

# Creating healthier food environments in Canada:

## Current policies and priority actions



### Report Authors

Lana Vanderlee, PhD  
Sahar Goorang, MSc  
Kimiya Karbasy, BSc  
Alyssa Schermel, MSc  
Mary L'Abbé, PhD

### Graphic Design

Luke Pauw

### Acknowledgements

The Food-EPI Canada study is led by Dr. Lana Vanderlee and Dr. Mary L'Abbé at the WHO Collaborating Centre for Nutrition Policy for Chronic Disease Prevention in the Department of Nutritional Sciences, University of Toronto, with research support from Sahar Goorang, Kimiya Karbasy, and Alyssa Schermel. This research was funded by a grant from the Canadian Institutes of Health Research (CIHR) (#343709) and a CIHR Banting Postdoctoral Fellowship to Dr. Vanderlee. We would like to gratefully acknowledge the support of the international INFORMAS research group, including Dr. Stefanie Vandevijvere, Prof. Boyd Swinburn and Dr. Gary Sacks.

We would like to extend our sincerest gratitude to all of the provincial, territorial and federal government stakeholders who helped to review the policy evidence collated for this work, with particular thanks to Health Canada for their support and for attending these ratings workshops as observers.

### Recommended citation:

Vanderlee L, Goorang S, Karbasy K, Schermel A, L'Abbe M. Creating healthier food environments in Canada: Current policies and priority actions - Alberta report. Toronto; University of Toronto, 2017. Available at: [www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017)

# Contents

<b>2</b>	<b>BACKGROUND</b>	
2	Diet related NCDs	
3	Importance of food environments	
<b>4</b>	<b>FOOD-EPI PROCESS</b>	
6	Policy indicators and International Benchmarks	
9	Food-EPI Canada 2017 Methods	
<b>12</b>	<b>ALBERTA RESULTS</b>	
<b>16</b>	<b>PROPOSED ACTIONS</b>	
<b>19</b>	<b>PROVINCIAL &amp; TERRITORIAL RESULTS</b>	
20	Summary of Provincial & Territorial Results	
<b>21</b>	<b>PROVINCIAL &amp; TERRITORIAL PRIORITIES</b>	
<b>23</b>	<b>IMPLICATIONS FOR POLICY</b>	
<b>23</b>	<b>WHAT NEXT?</b>	
<b>24</b>	<b>LIST OF CANADIAN EXPERTS</b>	

# Background

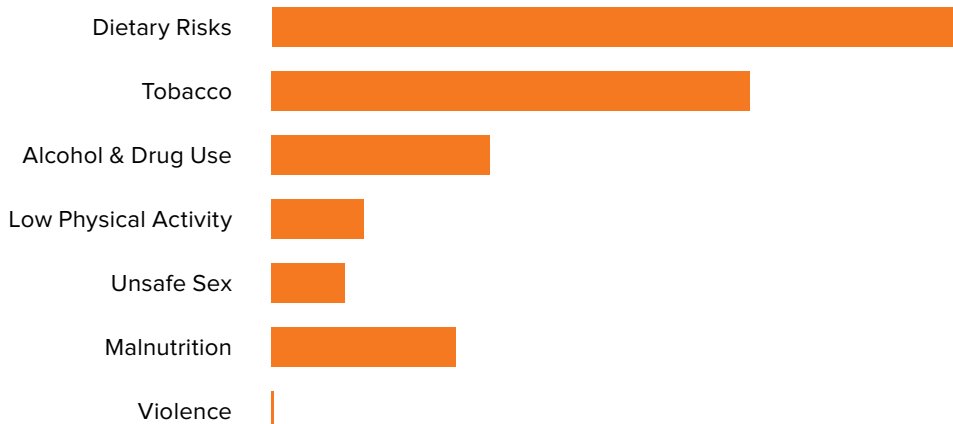
## Diet related NCDs

The high global burden of non-communicable diseases (NCDs) is worrisome. Poor diet is a major contributor to a range of NCDs, notably cardiovascular diseases, some types of cancer, and diabetes. Evidence suggests that diet is now the leading behavioural risk factor for mortality globally, spanning high, middle and low-income countries alike. See Figure 1a.

