge of healthy eating.



Healthy Eating is More Than An Individual Choice

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

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

Applying the concept of benchmarking to food and nutrition policy is gaining momentum internationally. INFORMAS (International Network for Food and Obesity/Non-Communicable Disease Research, Monitoring and Action Support), calls for monitoring food environments, and we have answered the call by developing the Indicators and Benchmarks in this Nutrition Report Card (Olstad et al., 2014). Brennan et al. (2011) provided a comprehensive overview of policy and environmental strategies to improve children's health-related behaviours, which we incorporated into the Nutrition Report Card. This conceptual framework depicts how policies and environments interact to shape children and youth's eating practices and body weights. Five environments: physical, communication, economic, social, and political; form the structure of the Nutrition Report Card (Brennan et al., 2011). Three major settings have the greatest relevance to children and youth: schools, childcare, and community settings (WHO, 2016a).

Falling Behind on Food Environments – The Need to Make Food and Nutrition for Children a Public Health Priority in 2021 and Beyond

In this seventh instalment of Alberta's Nutrition Report Card on Food Environments for Children and Youth, the purpose, to provide an assessment of how current environments and policies support or create barriers to improving children and youths' eating practices, has remained the same as in previous years. What has changed, along with so much in 2020-21, is how much more evident the need to protect children from vulnerabilities, including nutrition vulnerabilities, has become. In the public health crisis that is/was COVID-19, public health's role of protecting people from harm is at the forefront of our collective consciousness on a daily basis. The need to use policy, such as lockdowns to enable physical distancing and mandated masks for safer environments, is becoming part of our understanding of the role of public health. As vaccines became available and people lined up for a shot in the arm, we began to feel hope for a return to "normal". But when it comes to food environments, a pretty consistent mediocre "C" average over the past six years means that pre-COVID "normal" is not good enough to protect our children.

There are No Vaccines for Premature Chronic Diseases - Prevention Requires Improving Food Environments

Not only is there not yet a vaccine approved to protect children under 12 from COVID-19, there has never been a vaccine available to protect children

from a future of chronic diseases like Diabetes and heart disease. The urgency to protect children's nutritional health has been made even more clear by COVID-19; being well nourished protects everyone from more serious illness, whether it be from a novel virus or from the chronic diseases we have become so accustomed to that we take their future inevitability for granted. Premature Diabetes, heart disease and cancer are not inevitable; they are preventable. Preventing premature chronic diseases requires huge public health efforts to improve the "toxic" food environments that make us vulnerable. Unfortunately, in 2021, the seventh instalment of the Nutrition Report Card on Food Environments for Children and youth, Alberta's Grade has dropped to a near failing "D". Heroic and appropriate public health measures to protect the public from COVID-19 worked. We need similarly heroic measures to protect children from chronic diseases. Improving food environments could be the shot in the arm our kids need to live long and healthy lives.

Within the context of this Nutrition Report Card, some of the regression in grades that gave Alberta a "D" was related to the urgency of addressing COVID-19 that meant other health issues decreased in priority. For example, with schools closed for part of 2020-21, with children learning online at home, policies that promote healthy food availability at school (Indicator 1), subsidized food at school (Indicator 24) or food skills education in schools (Indicator 14) leave children nutritionally vulnerable as schools scramble to find ways to reach children at home with needed food or education. Nutritional quality of food offered to children in schools became less of a priority. Some child care facilities (Indicator 2) stopped offering food at all, with both food safety and cost weighing on those decisions. For many families, especially those facing the financial challenges of COVID-19, the food offered in child care may have bridged a gap toward having enough food on the table at home. When the cost of purchasing a nutritious food basket (Indicator

23) exceeds the funds provided by social assistance and minimum wage, and the number of families reliant upon social assistance (including temporary assistance) grows, more children are vulnerable to nutritional risks associated with the changing economic environment.

The Frank Reality of Deteriorating Food Environments

As a group of experts sat down (virtually) in June to come to consensus on the grades for 2021, we all noted that COVID-19 impacted food environments and affected 2020 and 2021 grades. While in 2020 we made a conscious decision not to grade based upon what we all hoped would be a temporary situation with COVID-19, in 2021 we believed it was better to be frank about what the past 18 months had done to deteriorate food environments. We also noted that the global pandemic was not the only factor influencing grades, redeployment of health staff such as health promotion facilitators and growing rates of food insecurity associated with economic vulnerabilities and reduced income are indeed related to COVID-19. So was the lack of progress on many programs and policies that held great promise, such as policies to restrict marketing of unhealthy food and beverages to children (Indicators 12 and 13), and policies that would accelerate food industry's action on reformulating foods to make their composition more aligned with nutrition recommendations (Indicators 6 and 9).

We can no longer ignore the threat of poor food environments. It is time to stop taking chronic disease for granted. Let's protect our children. Improving food environments is a shot in the arm for kids.

Measuring and Acting Locally to Improve Food Environments

For the first time in 2021 we included locally collected data from communities across Alberta. Concerned community members and health professionals participated in environmental scans in settings (e.g. school, cafeterias, childcare centres, rec centres, etc.) where children eat and rated how healthy the food choices are, as well as how current policies and actions may act as barriers or facilitators to positive change. The communities created their own Mini Nutrition Report Cards, and our team helped to co-create community-specific recommendations for making healthy eating easier. A portion of the communities that finalized their Mini from 2017 onwards agreed to share this information in aggregate, anonymized form. Our data this year are, therefore, reflective of a wider array of communities than in previous years, and we know that local action is percolating throughout the province.

We were impressed with how quickly communities started using the Mini Nutrition Report Cards to improve their food environments. Often, first steps provided immediate benefits as communities modified menus and vending options to increase the availability of healthy food and decrease the availability of unhealthy food (i.e., "easy swaps", such as replacing white bread with whole grain bread, offering vegetables as a side dish, etc.). Communities replaced unhealthy food marketing with signage that promotes healthy eating. Communities also sought out healthy food vendors to stock vending machines in recreation centres, and encouraged schools to implement and monitor nutrition policies that may have been on the books, but not necessarily implemented as intended. Just

having access to locally relevant data increased awareness of the possibilities for change and stimulated action (Aylward et al., 2021). What is important gets measured, and what is measured gets action. We were happy to support local communities in measuring and acting on local food environments, and we are developing an on-line app that will enable communities to self-monitor for years to come.

A Shot In The Arm For Kids' Health

Seven years of collecting data on food environments in Alberta reveals we are losing ground. We have become complacent to the "invisible" pandemic of diet related chronic diseases. It's time for us to pay attention to the data, just like we paid attention to the cases of COVID-19 during the visible pandemic. Protecting our children and youth from the invisible pandemic requires investment in public health measures, such as mandating policies for healthy food provision where kids learn and play. Providing opportunities for children to access healthy food is like getting the first dose. Creating opportunities for communities to act on their local food environments protects kids even more. It's time we stepped up to protect kids from the invisible pandemic of chronic diseases. Their future health is in our hands.



MICRO-ENVIRONMENTS



PHYSICAL

The physical environment refers to what is available in a variety of food outlets (Swinburn et al., 2013) including restaurants, supermarkets, schools, as well as community, sports and arts venues, and public buildings.

COMMUNICATION



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

ECONOMIC



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



SOCIAL

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



POLITICAL

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

Examining current food environments is a step in the right direction toward creating more supportive environments for healthy eating. Alberta's 2021 Nutrition Report Card is the seventh annual assessment of Food Environments for Children and Youth, and contributes to understanding the impact nutrition-related policies and actions have by highlighting where we are succeeding, and where more work is needed to support the health of children and youth.



Development of the Nutrition Report Card

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

In 2021, an Expert Working Group of 14 academic experts and representatives from non-governmental organizations (NGOs) across Canada with expertise related to childhood obesity, healthy eating, food environments, and nutrition policy convened to evaluate the available evidence for Alberta's seventh Nutrition Report Card. Forty Indicators were graded by the Expert Working Group in the 2021 Nutrition Report Card.