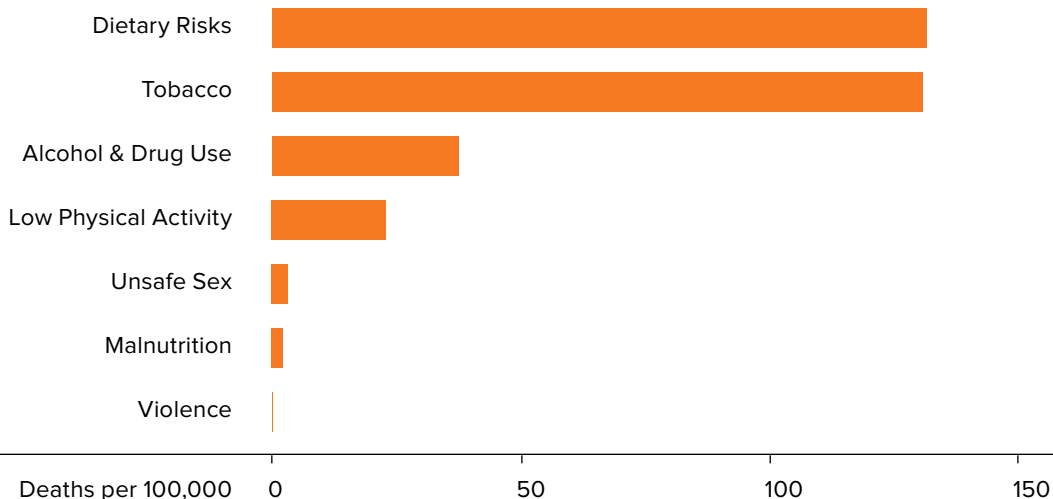
Canada is no exception, and unhealthy diet is now the leading behavioral risk factor for death in Canada.<sup>1</sup> See Figure 1b. The most recent nationally representative nutrition data from Canada suggest that there has been little improvement in dietary habits over the past 10 years, and that the overall quality of the Canadian diet is poor.<sup>2,3</sup> In addition, 27% of Canadians are living with obesity.<sup>4</sup>

**Figure 1a and 1b. Behavioural risk factors contributing to the mortality burden, both sexes, all ages, 2016.**

### Global



### Canada



In this document, the term “nutrients of public health concern” refers to added sugar, saturated and trans fat and sodium, as these are the nutrients considered by experts to most closely relate to risk of obesity and NCDs, and are currently consumed in excess amounts by most Canadians, according to guidelines from Health Canada and the World Health Organization.<sup>5,6,7</sup> In addition, low consumption of vegetables and fruit are of concern as the vast majority of Canadians consume vegetables and fruit in amounts much lower than recommended targets.<sup>8</sup>

## Importance of food environments

The food environment is comprised of all of the factors that influence food choices and dietary habits. The definition of the food environment is broad, and includes the physical, economic, political and sociocultural surroundings, opportunities and conditions that can all influence food choices and, ultimately, health.<sup>9,10</sup>

Government policy lays a foundation for the food environment, by establishing regulations and priorities for investment of government funding and resources, providing a framework in which the food industry and the general public operate. The current Canadian food environment is dominated by nutrient-poor, energy dense food items, which are increasingly more accessible, available at a lower cost and more heavily promoted than their healthy food counterparts, which plays a significant role in contributing to poor dietary habits among Canadians. Comprehensive government policy action is needed to support a food environment that can contribute to healthy diets and improve health among all Canadians.

The purpose of this research was to evaluate policies and actions that federal, provincial and territorial governments are taking to create a healthier food environment in Canada, and to prioritize areas for action to address current policy gaps.



The INFORMAS network (International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support) was founded by a group of international experts from 9 universities and 4 global NGOs in the area of food and nutrition, and has since expanded to include dozens of researchers from 19 countries around the globe. The objective of INFORMAS is to ‘monitor and benchmark food environments and policies globally to reduce obesity, diet related non-communicable diseases and their related inequalities,’ and the work aligns with overarching efforts of the United Nations and the World Health Organization to prioritize monitoring of NCDs and associated risk factors to improve population health.<sup>10–15</sup>

The INFORMAS groups is led by Prof. Boyd Swinburn from University of Auckland, and Dr. Mary L’Abbe is the Canadian lead for INFORMAS. For more information, visit [www.informas.org](http://www.informas.org) and <http://labbelab.utoronto.ca/projects/international-projects/>

# Food-EPI Process

The Food Environment Policy Index (Food-EPI) was developed by INFORMAS to comprehensively assess government policies and actions for creating healthier food environments using a set of evidence-based, standardized tools.<sup>16</sup>

The Food-EPI framework distinguishes government actions based on two components: 1) Policy and 2) Infrastructure support, to incorporate policy and infrastructure domains that have been identified by experts as those that contribute most to influencing the food environment.

## Policy Component

Within the Policy component, there are 7 domains or policy areas that can be implemented to create a healthier food environment. These include:



- 1. Food Composition:** There are government systems implemented to ensure that, where practicable, processed foods and out-of-home meals minimize the energy density and the nutrients of concern (sodium, saturated fat, trans fat, added sugar)



- 5. Food Provision:** The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies



- 2. Food Labelling:** There is a regulatory system implemented by the government for consumer-oriented labelling on food packaging and menu boards in restaurants to enable consumers to easily make informed food choices and to prevent misleading claims



- 6. Food Retail:** The government has the power to implement policies and programs to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)



- 3. Food Promotion:** There is a comprehensive policy implemented by the government to reduce the impact (exposure and power) of promotion of unhealthy foods to children (<16 years) across all media



- 7. Food Trade and Investment:** The government ensures that trade and investment agreements protect food sovereignty, favour healthy food environments, are linked with domestic health and agricultural policies in ways that are consistent with health objectives, and do not promote unhealthy food environments



- 4. Food Prices:** Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make the healthy eating choices the easier, cheaper choices

# Infrastructure Support Component

Within the Infrastructure Support component, there are 6 support domains that outline government infrastructure supports that enable the implementation of successful government policy and action. These include:



- 1. Leadership:** The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities



- 4. Funding and Resources:** Sufficient funding is invested in 'Population Nutrition' to create healthy food environments, improved population nutrition, and reductions in obesity, diet-related NCDs and related inequalities



- 2. Governance:** Governments have structures in place to ensure transparency and accountability, and encourage broad community participation and inclusion when formulating and implementing policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities



- 5. Platforms for Interaction:** There are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (non-governmental organizations, private sector, and academia) such that policies and actions in food and nutrition are coherent, efficient and effective in improving food environments, population nutrition, diet-related NCDs and their related inequalities



- 3. Monitoring and Intelligence:** The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans



- 6. Health-in-all-policies:** Processes are in place to ensure policy coherence and alignment, and that population health impacts are explicitly considered in the development of government policies within and outside of the health sector

5

## Global Food-EPI

The **Food Environment Policy Index (Food-EPI)** has been implemented in 13 countries to date, and is soon to be implemented in several more. Each country has adapted the methods to ensure that the analysis is appropriate at the country level using the same process infrastructure.





These international efforts will provide opportunities for international cross-country comparisons and lay the groundwork for policy evaluation national and subnational levels worldwide.

## Policy Indicators and International Benchmarks

The table below shows indicator areas, and samples of the international benchmarks against which the Canadian policies were compared. The table below shows indicator areas, and samples of the international benchmarks against which the Canadian policies were compared. International benchmarks of best practice are based on current practices implemented by governments across the world, identified

by the INFORMAS group as being most likely to positively influence the food environment, using the most recent evidence and data available. A table including all of the Food-EPI Good Practice Statements for each indicator can be found in Appendix A. The comprehensive list of international benchmarks can be found in the Federal Evidence Document at [www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017).

**Table 1. Indicators and international benchmark examples**

	Indicator title	Sample of international benchmarks of current best practice
	Composition targets for packaged foods	<b>ARGENTINA:</b> Mandatory maximum sodium levels in various food categories <b>DENMARK:</b> Ban on trans fat
	Composition targets for out-of-home foods	<b>NETHERLANDS:</b> Voluntary agreement with trade organization for nutrients of concern
	Nutrition information on labels	<b>MANY COUNTRIES (including Canada):</b> Require trans fat information on labels <b>USA:</b> To require added sugar on labels
	Health claim regulations	<b>AUSTRALIA:</b> Regulations for health and nutrition claims on healthy products only
	Front-of-package food labelling	<b>CHILE:</b> Warning labels for foods high in calories, saturated fat, sodium and sugar
	Menu labelling	<b>AUSTRALIA:</b> Three states require kilojoule labelling in chain restaurants
	Promotion to children via broadcast media	<b>QUEBEC, CANADA:</b> Prohibits all advertising to children under 13 years through all media
	Promotion to children via non-broadcast media	<b>QUEBEC, CANADA:</b> Prohibits all advertising to children under 13 years through all media
	Promotion to children in children's settings	<b>CHILE:</b> Restricts advertising to children under age 14 for foods high in nutrients of concern
	Minimize taxes on healthy foods	<b>POLAND:</b> Tax exemption for basic foods <b>TONGA:</b> Reduced import duties on all types of fish
	Increase taxes on unhealthy foods	<b>MEXICO:</b> Introduced an excise duty on drinks with added sugar and calorically dense foods
	Subsidies on foods	<b>SINGAPORE:</b> 'Healthier ingredient scheme' supports manufacturers to use healthy oils