The Nutrition Report Card is made up of 40 Indicators in key areas from each of the environments:

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

INDICATORS	BENCHMARKS
8. Shelf labelling is present	Grocery chains with ≥ 20 locations provide logos/symbols on store shelves to identify healthy foods.
9. Product labelling is present	A simple, evidence-based, government-sanctioned front-of- package food labelling system is mandated.
10. Product labelling is regulated	Strict government regulation of industry-devised logos/ branding denoting healthy foods.
11. Government-sanctioned public health campaigns encourage children to consume healthy foods	Broad-reaching child-directed social marketing campaigns for healthy foods.
12. Restrictions on marketing unhealthy foods to children	All forms of marketing unhealthy foods to children are prohibited.
12a. Settings where children gather are free from unhealthy food marketing(e.g. recreation facilities)	Recreation facilities are free from unhealthy food marketing.
13. Nutrition education provided to children in schools	Nutrition is a required component of the curriculum at all school grade levels.
14. Food skills education provided to children in schools	Food skills are a required component of the curriculum at the junior high level.
15. Nutrition education and training provided to teachers	Nutrition education and training is a requirement for teachers.
16. Nutrition education and training provided to childcare professionals	Nutrition education and training is a requirement for childcare professionals.
17. Lower prices for healthy foods	Basic groceries are exempt from point-of-sale taxes.
18. Higher prices for unhealthy foods	A minimum excise tax of \$0.05/100 mL is applied to sugar- sweetened beverages sold in any form.



INDICATORS	BENCHMARKS
19. Affordable prices for healthy foods in rural, remote, or northern areas	Subsidies to improve access to healthy food in rural, remote, or northern communities to enhance affordability for local consumers.
20. Incentives exist for industry production and sales of healthy foods	The proportion of corporate profits earned via sales is taxed relative to its health profile (e.g. healthy food is taxed at a lower rate and unhealthy food is taxed at a higher rate).
21. Reduce household food insecurity	Reduce the proportion of children living in food insecure households by 15% over three years.
22. Reduce households with children who rely on charity for food	Reduce the proportion of households with children that access food banks by 15% over three years.
23. Nutritious Food Basket is affordable	Social assistance rate and minimum wage provide sufficient funds to meet basic needs including purchasing the contents of a Nutritious Food Basket.
24. Subsidized fruit and vegetable subscription program in schools	Children in elementary school receive a free or subsidized fruit or vegetable each day.
25. Weight bias is avoided	Weight bias is explicitly addressed in schools and childcare settings through policies and practices which promote body size and shape inclusivity, such as mandating weight bias training for educators, designing curricula to focus on health rather than weight, and implementing and evaluating strategies to mitigate weight-related bullying.
26. Corporations have strong nutrition- related commitments and actions	Most corporations in the Access to Nutrition Index with Canadian operations achieve a score of \geq 5.0 out of 10.0.
27. Breastfeeding is supported in public buildings	All public buildings are required to permit and facilitate breastfeeding.
28. Breastfeeding is supported in hospitals	All hospitals with labour and delivery units, pediatric hospitals, and public health centres have achieved WHO Baby-Friendly designation or equivalent standards.
29. Healthy living strategy/action plan exists to promote healthy eating	A comprehensive, evidence-based childhood healthy living strategy/action plan promoting healthy eating is endorsed by government.

INDICATORS	BENCHMARKS
30. Health-in-All policies	Health Impact Assessments are conducted in all government departments on policies with potential to impact child health.
31. Childhood health promotion activities adequately funded	At least .01% of the Alberta provincial budget is dedicated to implementation of a whole of government approach to a healthy living strategy/action plan, with a significant portion focused on children (health is accountable for earmarking prevention funding).
32. Compliance monitoring of policies and actions to improve children's eating practices	Mechanisms are in place to monitor adherence to mandated nutrition policies.
33. Children's eating practices and body weights are regularly assessed	Ongoing provincial-level surveillance of children's eating practices and body weights exists.
34. Resources are available to support the government's childhood healthy living strategy/action plan	A website and other resources exist to support programs and initiatives of the childhood healthy living strategy/ action plan.
35. Food rating system and dietary guidelines for foods served to children exists	There is an evidence-based food rating system and dietary guidelines for foods served to children and tools to support their application.
36. Support to assist the public and private sectors to comply with nutrition policies	Support (delivered by qualified personnel) is available free of charge to facilitate compliance with nutrition policies.
37. Municipal food policy strategies exist	All municipalities with populations over 50,000 have written food policy strategies, with a focus on access to healthy foods/promoting healthy eating.
38. Healthy food procurement policies exist in publicly funded institutions	Food procurement contracts/agreements signed by public institutions specify that 50% of foods procured are healthy.



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

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

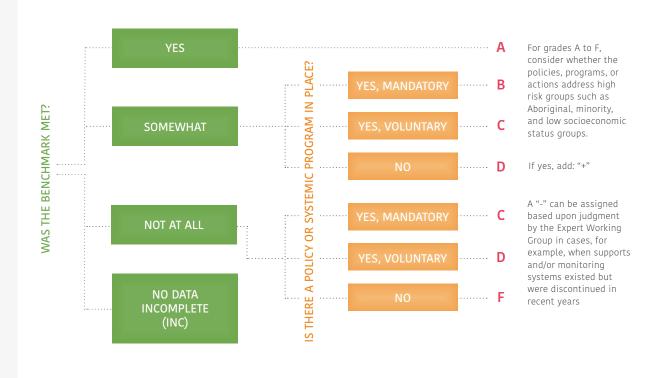
Finally, the Nutrition Report Card aims to catalyze and inform various stakeholders about the landscape of policies in Alberta, and then delineate recommendations based on a broad portfolio of evidence-based strategies. Recognizing that success in healthy eating behaviors cannot be achieved through any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



Grading the Nutrition Report Card

Based on the best available scientific knowledge and data on policies, programs, and actions relevant to each Indicator, the 2021 Expert Working Group used the grading scheme illustrated below to assign a grade to each Indicator. The grading scheme follows a series of three key decision steps:

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



THE GRADING PROCESS

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



Has the Benchmark been met?

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

Example of a Benchmark

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

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

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



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

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

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



Are high-risk groups addressed?

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

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

_____ 15 _____ 2021 Alberta Report Card

What overall grade did Alberta receive on the 2021 Nutrition Report Card?

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

Following this year's rigorous grading process, Alberta received an overall score of 'D'. In the following pages, each of the five environment categories starts with 'What Research Suggests' to highlight current best evidence as it relates to the Indicators and Benchmarks. This is followed by Indicator 'Key Findings' based on Alberta data along with Recommendations.

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



_____ (16) _____ 2021 Alberta Report Card

Acknowledgements

We would like to thank all of the individuals that contributed toward the development of the 2021 Nutrition Report Card by facilitating access to relevant data and information:

Kate Battista, MMath, PhD Candidate

COMPASS Data Manager/Biostatistician

Chad Bredin COMPASS Project Manager

Dee-Ann Carol, MSc

Manager, Community Wellness, Health and Wellness Promotion Alberta Health, Government of Alberta

Charlene C. Nielsen, PhD

Postdoctoral Fellow School of Public Health, University of Alberta

Nutrition Services Public Health Dietitians

Alberta Health Services

Performance Management and Analytics, Community and Social Services

Government of Alberta

Phi Phan, MPH, CPHI(C)

Provincial Manager, Safe Healthy Environments, Alberta Health Services

Sofia Seer

Research Officer Food Banks Canada

Kate Storey, PhD

Associate Professor School of Public Health, University of Alberta

Kerri Murray

Director of Projects Ever Active Schools



UNIVERSITY OF ALBERTA SCHOOL OF PUBLIC HEALTH

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

www.uofa.ualberta.ca/public-health



Funding for the production of Alberta's 2021 Nutrition Report Card on Food Environments for Children and Youth has been made possible through Alberta Innovates. The views expressed herein represent the views of the authors and do not necessarily represent the views of Alberta Innovates.



The Alberta Policy Coalition for Chronic Disease Prevention (APCCP) is a coalition of 16 prominent organizations in Alberta. Since 2009, the APCCP has leveraged the partnerships, skills, and expertise of its members in the areas of research, policy, and practice to increase knowledge about and support for policies to address risk factors for chronic disease, including poor nutrition, physical inactivity, and alcohol misuse.

www.abpolicycoalitionforprevention.ca

The Benchmarking Food Environments project would like to thank the following communities for completing their Mini Nutrition Report Cards and agreeing to share their information anonymously and in aggregate form: Castor, Coronation, Lethbridge, Medicine Hat, Sexsmith, Vegreville, and Viking. [Note: not all communities that have since completed their Mini Nutrition Report Cards were included and of all that shared anonymously, not all agreed to be acknowledged.]

Referencing this report

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

Alberta's 2021 Nutrition Report Card on Food Environments for Children and Youth. University of Alberta, Edmonton, Alberta.

A summary of Alberta's 2021 Nutrition Report Card on Food Environments for Children and Youth is also available online at: https:// abpolicycoalitionforprevention.ca/evidence/ albertas-nutrition-report-card/



2021 Report Card Development Team Publication Date: September 2021

CORE REPORT CARD DEVELOPMENT TEAM

Kim D. Raine, PhD, RD, FCAHS* Lead, Distinguished Professor School of Public Health, University of Alberta

Candace I.J. Nykiforuk, PhD* Co-Lead, Professor School of Public Health, University of Alberta

Katerina Maximova, PhD* Co-Lead, Associate Professor Dalla Lana School of Public Health University of Toronto

Dana Lee Olstad, PhD, RD* Assistant Professor Department of Community Health Sciences, University of Calgary

Krista Milford, MSc Project Coordinator, Benchmarking Food Environments, School of Public Health, University of Alberta *also part of the Expert Working Group

CONTENT & MATERIALS PRODUCTION

Alexa Ferdinands, RD, PhD School of Public Health, University of Alberta

Breanne Aylward, BSc, MSc, PhD student School of Public Health, University of Alberta

Aleksandra Tymczak, MPH, PhD student Resource Economics and Environmental Sociology, University of Alberta

Jennifer-Ann McGetrick, MSc, PhD candidate School of Public Health, University of Alberta

Lianne Cawley

Lianne Charlene Creative

EXPERT WORKING GROUP

Karen Boyd, MSc, RD

Alexa Ferdinands, RD, PhD School of Public Health, University of Alberta

Laura Gougeon, RD, MSc, PhD Healthy Communities Scientist AHS – Alberta Cancer Prevention Legacy Fund Population, Public and Indigenous Health

Leia Minaker, PhD Assistant Professor School of Planning, University of Waterloo

Marie-Claude Paquette, PhD, RD Institut national de santé publique du Québec

Rachel Prowse, PhD, RD

Assistant Professor Nutrition and Dietetics, Division of Community Health and Humanities Faculty of Medicine Memorial University of Newfoundland

Jacob Shelley, LLM, S.J.D. Associate Professor Faculty of Law and School of Health Studies, Western University

Sheila Tyminski, MEd, RD Director, Nutrition Services, Population & Public Health Strategy, Alberta Health Services

Patricia Tallon, BSc, RD Evaluator, Centre for Healthy Communities, University of Alberta



PHYSICAL ENVIRONMENT

OVERALL GRADE

Food Availability Within Settings: C

INDICATOR: RECOMMENDATIONS 1. High availability of healthy food in school RESEARCH Monitor school food policies and the healthfulness of settings foods offered in schools on an annual basis. This can **BENCHMARK:** include practice-based research where schools monitor Approximately 3/4 of foods available in schools are and report on their practices on public facing websites. healthy. PRACTICE **KEY FINDINGS:** Implement the Alberta Nutrition Guidelines for Children The Alberta School Nutrition Program provided a healthy and Youth (ANGCY) in all school settings. meal/snack to approximately 40,000 K-6 students with Designate a district or school champion to oversee some 7-12 students as well in 2019/2020; however, no implementation of the ANGCY. new information is currently available regarding the Local school boards and districts develop and implement program. healthy food procurement contracts that adhere to The COMPASS study assessed food and beverages nutrition standards. The procurement contracts should offered in 6 Alberta schools in the 2019-2020 school encompass all food and beverages served in schools, year and found that the majority of food available is including those from third-party vendors (e.g. franchising, not healthy. None of the 6 schools had healthy eating fundraising). policies in place. The BFE project* found that a little over POLICY half the food was healthy in 24 participating schools in Mandate a provincial school nutrition policy and 5 Alberta communities.

a mechanism to monitor its implementation in all schools.

2015	2016	2017	2018	2019	2020	2021
С	С	C+	C+	С	С	С

2. High availability of healthy food in childcare settings

BENCHMARK:

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

KEY FINDINGS:

Creating Healthy Eating & Active Environments for Childcare (CHEERS) project http://cheerskids. ca/aboutcheers/ is a voluntary, online self- assessment tool which examines the nutrition and physical activity environments in childcare settings: foods served, healthy eating environments, healthy eating program planning, and physically active environment areas.

Found 27% (17/64) of the participating programs met the Benchmark, achieving 'satisfactory scores'. In addition, 77% (49/64) reported following a written healthy eating policy; thus, there is a disconnect between the policy and practice. However, the BFE project* found that more adherence is occurring in some childcare centres across Alberta.

RECOMMENDATIONS

RESEARCH

Monitor nutrition quality of food served in childcare settings across Alberta and report findings to the public on an ongoing basis.

PRACTICE

Implement the Alberta Nutrition Guidelines for Children and Youth (ANGCY) in all childcare settings. Enforce adherence to existing licensing policies which

require licensed facilities to follow nutrition guidelines for all snacks and meals served.

Have Environmental Health Inspectors include nutrition quality as well as food safety in their criteria for granting licensure, by ensuring use of AHS Nutrition Services healthy menu/guides or equivalent at licensing checks.

Hold childcare settings that do not adhere to these requirements accountable through the licensing process.

POLICY

Advocate for federal funding to enhance childcare infrastructure for preparing/offering healthier food.

2015	2016	2017	2018	2019	2020	2021
INC	INC	INC	INC	D	D	С



3. High availability of healthy food in community settings

BENCHMARK:

Approximately 3/4 of foods available in public buildings are healthy

KEY FINDINGS:

The Eat Play Live (EPL) Project collected data on food and beverages sold in concessions and vending machines in 11 publically funded recreation facilities in Alberta. Only 11% of entrées or main dish salads were rated as healthy. More than half (53%) of vending machine beverages, 71% of vending machine snacks, as well as the majority of concession stand snacks were all rated as unhealthy.

These findings are similar to the Food Environment in Central Alberta Recreation Facilities Report (AHS, 2016), which also found that in 19 recreation facilities most food and beverages offered were not healthy. Additionally, the BFE project* found the food and beverages available in 31 recreation facilities across 6 communities to be opposite of the benchmark.

RECOMMENDATIONS

RESEARCH

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

PRACTICE

Continue to support and educate facility and concession managers about the ANGCY and provide context- specific strategies for implementation, including AHS Nutrition Services resources and on-line learning modules <u>https://communitieschoosewell.ca/</u> <u>resources/for-recreation/healthy-eating-in-recreationsettings/online-course/.</u> Develop food procurement contracts that use nutrition as a criteria to increase the quantity of healthy foods served.

POLICY

Mandate and provide incentives for implementing the ANGCY in recreation facilities

(see <u>https://open.alberta.ca/dataset/1c291796-</u> <u>4eb0-4073-be8e-bce2d331f9ce/resource/3319786c-</u> <u>1df1-43ca-8693- 067f733682dc/download/nutrition-</u> <u>guidelines-ab-children-youth.pdf</u>).

2015	2016	2017	2018	2019	2020	2021
D	D	D	D	D	D	D



Neighbourhood Availability of Restaurants and Food Stores: D

INDICATOR:

4. High availability of healthy food vendors

BENCHMARK:

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

[The mRFEI is the proportion of healthy to unhealthy food retailers, representing "the percentage of retailers that are more likely to sell healthful food (CDC, 2011)."A mRFEI of 10 would mean that 10% of food retailers are more likely to sell "healthful" options.]

KEY FINDINGS:

Due to the prevalence of fast food restaurants and convenience stores, unhealthy food vendors greatly outnumber those likely to sell healthful options in both Edmonton and Calgary. Over half of census tracts met the Benchmark in both Calgary and Edmonton.

RECOMMENDATIONS

RESEARCH

Calculate the mRFEI on an annual basis to assess trends in availability of healthy food vendors.

PRACTICE

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

Consider the healthfulness of products offered when providing licenses to food trucks located at festivals and family-oriented locales where children gather.

POLICY

Use municipal zoning policies to improve food environments. For example, when a grocery store closes down, municipalities can prevent covenants that restrict future grocery store potential.

Consider tax incentives for entrepreneurs with innovative ways of offering healthy foods to neighbourhoods (e.g. mobile markets).