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Food-related income support

**USA:** The Supplemental Nutrition Program for Women, Infants, and Children (WIC) aims to provide healthier foods



School nutrition policies

**CHILE:** Limits foods sold in schools that are high in nutrients of concern

Public sector nutrition policies

**LATVIA:** Set sodium levels for foods in hospitals  
**UK:** Minimum standards for public sector buying and catering services

Support for public sector nutrition policies

**JAPAN:** Dietitians help implement nutrition programs in schools, public settings, etc.

Support for private sector nutrition policies

**SINGAPORE:** Program provides grants and tools to private and public institutions to promote health in workplaces



Planning policies for unhealthy food outlets

**SOUTH KOREA:** 'Green food zones' around 200 m of schools can sell healthy foods only

Planning policies for healthy food outlets

**USA:** Provides grants to states to attract healthier retail outlets in underserved areas

Health and unhealthy food availability in stores

**USA:** The WIC program requires authorized stores to stock healthier products

Healthy and unhealthy food availability in restaurants

**SINGAPORE:** Program to support food vendors with healthier options  
**FRANCE:** Banned unlimited free refills in restaurants



Risk impact assessments

**USA:** Environmental impact assessments sometimes incorporate Health Impact Assessments

Manage and protect regulatory capacity

**MANY COUNTRIES:** Sanitary and phytosanitary clauses in World Trade Organization agreements



Political support for population nutrition

**BRAZIL:** Minister of Health support for new dietary guidelines  
**CARICOM COUNTRIES:** NCD commissions in 6 member states

Population intake targets established

**BRAZIL:** National targets for fruit and vegetable consumption and salt intake

Dietary guidelines




**BRAZIL:** National dietary guidelines address healthy eating from a cultural, ethical and environmental perspective

Implementation plan to improve food environments

**EU:** The European Food and Nutrition Action Plan 2015–20 outlines clear strategic goals, guiding principles, objectives, priorities and tools

Priorities for inequalities related to nutrition

**NEW ZEALAND:** Reports estimates from health and nutrition surveys by ethnic group and area level deprivation index  
**AUSTRALIA:** The National Indigenous Reform Agreement (Closing the Gap)

Indicator title	Sample of international benchmarks of current best practice
	<p><b>Restrict commercial influence</b></p> <p><b>USA:</b> Federal and state lobby registries which must disclose amount spent on lobbying  <b>AUSTRALIA:</b> Australian Public Service Commission's Values and Code of Conduct</p>
Evidence in policymaking	<p><b>AUSTRALIA:</b> The National Health and Medical Research Council Act 1992 requires development of evidence-based guidelines</p>
Transparency in policy development	<p><b>AUSTRALIA/NZ:</b> Food Standards Australia New Zealand requires stakeholder engagement in the development of new standards</p>
Public access to information	<p><b>AUSTRALIA/NZ:</b> The Freedom of Information Act and Open Access principles across governments</p>
	<p><b>Monitoring food environments</b></p> <p><b>NEW ZEALAND:</b> Measures food environments in all schools and early childhood education centres</p>
Monitoring population intakes	<p><b>USA:</b> The NHANES assesses health and nutrition status of representative samples of adults and children annually</p>
Monitoring overweight and obesity	<p><b>UK:</b> Measures all children in England in the first and last years of primary school</p>
Monitoring NCD prevalence and risk factors	<p><b>OECD COUNTRIES:</b> Have regular, robust prevalence, incidence and mortality data for diet-related NCDs and risk factors</p>
Evaluation of programs and policies	<p><b>USA:</b> Provides dedicated research funding for natural experiments evaluating policies that may influence obesity and health</p>
Monitoring health inequalities	<p><b>NEW ZEALAND:</b> All annual surveys report estimates by subpopulations (including ethnicity)</p>
	<p><b>Sufficient population nutrition budget</b></p> <p><b>NEW ZEALAND:</b> Funding for population nutrition was estimated at 0.6% of the health budget</p>
Government-funded research	<p><b>AUSTRALIA:</b> Obesity, diabetes and cardiovascular health have been designated as National Health Priority Areas</p>
Health promotion agency	<p><b>AUSTRALIA:</b> The Victorian Health Promotion Foundation was created in 1987</p>
	<p><b>Coordination mechanism across government</b></p> <p><b>MALTA:</b> Established an inter-ministerial Advisory Council on Healthy Lifestyles</p>
Coordination mechanism with commercial food sector	<p><b>UK:</b> The UK 'Responsibility Deal' initiative brought together food companies and NGOs to voluntarily take steps to address NCDs</p>
Coordination mechanism with civil society	<p><b>BRAZIL:</b> The National Council of Food and Nutrition Security (CONSEA) includes civil society actors as advisors</p>