2015	2016	2017	2018	2019	2020	2021
С	D	D	D	D	D	D



5. Limited availability of unhealthy food vendors

BENCHMARK:

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

KEY FINDINGS:

Most schools in Edmonton **(75.9%)** and Calgary **(71.7%)** have at least one convenience store or fast food restaurant within 500 m, comparable to three towns from north, central and southern Alberta.

The BFE project* found similar findings with 71% of assessed schools (n = 24) across 7 Alberta communities having unhealthy vendors within 500m of each school.

RECOMMENDATIONS

RESEARCH

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

PRACTICE

Continue to work with schools to identify strategies to encourage students to remain on school grounds during breaks, and offer appealing healthy choices at school. [Closed campuses protect students from unhealthy food options].

POLICY

Establish healthy zones around schools through appropriate zoning by-laws that limit the number of unhealthy food vendors in close proximity (Heart & Stroke, 2013).

Change municipal zoning policies to address unhealthy food vendors: (1) When fast food restaurants within 500 meters of schools close down, only allow healthy food vendors to replace them; (2) As new proposals come forward for land use, create by-laws that restrict poor food retailers within 500 meters of schools.

In rural areas where small geographical size may limit the feasibility of zoning changes, work with schools to mandate closed campus policies to restrict access to unhealthy foods for children during the school day.

2015	2016	2017	2018	2019	2020	2021
С	D	D	D	D	D	D



Food Composition: **D**

INDICATOR:

6. Foods contain 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:

Out of 88 child-specific cereals identified, 11 cereals (13%) met the Benchmark being 100% whole grain and < 13g of sugar per 50g serving.

The BFE project* found that 8% of cereals assessed across 6 Alberta communities were 100% whole grain and contained less than 13g of sugar per 50g serving.

RECOMMENDATIONS

RESEARCH

Monitor changes in the nutrient content of children's cereals over time, including before and after policy changes such as front-of-pack labelling.

PRACTICE

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

Store owners stock healthier cereals, such that 75% of children's cereals available for sale are 100% whole grain and contain < 13g of sugar per 50g serving. Encourage consumers to increase their demand for healthy cereal.

POLICY

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

IT TAKES A VILLAGE TO RAISE A CHILD

Children are exposed to colorful packaging for unhealthy cereal products at their eye-level while riding around in a grocery cart. It is our responsibility to ensure children are not submersed in

an environment where fun and colorful packaging is synonymous with unhealthy food.

2015	2016	2017	2018	2019	2020	2021
F	F	F	F	F	F	F



Food Composition: D

INDICATOR:

6a. Foods meet Health Canada's Phase III Targets for Sodium Reduction

BENCHMARK:

≥75% of processed foods (breakfast cereals, infant & toddler foods, bakery products) available for sale meet Health Canada's Phase III targets for sodium reduction

KEY FINDINGS:

An analysis of 2018 data for 5 food categories most relevant to children, the ready-to-eat cereals, sliced breads and sweet and salty granola bars showed none had sodium levels meeting Phase III Target levels.

RECOMMENDATIONS

RESEARCH

Ongoing monitoring of compliance to Health Canada's Targets.

PRACTICE

Industry reformulates products to contain less sodium based on targets.

POLICY

Implement mandatory sodium targets since selfregulation is showing slow changes to sodium in foods.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	N/A	D	D	D	D



COMMUNICATION ENVIRONMENT

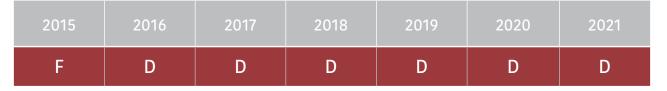
OVERALL GRADE

Nutrition Information at the Point-of-Purchase: D

INDICATOR:	RECOMMENDATIONS
7. Menu labelling is present BENCHMARK: A simple and consistent system of menu labelling is mandated in restaurants with ≥ 20 locations KEY FINDINGS: While some restaurants have voluntarily provided nutrition information for consumers, menu labelling is not mandatory in Alberta.	RESEARCH Assess the impact of menu labelling legislation on consumer food choices. PRACTICE Engage local dietitians in working with local businesses to identify healthy choices on menus (e.g. Bonnyville) <u>https://</u> <u>abpolicycoalitionforprevention.ca/wp-content/_</u> <u>uploads/2017/04/hac_communityreport_bonville_09.pdf</u> POLICY Require that menu labelling, such as traffic light labelling, be mandated in restaurants with ≥ 20 locations.

IT TAKES A VILLAGE TO RAISE A CHILD

Reform 'Children's Menus' to offer healthy choices.





8. Shelf labelling is present

BENCHMARK:

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

KEY FINDINGS:

Alberta lacks a simple and consistent governmentapproved shelf-labelling program; however, Loblaw Companies Limited's Guiding Stars program is the only shelf-labelling program in Alberta accounting for about 33% of stores in the province.

The BFE project* found that of the grocery stores assessed across 4 Alberta communities, only 1 had shelf labelling.

RECOMMENDATIONS

RESEARCH

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

PRACTICE

Engage with stakeholders, including grocers, to determine how to provide consumers with easy-tounderstand, useful nutrition information to identify healthy food at point of purchase.

POLICY

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

2015	2016	2017	2018	2019	2020	2021
F	D	D	D	D	D	D

9. Product labelling is present

BENCHMARK:

A simple, evidence-based, government- sanctioned front-of-package food labelling system is mandated

KEY FINDINGS:

Despite some changes, this Indicator received an F because a simple label is not provided front-of-package

RESEARCH

Evaluate the impact of implementing front-of- package food-labelling system.

PRACTICE

Implement front-of-package food labelling.

POLICY

Mandate a simple, standardized front-of-package food-labelling system for all packaged foods in Canada utilizing nutrient profiles to identify unhealthy foods and beverages (World Health Organization, 2016a).

2015	2016	2017	2018	2019	2020	2021
B-	F	F	F	F	F	F



10. Product labelling is regulated

BENCHMARK:

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

KEY FINDINGS:

The Safe Food for Canadians Regulations (SFCR) came into force January 15, 2019. Certain requirements are being phased in over 12-30 months. It consolidates all 14 sets of existing food regulations into a single set. The Food and Drugs Act (and the Food and Drug Regulations), will continue to apply to all food sold in Canada (Government of Canada, 2019).

SFCR pertains to preventing food contamination, hazards and immediate risks; thus it does not address the long-term consequences of eating unhealthy food such as chronic diseases.

RECOMMENDATIONS

PRACTICE

Enforce existing regulations regarding industry- devised logos/branding.

POLICY

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

Amend current legislation to include regulations on industry- devised logos/branding food with long-term harmful health outcomes. The current legislation focuses on immediate threats and pathogens, which does not protect people from the long-term consequences of unhealthy food, such as chronic disease.

2015	2016	2017	2018	2019	2020	2021
В	D	D	D	В	С	С



Food Marketing: D

INDICATOR:	INDICATOR:					RECOMMENDATIONS			
11. Government-sanctioned public health campaigns encourage children to consume healthy foods BENCHMARK: Broad-reaching child-directed social marketing campaigns for healthy foods. KEY FINDINGS:					 PRACTICE Use nutrition education resources (available from Alberta Health Services) to promote healthy eating in local settings (public buildings, health centres, recreation centres, etc.). Partner with local media to promote healthy eating (PSAs, "ask the dietitian" call-ins). POLICY 				
Kid Food Nation, a national food skills initiative, for kids 7-12 years of age, is currently being piloted. Four components of this initiative include: food skills education, television programming to reach families, a national recipe challenge, and a cookbook.				M ca	DLICY andate governme ampaigns encoura ealthy foods in pla	ging children to c	onsume		
2015	2016	2017	2018		2019	2020	2021		
А	D	F	C+		C+	C+	C+		

12. Restrictions on marketing unhealthy foods to children

BENCHMARK:

All forms of marketing unhealthy foods to children are prohibited.

KEY FINDINGS:

Alberta does not have official policies in place that prohibit advertising of unhealthy food to children.

At the federal level, Bill S-228 aimed to prohibit advertising of unhealthy food and beverages to children ≤ 13 years of age. Unfortunately, 79 industry representatives lobbied against Bill S-228 and Senate procedural tactics prevented the Bill from being brought forward for a final vote before the Senate was adjourned for the summer in June 2019. The Bill "died" on the order table. Restrictions on marketing to children continued to be a mandate of the Minister of Health, although no progress has yet been reported on resurrecting the Bill.

RESEARCH

Determine the level of children's exposure to food and beverage marketing in multiple local contexts, including on-line and targeted digital marketing.

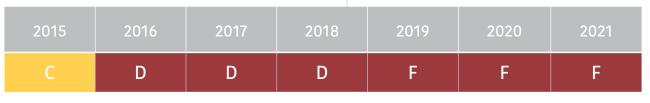
PRACTICE

Encourage adoption of mandated or voluntary self-regulatory initiatives following governmentapproved guidelines subject to independent audits (WHO, 2016a; Heart & Stroke, 2017a).

POLICY

Decrease industry influence on government decision-making with respect to marketing unhealthy foods to children.

Support development of a national regulatory system prohibiting marketing of unhealthy foods and beverages to children with minimum standards, compliance monitoring, and penalties for noncompliance (APCCP, 2015; Raine et al. 2013), such as that proposed by Bill S-228.



12a. Settings where children gather are free from unhealthy food marketing(e.g. recreation facilities) BENCHMARK:

Recreation facilities are free from unhealthy food marketing.

KEY FINDINGS:

Less than half (47.9%) of recreation facilities food marketing occasions were assessed as 'Least Healthy' food (Prowse et al., 2018). Prowse (2021) found the majority of recreation facilities assessed in Alberta have sponsors and contracts, with 2/3 of these being food sponsors, which are typically restaurant/quick service that enable several ways of marketing food.

The BFE project* found that 33% of assessed recreation facilities (n = 15) across 6 Alberta communities had marketing of unhealthy foods to children.

RECOMMENDATIONS

RESEARCH

Continue to monitor food marketing occasions in recreation facilities.

PRACTICE

Municipal government audits all forms of food marketing to children to ensure restricted unhealthy food is not marketed in recreation facilities.

POLICY

Mandate Bill S-228 or develop provincial policy to restrict marketing unhealthy food in recreation facilities.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	N/A	N/A	N/A	D	D



Nutrition Education: C

INDICATOR:

13. Nutrition education provided to children in schools

BENCHMARK:

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

KEY FINDINGS:

The redesigned K-6 curriculum is to be piloted in the 2021-22 school year, with full implementation occurring in the 2022-2023 school year (Alberta Education, n.d.). Students in Grades 10-12 do not have any nutrition-specific outcomes within the current curriculum framework and no other curriculum has yet been developed (New Learn Alberta, 2020).

RECOMMENDATIONS

PRACTICE

Monitor the delivery of nutrition education to children at all grade levels. All healthy eating topics should be framed and developed with sensitivity to food insecurity, socioeconomic diversity, equity, and body image.

POLICY

Mandate age and stage appropriate nutrition education within the school health and wellness curriculum, including for Grades 10-12.

Alberta Education to take action on consultations with expert stakeholders regarding nutrition-specific curriculum re-design to ensure learning outcomes are nutrition-evidence-based, developmentally appropriate and sequentially aligned across Gr. K-12.

2015	2016	2017	2018	2019	2020	2021
B+	В	В	B+	B+	B+	В



14. Food skills education provided to children in schools

BENCHMARK:

Food skills are a required component in the curriculum at the junior high level

KEY FINDINGS:

Many schools offer Home Economics (food skills education), but it is not mandatory for Grades 7-9 students.

Nutrition Youth Advisory Council (YAC, a group of high school students, led by Nutrition Services, AHS) felt that food skills and nutrition education is necessary and appropriate for all school aged children, and should be taught in school; moreover, they felt that including high school is necessary.

The BFE project* found that food skills are a required component of the curriculum in 25% of the schools assessed (n = 16) across 6 Alberta communities.

RECOMMENDATIONS

PRACTICE

Deliver food skills education to all students at the junior high level.

Make food preparation classes available to children, their parents, and child caregivers.

Make use of facilities in close proximity to schools, such as recreation centres, to provide cooking classes, community kitchens, and gardens to facilitate hands-on food handling experience when school infrastructure is lacking.

POLICY

Mandate Food Skills education for junior high students.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	D	D	D	D	С



15. Nutrition education and training provided to teachers

BENCHMARK:

Nutrition education and training is a requirement for teachers.

KEY FINDINGS:

Alberta does not require teachers to participate in nutrition education training; however, University of Calgary, began a mandatory course January 2018, entitled EDUC 551 Comprehensive School Health and Wellness.

The course helps students gain foundational knowledge in the three pillars of Comprehensive School Health (healthy eating, physical activity, and positive mental well-being).

Among other post-secondary institutions, "there is a movement to embed Comprehensive School Health (CSH) in the culture of Faculties of Education as an upstream approach to CSH in K-12. However, it has been slow, and it isn't always embedded in curriculum" (K. Storey, personal communication, May 18, 2021).

RECOMMENDATIONS

PRACTICE

Offer Comprehensive School Health and Wellness courses to all pre-service teachers.

POLICY

Mandate nutrition-specific training and Comprehensive School Health as part of all new teachers' training and ongoing professional development in Alberta.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	D	С		С	С



16. Nutrition education and training provided to childcare professionals

BENCHMARK:

Nutrition education and training is a requirement for childcare professionals.

KEY FINDINGS:

Alberta does not require childcare professionals to participate in nutrition education training. However, the Level 1 Early Childhood Educator (formerly Child Development Assistant) has an online Child Care Orientation course with nutrition outcomes (https:// childcare.basecorp.com/home).

Registered Dietitians in Nutrition Services, AHS, through their Healthy Eating Environments in Child Care Working Group (HEECC), contributed nutrition content of this course. Nutrition concepts covered include:

- Meal and snack planning using the Alberta Nutrition Guidelines for Children and Youth and nutrition labels on foods;
- How to support children as they develop healthy attitudes and behaviours around food through positive meal time experiences and in partnership with parents;
- Course content contains links to relevant resources from Health Canada, Alberta Health and the AHS Healthy Eating Starts Here.ca website.

This Child Care Orientation course is funded by the Government of Alberta, but it is not a required course and is one of four ways to get the Level 1 Early Childhood Educator certification (Government of Alberta, n.d.).

RECOMMENDATIONS

PRACTICE

Offer online Child Care Orientation course with nutrition outcomes to all childcare professionals.

POLICY

Mandate nutrition-specific training, such as the Child Care Orientation Course. (https://www. alberta.ca/childcare-staff- certification.aspx), as part of post-secondary training and ongoing professional development of childcare professionals in Alberta.

IT TAKES A VILLAGE TO RAISE A CHILD

Childcare includes nurturing children's optimal nutritional health.

2015	2016	2017	2018	2019	2020	2021
D	D	D	С			

ECONOMIC ENVIRONMENT

OVERALL GRADE

KEY FINDINGS & RECOMMENDATIONS

Financial Incentives for Consumers: D

INDICATOR:				RECOMMENDATIONS				
17. Lower prices for healthy foods BENCHMARK: Basic groceries are exempt from point-of-sale taxes.					PRACTICE Continue to exclude basic groceries from point-of- sale taxes.			
Basic groceries are exempt from point-of-sale taxes. KEY FINDINGS: The Government of Canada's Excise Tax Act excludes basic groceries such as "fresh, frozen, canned and vacuum sealed fruits and vegetables, breakfast cereals, most milk products, fresh meat, poultry and fish, eggs and coffee beans.", since basic groceries are not taxed, healthy foods are generally exempt.								
2015	2016	2017	20	18	2019	2020	2021	

2015	2016	2017	2018	2019	2020	2021
C-	А	А	А	А	А	А

18. Higher prices for unhealthy foods

BENCHMARK:

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

KEY FINDINGS:

Despite support from policy influencers, Alberta has no formal policies to tax sugar sweetened beverages.

RESEARCH

As some Canadian jurisdictions implement SSB taxes, evaluate impacts on consumption, health outcomes, and equity.

PRACTICE

Promote public and policy-maker understanding of the benefits of a sugar-sweetened beverage tax, particularly among low income groups, in order to make informed policy decisions.

POLICY

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

2015	2016	2017	2018	2019	2020	2021
D	F	F	F	F	F	F



19. Affordable prices for healthy foods in rural, remote, or northern areas

BENCHMARK:

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

KEY FINDINGS:

There are no provincial initiatives to increase the availability and affordability of nutritious foods in rural, remote and northern areas.

RECOMMENDATIONS

PRACTICE

Create provincial initiatives to reduce healthy food prices in rural, remote, and Northern areas by coordinating subsidies with local food retailers.