Systems-based approach with local organizations

**NEW ZEALAND:** Healthy Families NZ supports community-led initiatives for better health



Health considerations in all food policies

**SLOVENIA:** Undertook a Health Impact Assessment (HIA) to assess the health effects of national agricultural policy

Health impact assessments in non-food policies

**FINLAND:** Has worked towards health-in-all-policies for over four decades

## Food-EPI Canada 2017 Methods

The Food-EPI was adapted to the Canadian context to enable a thorough understanding of the state of food environment policy across the country. Given the nature of regulatory jurisdiction in Canada, policies were evaluated for the federal government, as well as for provincial and territorial governments.

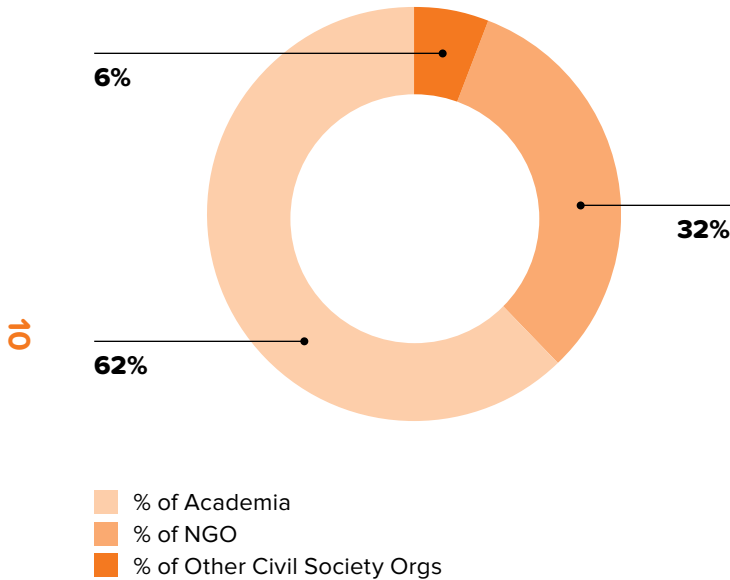
A depiction of the overall Food-EPI Canada process can be found in Figure 2.

**Figure 2. Steps of the Food-EPI Canada 2017 process**



Experts involved in the Food-EPI process came from across the country, for a total of 71 experts involved in the overall process.

**Figure 3. Participants from each sector**



**Figure 4. Expert geographic location**



**\* A Note on Nunavut**

The Food-EPI process is underway in Nunavut as well; however, due to the novel food environment in Nunavut and the unique nutrition challenges faced by the Nunavummiut, a separate process will be undertaken to adapt the Food-EPI tool as appropriate to the Nunavut context, and engage local experts and government in evaluating the food environment to support policy action.

## Provincial Methods

Experts were randomized to conduct policy ratings for one of the 12 provinces or territories included in the ratings (excluding Nunavut – see note above). Experts may or may not have been residents of or worked in the province or territory to which they were randomly assigned. The Provincial/Territorial Evidence document to which the expert was randomized was provided to describe the level of policy implementation and provincial/territorial context. The Alberta Evidence document can be accessed at: [www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017).

Participants were instructed to rate the policy compared to international best practice examples using a Likert scale of 1 to 5 (1=0-20% implemented, 2=20-40% implemented, 3=40-60% implemented, 4=60-80% implemented, 5=80-100% implemented). Experts were told to consider the various steps of the policy cycle (agenda-setting and initiation, policy development, implementation, enforcement, etc.), including intentions and plans of the government such as the establishment of working and advisory groups, and government funding for actions undertaken by non-governmental organizations.

# Prioritizing Policy and Infrastructure Support Actions

As a final activity, participants were asked to rate the policy and infrastructure support actions according to two elements: 'Importance' and 'Achievability'. Criteria that were to be taken into account when evaluating these elements can be found in Table 2.

**Table 2. Criteria for 'Importance' and 'Achievability' elements**

## Importance

<b>Need</b>	Size of the implementation gap
<b>Impact</b>	Effectiveness of the action on improving food environments and diets (including reach and effect size)
<b>Equity</b>	Progressive/regressive effects on reducing food/diet-related health inequalities
<b>Other Positive Effects</b>	For example on protecting rights of children and consumers
<b>Other Negative Effects</b>	For example regressive effects on household income, infringement on personal liberties

## Achievability

<b>Feasibility</b>	How easy or hard the action is to implement
<b>Acceptability</b>	The level of support from key stakeholders including government, the public, public health and industry
<b>Affordability</b>	The cost of implementing the action
<b>Efficiency</b>	The cost-effectiveness of the action

The policy ratings for Alberta were conducted by 7 experts, randomized from the Expert Panel. The prioritization ratings were conducted for Alberta were conducted by 3 experts.

# Alberta Results



## Areas where the Alberta government is doing particularly well:

**Food Prices:** No additional taxes on basic groceries



**Food Provision:** A strong school nutrition policy (although not mandatory) coordinated with provincial efforts to promote healthy foods in public sector and support mechanisms to implement the policies effectively



**Funding & Resources:** Support for research to understand and encourage healthy food environments



## Areas where little or no policy implementation was evident compared to some of the most promising international practices:

**Food Labelling:** Provincial policy or strategy for menu labelling



**Food Promotion:** Policies to limit or restrict marketing to children



**Food Retail:** Retail-related policies or support for retailers



**Leadership:** A provincial strategy or plan to improve the overall food environment



**Platforms for Interaction:** Mechanisms to support coordination between governments, the food sector, and civil society



*Expert ratings of policy implementation for Alberta can be found in Figure 5.*

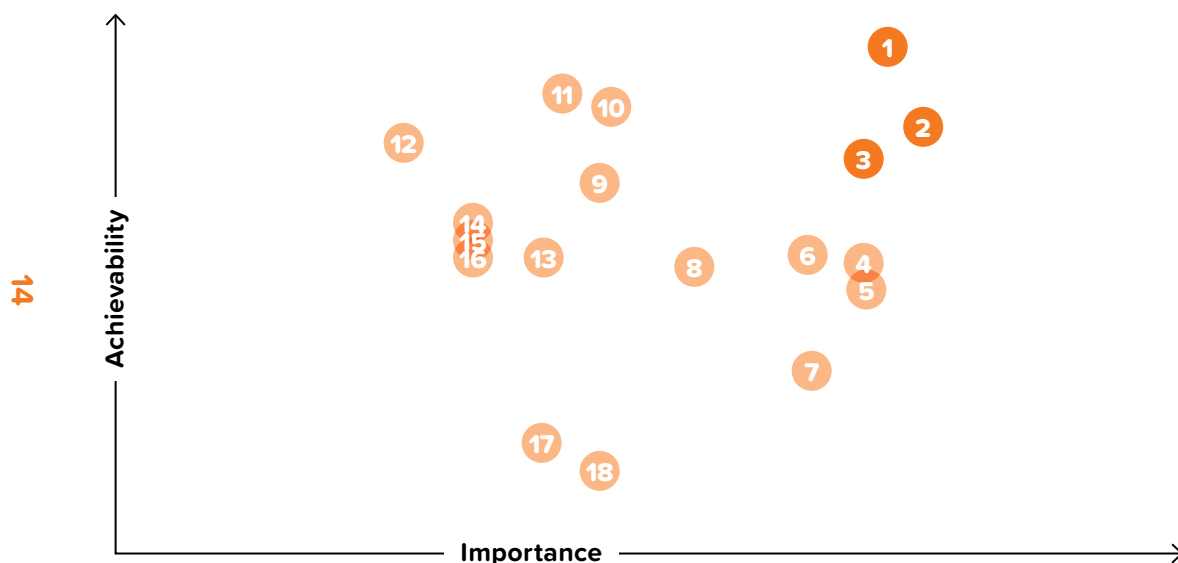
**Figure 5. Expert ratings of implementation of 39\* provincial government policy areas from online ratings for Alberta**



\*Only 39 of the 47 Food-EPI indicators were identified as falling within provincial or territorial jurisdiction