Expand the Nutrition North Canada program to include more remote Alberta communities.

POLICY

Increase the affordability of healthy food in rural, remote, and Northern communities by subsidizing local food retailers who are accountable for passing the subsidy on to consumers.

2015	2016	2017	2018	2019	2020	2021
N/A	F	D+	D+	D+	F	F



Financial Incentives for Industry: F

INDICATOR:

20. Incentives exist for industry production and sales of healthy foods

BENCHMARK:

The proportion of corporate profits earned via sales is taxed relative to its health profile (e.g. healthy food is taxed at a lower rate and unhealthy food is taxed at a higher rate).

KEY FINDINGS:

There is no evidence to suggest that corporate profits earned via sales of healthy foods are taxed at a lower rate, nor that corporate profits earned via sales of unhealthy foods are taxed at a higher rate in Alberta.

However, the recently passed Supporting Alberta's Local Food Sector Act could be used as a model to support the growth and production of healthy food.

RECOMMENDATIONS

POLICY

Provide incentives via differential taxation of profits from healthy food sales and unhealthy food sales. This could be achieved through the Supporting Alberta Local Food Act with a focus on healthy food.

2015	2016	2017	2018	2019	2020	2021
F	F	F	F	F	F	F





Government Assistance Programs: F

INDICATOR: RECOMMENDATIONS 21. Reduce household food insecurity RESEARCH Mandate surveillance of household food insecurity and **BENCHMARK:** quicker release of data. Reduce the proportion of children living in food POLICY insecure households by 15% over three years. Develop income-based programs and policies, such **KEY FINDINGS:** as Basic Income Guarantee, to tackle childhood food

Based on PROOF's current work with CCHS data from 2015/2016 and 2017, the percentage of food insecure households with children continues to go up from 16.7% 2015/2016 to 17% in 2017/2018.

insecurity in Alberta.

2015	2016	2017	2018	2019	2020	2021
N/A	INC	INC	F	F	F	F

22. Reduce households with children who rely on charity for food

BENCHMARK:

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

KEY FINDINGS:

Due to the pandemic, the HungerCount did not take place in March 2020. Food bank usage fluctuated during the pandemic. Participating food banks responded to the pandemic in innovative ways, with roughly half providing aid beyond their typical supports. For example, almost 70% reported creating home delivery services (Food Banks Canada, 2020).

POLICY

Increase social assistance rates and minimum wage to ensure income is adequate to afford healthy food while working toward a Basic Income Guarantee.

Allow low-income households to have access to benefits only available to those on social assistance (e.g. child care subsidies, affordable housing supplements).

2015	2016	2017	2018	2019	2020	2021
B+	F	F	INC	А	С	INC



23. Nutritious Food Basket is affordable

BENCHMARK:

Social assistance rate and minimum wage provide sufficient funds to meet basic needs, including purchasing the contents of a Nutritious Food Basket.

KEY FINDINGS:

Prior to 2019, calculated household profiles were food insecure, unable to meet their basic needs fully and now that the average monthly cost of a Nutritious Food Basket for a reference family of four in Alberta increased by \$62.91, the situation is more dire now. Food is the budget item that is most at risk in these situations. This places children in these households at risk for poor nutrition and poorer health outcomes.

RECOMMENDATIONS

RESEARCH

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

Measure impact of CERB on household's ability to meet basic needs, including affordability of healthy eating.

Qualitative research on the benefits of Living Wage Policy to employers and employees.

POLICY

Move toward a Basic Income Guarantee. In the meantime, raise social assistance rate and minimum wage to provide sufficient funds to meet basic needs including purchasing the contents of a Nutritious Food Basket, as presently there is no policy that maps the cost of living to social assistance rates.

2015	2016	2017	2018	2019	2020	2021
D	F	F	C+	F	F	F



24. Subsidized fruit and vegetable subscription program in schools

BENCHMARK:

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

KEY FINDINGS:

A universal (i.e. for all K-12 students) fruit and vegetable subscription program does not exist in Alberta; however, the Alberta School Nutrition Program provides healthy meals/snacks to approximately 5% of all Albertan students.

Furthermore, many initiatives (government and nongovernment funded) provide healthy food to students in high-needs schools.

There was a lack of reporting during COVID-19 on the AB School nutrition program regarding how funding is spent, menus/ foods provided and if they are complying with ANGCY as originally mandated.

RECOMMENDATIONS

RESEARCH

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

PRACTICE

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

Make use of facilities in close proximity to schools, such as recreation centres to prepare food for nutrition programs, when school infrastructure is lacking.

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

POLICY

Revise the Alberta School Nutrition Program to be made universal through focusing on fruit and vegetable provision.

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

Incorporate spaces to run nutrition programs in new school building plans.

2015	2016	2017	2018	2019	2020	2021
D+	D+	C+	C+	C+	C+	INC



TA SOCIAL ENVIRONMENT



Weight Bias: **D**

INDICATOR:

25. Weight bias is avoided

BENCHMARK:

Weight bias is explicitly addressed in schools and childcare settings through policies and practices which promote body size and shape inclusivity, such as mandating weight bias training for educators, designing curricula to focus on health rather than weight, and implementing and evaluating strategies to mitigate weight-related bullying.

KEY FINDINGS:

The K-9 Health and Life Skills and high school CALM programs allow teachers the flexibility to discuss topics related to weight bias, but it is not a required component of the curriculum. Similar to the framework in schools, early education addresses broad concepts but does not explicitly address weight bias.

A required Comprehensive School Health course for pre-service teachers at the University of Calgary explicitly addresses weight bias in the teaching materials; however, this is the only institution that has offered the course thus far.

RECOMMENDATIONS

RESEARCH

Explore the impact of programs aimed at reducing weight bias within school and childcare communities.

Involve people with obesity in researching and developing weight bias reduction messages (Canadian Obesity Network, 2016).

Bridge the communication gap between obesity and weight stigma researchers, such that both sides are aware of and engaged in strategies to reduce weight stigma (Hart et al., 2020).

PRACTICE

Incorporate weight bias education into pre- service teacher and childcare professional education programs.

Integrate weight bias reduction strategies into existing programs related to nutrition, physical activity, and bullying in schools and childcare.

Promote body size diversity and body inclusivity.

POLICY

Strong and clear policies are needed to prohibit weight-based discrimination (Rubino et al., 2020).

Address weight bias in the School Act and provincial childcare policies.

Ensure that spaces in schools and childcare accommodate larger bodies (e.g., appropriately sized chairs and desks) (Hart et al., 2020).

2015	2016	2017	2018	2019	2020	2021
F	F	D	D	D	D	D



Corporate Social Responsibility: C

INDICATOR:

26. Corporations have strong nutrition-related commitments and actions

BENCHMARK:

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

KEY FINDINGS:

The 2018 Global Access to Nutrition Index ranks the world's 22 largest food and beverage companies by measuring company contribution to good nutrition against international norms and standards: Forty-four percent of the 17 companies that operate in Canada achieved a score of \geq 5.0, which is an increase over 12.5% back in 2016. Some companies have increased their efforts in a variety of areas including updated nutrition policies and accompanying strategies, commitment to affordability and accessibility, better labeling of health and nutrition claims, and more disclosure of nutrition information.

RECOMMENDATIONS

PRACTICE

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

RESEARCH

Complete a comprehensive assessment of all commercial activities, including lobbying activities, political donations, and philanthropic activities.

POLICY

Mandate a policy for food and beverage companies to make healthier products more readily available and at a better price point.

2015	2016	2017	2018	2019	2020	2021
D	D	INC	С	С	С	С



Breastfeeding Support: B

INDICATOR:

27. Breastfeeding is supported in public buildings

BENCHMARK:

All public buildings are required to permit and facilitate breastfeeding.

KEY FINDINGS:

While breastfeeding is a basic human right and there is some evidence that certain municipalities have publicized that breastfeeding is permitted in public buildings, there remains a need to facilitate breastfeeding.

Public spaces in Calgary and Edmonton, such as shopping malls, libraries, and airports are actively facilitating breastfeeding by providing safe and welcoming spaces within their buildings for mothers to breastfeed. Some rural public spaces are starting to recognize the need for supportive settings.

RECOMMENDATIONS

RESEARCH

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



Create a culture where breastfeeding is normalized.

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

Provide a clean, comfortable space for breastfeeding in all public buildings.

Implement Recommendations from the 'Availability of Breastfeeding Support at University of Alberta: An Analysis of Physical Facilities, Policies, and Environment'.

POLICY

Mandate all public buildings to develop written policies facilitating breastfeeding.

2015	2016	2017	2018	2019	2020	2021
С	В	В	В	В	В	В



28. Breastfeeding is supported in hospitals

BENCHMARK:

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

KEY FINDINGS:

One health centre and three hospitals in Alberta achieved WHO Baby-Friendly designation.

Current professional education strategies align with elements of the WHO Baby-Friendly Initiative. In 2020, the first three CME accredited modules were completed as part of the Foundations for Working with Families series of Alberta's go-to online, 20-hour breastfeeding course for healthcare professionals. Discussions with AHS leadership will continue to explore the question around mandating staff education. The course will be offered to all health professionals anywhere in Alberta. It is publicly accessible:

https://www.albertahealthservices.ca/info/Page16993. aspx

RECOMMENDATIONS

RESEARCH

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

PRACTICE

Continue to foster a supportive breastfeeding culture in hospitals where breastfeeding is normalized.

Consider joining the Breastfeeding Committee for Canada's National Baby-Friendly Initiative (BFI) Quality Improvement (QI) Collaborative Project.

POLICY

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

2015	2016	2017	2018	2019	2020	2021
С	D	С				



S POLITICAL ENVIRONMENT



Leadership & Coordination: C

29. Healthy living strategy/action plan exists to promote healthy eating.

BENCHMARK:

INDICATOR:

A comprehensive, evidence-based childhood healthy living strategy/action plan promoting healthy eating is endorsed by the government.

KEY FINDINGS:

A new healthy living action plan is being finalized to replace the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018. It will span preconception to 18 years of age and their families and includes healthy eating environments for children and youth.

However, due to the Covid-19 pandemic, timelines for rolling out the new provincial strategic plan for healthy living have been altered.

Also, extensive collaboration is occurring across AHS including to address the strategic priority areas as well as topics such as the lifespan to improve health outcomes.

RECOMMENDATIONS

PRACTICE

Fund strategic priority areas identified in the Alberta Health Services Healthy Children and Families Strategic Action Plan 2015-2018 [this is being replaced].

POLICY

Create universal, sustainable childhood healthy living programs.

Create population targets for healthy eating for children and youth.

2015	2016	2017	2018	2019	2020	2021
С	D	С	С	С	В	В

30. Health-In-All-Policies

BENCHMARK:

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

KEY FINDINGS:

Alberta Health developed and piloted a Health in All Policies (HiAP) analysis process and provided awareness sessions but currently employs Gender-Based Analysis + (GBA+). The GBA+ framework addresses inequity; however, it does not describe the spectrum of health issues and impacts of policy related to the health of children and youth.

RECOMMENDATIONS

PRACTICE

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

POLICY

Mandate the use of Alberta Health's Health in All Policies (HiAP) analysis process and toolkit in all government departments in considering the social, physical and economic environments and conditions (collectively known as the social determinants of

health) when developing and/or evaluating public policy.

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

2015	2016	2017	2018	2019	2020	2021
D	F	D	С	D+	D+	D+



Funding: INC

INDICATOR:

31. Childhood health promotion activities adequately funded

BENCHMARK:

At least .01% of the Alberta provincial budget is dedicated to implementation of a whole of government approach to a healthy living strategy/action plan, with a significant portion focused on children (health is accountable for earmarking prevention funding).

KEY FINDINGS:

The Government of Alberta funds several nutrition and health-related programs and initiatives for children and youth across many ministries; yet, there is no tracking of budget expenditures pertaining to all programs addressing the implementation of a healthy living strategy/action plan to indicate the amount of funding.

RECOMMENDATIONS

RESEARCH

Determine whether 0.01% of the provincial budget is dedicated to implementation of the government's healthy living strategy/action plan, with a significant portion focused on children.

PRACTICE

Continue to fund a healthy living strategy/ action plan.

Create a Health Promotion Foundation, such as called for by Wellness Alberta http://www.

wellnessalberta.ca, to consolidate and track the amount of funding dedicated to a healthy living strategy/action plan.

POLICY

Mandate that all government ministries report funds spent on health promotion for children: Funding should be classified to its target and have a specific indicator related to it in the Alberta Business Planning Reports.

2015	2016	2017	2018	2019	2020	2021
С	F	INC	F	INC	INC	INC



Monitoring and Evaluation: C

INDICATOR:

32. Compliance monitoring of policies and actions to improve children's eating practices and body weights

BENCHMARK:

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

KEY FINDINGS:

74% of public, private, and Francophone school boards in Alberta, representing the majority of schools in the province, had designated nutrition/healthy eating policies in place; however, this is not mandatory at the provincial level as in other Canadian provinces (e.g BC, ON, NB, NS, PE, YK) and it is unclear if policies have been implemented in schools and to what degree.

In childcare settings, bi-annual inspections ensure all licensed child care programs adhere to the Child Care Licensing Act and Regulation; thus, monitoring is occurring; however, there appears to be no enforcement when food guides are not adhered to.

RECOMMENDATIONS

PRACTICE

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

POLICY

Mandate the Alberta Nutrition Guidelines for Children and Youth at the provincial level.

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

2015	2016	2017	2018	2019	2020	2021
F	D	С	С	С	D	D



33. Children's eating practices and body weights are regularly assessed.

BENCHMARK:

Ongoing provincial -level surveillance of children's eating practices and body weights exists.

KEY FINDINGS:

Alberta Health Services zones conduct surveillance of height and weight measurements for children aged 0-6 years with an aim to increase availability and usage of this data.

The Canadian Community Health Survey (CCHS) and the Canadian Health Measures Survey (CHMS) survey sample size for children and youth in Alberta was recently discovered to be very small – too small for prevalence analysis.

RECOMMENDATIONS

RESEARCH

Collect a large enough sample size to make provincially representative data when administering the CCHS and CHMS surveys.

PRACTICE

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

POLICY

Create provincial initiatives to conduct surveillance of height and weight measurements for children aged 7-18 years in a non-stigmatizing manner.

2015	2016	2017	2018	2019	2020	2021
В	D	А	А	В	В	В



Capacity Building: B

34. Resources are available to support the government's childhood healthy living strategy/ action plan PRACTICE BENCHMARK: Increase public knowledge of resources available	NDICATOR:		R	RECOMMENDATIO	ONS	
	overnment's childhoo				wledge of resourc	es available.
A website and other resources exist to support programs and initiatives of the childhood healthy living strategy/action plan.	A website and other resou programs and initiatives o	1.1	ving			
KEY FINDINGS: Various online resources and media campaigns exist for residents of Alberta that support the childhood healthy living strategy/action plan. AHS continues to develop relevant resources for public use.	/arious online resources a residents of Alberta that s iving strategy/action plar	oort the childhood heal IS continues to develop	thy			
2015 2016 2017 2018 2019 2020 2021	2015 2016	2017	2018	2019	2020	2021

Α

35. Food rating system and dietary guidelines for foods served to children exists

Α

BENCHMARK:

Α

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

KEY FINDINGS:

In 2008, the Alberta Nutrition Guidelines for Children and Youth (ANGCY) were released to support the provision of nutritious foods and beverages in childoriented settings, such as in schools, childcare centres, recreation facilities, and at community events.

RESEARCH

Α

Investigate reasons for low implementation rates of the ANGCY.

Α

Α

PRACTICE

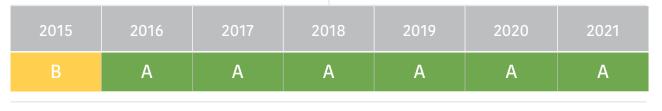
Increase adoption and implementation of ANGCY by target audiences (i.e. schools, recreation facilities).

Evaluate the ANGCY to see if updates need to be made based on the Canada Food Guide

Create menu planning guides based on the Canada Food Guide for target populations.

POLICY

Mandate the implementation of existing rating systems and guidelines.





36. Support to assist the public and private sectors to comply with nutrition policies BENCHMARK:

Support (delivered by qualified personnel) is available free of charge to facilitate compliance with nutrition policies.

KEY FINDINGS:

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

RECOMMENDATIONS

PRACTICE

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

Integrate supports to assist the public and private sectors to comply with nutrition policies at the system level for more strategic action.