# Policy Actions Recommended to Support Healthy Food Environments in Alberta

Figure 6. Prioritized policy actions graph



## Full Recommendations for Prioritized Policy Actions

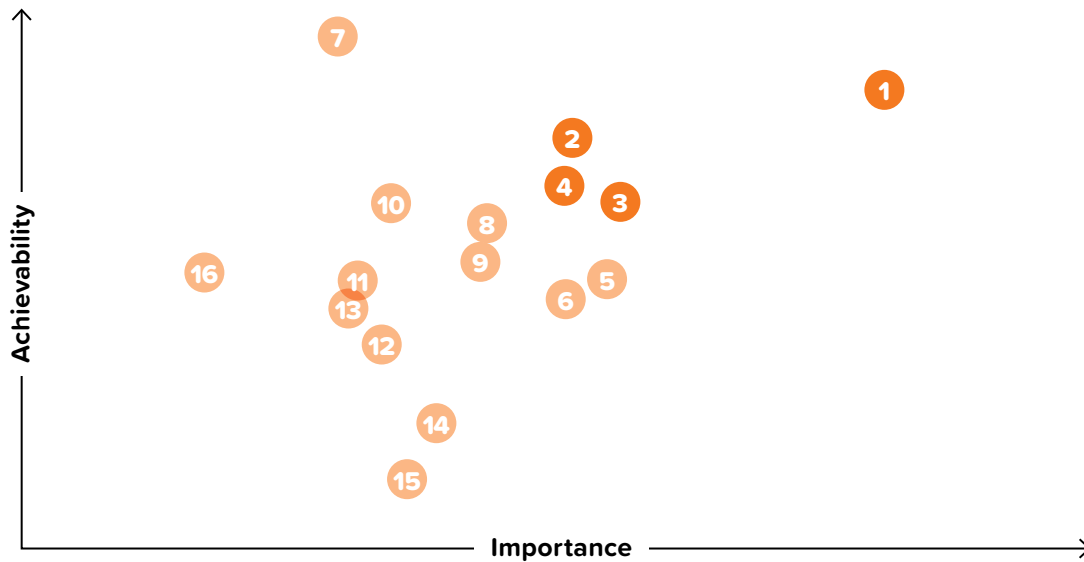
A list of all proposed actions can be found in Table 3.

1. Fund a provincial fruit and vegetable program in schools, with a focus on schools with a high proportion of children from lower socio-economic backgrounds in primary and secondary schools
2. Extend the implementation of the ANGCY so that the standards are mandatory in all publicly-funded and child-directed settings (including schools, childcare settings and recreation settings), with adequate resources and supports in place to increase capacity among providers, educators and food service operators to successfully implement, monitor and enforce the program
3. Reduce restrictions for zoning requirements to increase the availability of fresh fruits and vegetables, with a particular focus in designated, underserved neighbourhoods



# Infrastructure Support Actions Recommended to Support Healthy Food Environments in Alberta

Figure 7. Prioritized infrastructure support actions graph



## Full Recommendations for Prioritized Infrastructure Support Actions

A list of all proposed actions can be found in Table 3.

1. Establish an up-to-date provincial strategy or framework for public health nutrition and healthy eating with comprehensive food environment considerations, with specific actions and policies in the health strategy to improve population nutrition among vulnerable and disadvantaged populations
2. Regularly report on provincial dietary intake using data from national surveys, stratified by socio-demographic factors associated with health inequities
3. Establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and to publish annual progress reports and assess long-term trends, as recommended in the Truth and Reconciliation Commission Calls to Action
4. Develop and implement community-wide structures or networks to provide broad and coordinated support for community-based interventions designed to create and maintain healthy food environments

# Proposed Actions

**Table 3. List of proposed policy and infrastructure support action recommendations for the Alberta government to improve food environments, in order of priority ranking according to policy experts**

## POLICY ACTIONS

1. Fund a provincial fruit and vegetable program in schools, with a focus on schools with a high proportion of children from lower socio-economic backgrounds

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2. Extend the implementation of the ANGCY so that the standards are mandatory in all publicly-funded and child-directed settings (including schools, childcare settings and recreation settings), with adequate resources and supports in place to increase capacity among providers, educators and food service operators to successfully implement, monitor and enforce the program

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3. Reduce restrictions for zoning requirements to increase the availability of fresh fruits and vegetables, with a particular focus in designated, underserved neighbourhoods

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4. Introduce a comprehensive provincial policy restricting marketing of unhealthy food and beverages as identified by a comprehensive, evidence-based nutrient profiling system to children under the age of 17 in schools and public settings frequented by children, such as arenas and community centres and via other non-broadcast media

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5. Implement a provincial minimum basic income to ensure that social assistance provides adequate financial support to cover the costs of living, including the cost of purchasing healthy, nutrient-rich diets, as part of a comprehensive provincial Poverty Reduction Strategy

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6. Introduce food literacy and food skills training as part of school curricula

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7. Develop and implement provincial policies that require local zoning acts to consider public health nutrition in their development

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8. Implement a point-of-sale sales tax on all sugary drinks, as defined by comprehensive, evidence based nutrient profiling criteria. Invest the revenue from the tax to targeted areas that address public health as appropriate to provincial context, and advertise the re-investment of the tax dollars to the public