2015	2016	2017	2018	2019	2020	2021
INC	С	А	А	А	А	А

37. Municipal food policy strategies exist

BENCHMARK:

All municipalities with populations over 50,000 have written food policy strategies, with a focus on access to healthy foods/promoting healthy eating.

KEY FINDINGS:

Half of the municipalities in Alberta with populations over 50,000 have written food policy strategies in place with a focus on access to healthy foods/promoting healthy eating.

PRACTICE

Mandate all municipalities with populations over 50,000 to write food policy strategies, with a focus on access to healthy foods/promoting healthy eating.

POLICY

All municipalities with populations over 50,000 have written food policy strategies, focusing on improving access to healthy foods/promoting healthy eating.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	N/A	N/A	N/A	С	С



38. Healthy food procurement policies exist in publicly funded institutions

BENCHMARK:

Food procurement contracts/agreements signed by public institutions specify that 50% of foods procured are healthy.

KEY FINDINGS:

There is a lack of data for the for the province; however, St. Albert has completed work on recreation facility Request for Proposals increasing Choose Most Often items, <u>https://abpolicycoalitionforprevention.ca/portfolioposts/promoting-healthy-food-environments-in-the-cityof-st-albert-through-request-for-proposals/</u>

Alberta Health Services (AHS) Healthy Eating Environments Policy 1138, works to establish a healthy eating environment in AHS facilities. It is intended for use in all retail operations including, cafeterias, vending machines, third-party retail operations, and catering. For example, the policy mandates that AHS facility space must be leased to retail operations that align with this policy, sell food that meets the healthy food criteria, and are willing to continuously improve their operation's availability and promotion of healthy food choices. The policy was set to be revised on April 5, 2021, and is not currently mandatory or implemented widely, but could serve as a model for other public institutions.

RECOMMENDATIONS

PRACTICE

Public institutions enter into healthy food procurement contracts and post this on their websites.

POLICY

Mandate policy that all public institutions develop food procurement contracts/agreements specifying that at least 50% of foods procured are healthy.

2015	2016	2017	2018	2019	2020	2021
N/A	N/A	N/A	N/A	N/A	INC	F

* Note: The Benchmarking Food Environments (BFE) project works with communities across Alberta to conduct environmental scans (Mini Nutrition Report Cards) in settings (e.g. school, cafeterias, childcare centres, rec centres, etc.) where children eat and rate how healthy the food choices are, as well as how current policies and actions may act as barriers or facilitators to positive change, with the goal of finding ways to make healthy eating easier (see Aylward et al., 2021). Concerned community members and health professionals are asked to do the environmental scan by collecting this food information and with our team co-create recommendations for making healthy eating easier. A portion of the communities that have finalized their Mini Nutrition Report Cards from 2017 onwards have agreed to share this information in aggregate, anonymized form.



References

Access to Nutrition Index. (2016). 2016 Global Access to Nutrition Index. Retrieved from https://www.accesstonutrition.org/index/2015

Alberta Education. (n.d.). Curriculum development https://www.alberta.ca/curriculum-development.aspx?utm_source=redirector

Alberta Health Services. (2016a). Food Environment in Central Alberta Recreation Facilities.

Alberta Health Services. (2017d). Healthy Children and Families Strategic Action Plan 2015-2018.

Alberta Policy Coalition for Chronic Disease Prevention. (2015). Restricting the Marketing of Unhealthy Foods and Beverages to Children and Youth. http://abpolicycoalitionforprevention.ca/our-focus/apccp-priorities/healthy-eating-ibs.html. Accessed September 30, 2015

Aylward, B. L., Milford, K. M., Storey, K. E., Nykiforuk, C. I. J., & Raine, K. D. (2021). Local Environment Action on Food Project: Impact of a community-based food environment intervention in Canada. Health Promotion International. https://doi.org/10.1093/heapro/daab127

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

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

Canadian Obesity Network. (2016). EveryBODY Matters 3rd Canadian Weight Bias Summit May 26-27, 2016. Retrieved from https://obesitycanada.ca/wp-content/uploads/2018/02/Weight-Bias-Summit-2016-Full-Report.pdf. Accessed March 22, 2020.

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

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

Food Banks Canada. Hungercount (2016); https://www.foodbankscanada.ca/getmedia/6173994f-8a25-40d9-acdf-660a28e40f37/ HungerCount_2016_final_singlepage.pdf. Accessed January 19, 2017.

Food Banks Canada. (2020). Food Banks and the COVID-19 crisis - A national snapshot. https://www.foodbankscanada.ca/FoodBanks/ MediaLibrary/COVID-Report_2020/A-Snapshot-of-Food-Banks-in-Canada-and-the-COVID-19-Crisis_EN.pdf

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

Government of Alberta. (2012). Alberta Nutrition Guidelines for Children and Youth: A Childcare, School and Recreation/Community Centre Resource Manual.

Government of Alberta. (n.d.,). Changes to Alberta's child care system. https://www.alberta.ca/changes-to-albertas-child-care-system.aspx

Government of Canada. (2019). Safe Food for Canadians Regulations. Retrieved from https://laws-lois.justice.gc.ca/eng/regulations/SOR-2018-108/index.html. Accessed May 20, 2020.

Hart, L.M., Ferreira, K.B., Ambwani, S., Gibson, E.B., & Austin, S.B. (2020). A Roadmap for Addressing Weight Stigma in Public Health Research, Policy, and Practice. Boston, MA: The Strategic Training Initiative for the Prevention of Eating Disorders (STRIPED).

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

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

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

Institute for Health Metrics and Evaluation (IHME) (2019).GBD Compare. Seattle, WA: IHME, University of Washington. http://www.healthdata. org/canada (accessed December 2020).

New LearnAlberta. (2020). Curriculum. https://new.learnalberta.ca/curriculum?x=2BDEA55E. Accessed Mar 24, 2020.

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

Prowse RJ, Naylor PJ, Olstad DL, Carson V, Storey K, Mâsse LC, Kirk SF, Raine KD. (2018). Food marketing in recreational sport settings in Canada: a cross-sectional audit in different policy environments using the Food and beverage Marketing Assessment Tool for Settings (FoodMATS). International Journal of Behavioral Nutrition and Physical Activity, 1;15, (1): 39.

Prowse et al. (2021) Monitoring Food Promotion in Recreation Facilities in Canada: Phase 1 Survey Update. Prepared for Office of Nutrition Policy and Promotion, Health Canada.

Raine KD, Lobstein T, Landon J, et al. (2013). Restricting marketing to children: consensus on policy interventions to address obesity. J Public Health Policy, 34(2):239-253.

Rubino, F., Puhl, R. M., Cummings, D. E., Eckel, R. H., Ryan, D. H., Mechanick, J. I., ... & Apovian, C. M. (2020). Joint international consensus statement for ending stigma of obesity. Nature Medicine, 1-13.

Sadler, R.C., Clark, A.F., Wilk, P., O'Connor, C., & Gilliland, J.A. (2016). Using GPS and activity tracking to reveal the influence of



References

adolescents' food environment exposure on junk food purchasing. Canadian Journal of Public Health, 107:14-20.

Smoyer-Tomic, K., Spence, J.C., Raine, K.D., Amrhein, C. , Cameron, N., Yasenovskiy, V., Cutumisu, N., Hemphill, E., Healy, J. (2008.). The association between neighborhood socioeconomic status and exposure to supermarkets and fast food outlets. Health & Place, 14, 740-754.

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

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

Swinburn, B., Vandevijvere, S., Kraak, V., Sacks, G., Snowdon, W., Hawkes, C., Barquera, S., Friel, S., Kelly, B., Kumanyika., S, L'Abbe, M., Lee, A.,Lobstein, T., Ma, J., Macmullan, J., Mohan, S., Monteiro, C., Neal, B., Rayner, M., Sanders, D., Walker, C., & INFORMAS. (2013). Monitoring and benchmarking government policies and actions to improve the healthiness of food environments: A proposed Government Healthy Food Environment Policy Index. Obesity Reviews, 14(S1), 24-37. doi:10.1111/obr.12073

Tarasuk V, Mitchell A. (2020). Household food insecurity in Canada, 2017-18. Toronto: Research to identify policy options to reduce food insecurity (PROOF).

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

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

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

World Health Organization. (2017a). Report of the Commission on Ending Childhood Obesity: implementation plan. Geneva, Switzerland, World Health Organization, http://www.who.int/end-childhood-obesity/en