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9. Establish a support service delivered by experienced dietitians to train cooks, chefs, foods service and other key staff in developing healthier recipes, and offer food ideas and other helpful resources to provide healthier menus and food products for various public sector settings

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10. Remove sugary drinks, as defined by comprehensive, evidence based nutrient profiling criteria, from the premises of all public sector settings

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11. Develop supplementary planning guidance to support municipal zoning efforts that restrict unhealthy food vendors, such as fast food chains or food trucks, within certain distances from schools or other settings where children typically gather

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12. Implement a provincial menu labelling policy with calorie and sodium information on menus and menu boards for all chain food service providers with a comprehensive menu labelling education campaign and added fiscal incentive for industries. In addition, require chain food service providers to fully disclose amounts of energy and the core nutrients found on the Nutrition Facts table per serving size for foods and beverages in an online format

- 
13. Establish a mechanism to provide synthesized, evidence-based guidance and support for retailers and food service outlets to both encourage and enable them to provide healthier food choices
- 
14. Prohibit restrictive covenant caveats that prevent the establishment of grocery stores or other healthy food vendors in specific areas or premises
- 
15. Extend efforts to provide incentives and information appropriate to all private organisations (especially small- and medium-sized enterprises) to promote and sustain the provision of healthy food in workplaces (including in employee cafeterias and in vending machines), highlighting the benefits of a healthier workplace food environment on employee health, productivity and wellness
- 
16. Implement targets for sodium, free sugar, and saturated fat in the foods provided in restaurant and food service outlets using a structured voluntary approach with the threat of mandatory requirements if compliance is poor after an established time period, and implement a monitoring system for nutrients of concern in the food supply to track compliance
- 
17. Implement targeted commodity subsidies and subsidized transportation for vegetable, fruit and legume producers that support local and sustainable production to reduce costs in domestic markets and increase consumption
- 
18. Develop agricultural policies and subsidies that incentivize production, processing, distribution and consumption of vegetables, fruits and legumes that are unprocessed or minimally processed, local and sustainable

#### INFRASTRUCTURE SUPPORT ACTIONS

1. Establish an up-to-date provincial strategy or framework for public health nutrition and healthy eating with comprehensive food environment considerations that complement the Alberta Nutrition Guidelines for Children and Youth and the Alberta Nutrition Guidelines for Adults as well as federal actions of the Healthy Eating Strategy, and include specific actions and policies in the health strategy to improve population nutrition among vulnerable and disadvantaged populations
- 
2. Regularly report on provincial dietary intake using data from national surveys, stratified by socio-demographic factors associated with health inequities (income, education, gender, Aboriginal status, geographic location, etc. as relevant)
- 
3. Establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and publish annual progress reports and assess long-term trends, as recommended in the Truth and Reconciliation Commission Calls to Action
- 
4. Develop and implement community-wide structures or networks, with associated resources, to provide broad and coordinated support for community-based interventions designed to create and maintain healthy food environments across multiple settings
- 
5. Establish requirements and a process for the collection and use of evidence in all provincial food policies
-

- 
6. Work with First Nations/ Inuit/ Metis leadership and others to develop a comprehensive strategy to promote access, availability, and affordability of healthy foods for Indigenous populations on and off reserve within the context of local foodways and cultural traditions
- 
7. Establish a provincial Healthy Eating Committee that includes representation from all sectors (government, private sector and civil society) with sufficient resources to support participation of non-governmental groups
- 
8. In the absence of federal targets, develop public provincial targets for population intakes of all nutrients of public health concern and monitor the achievement of targets and disparities in intakes across subpopulations which could contribute to health inequities
- 
9. Establish provincial monitoring for the nutritional quality of foods served and marketed in child-directed food environments and public sector settings
- 
10. Increase the opportunity for policy-maker and researcher partnerships and provide infrastructure support for the development, monitoring and evaluation of government policies
- 
11. Acknowledge and endorse the importance of provincial public health nutrition and obesity and NCD prevention strategies in political platforms, mandate letters and speeches from the throne
- 
12. Develop clear provincial guidelines for establishing relationships with the food industry, including policy development and public private partnerships, ensuring that food industry representatives are not involved in setting policy objectives and agendas where they have conflicts of interest with improving population nutrition
- 
13. Establish health impact assessment (HIA) capacity, including funding for HIAs at the provincial and local level
- 
14. Establish a health promotion agency in Alberta with a secure funding stream and expertise to address population nutrition issues
- 
15. Implement formal health impact assessments as part of food and non-food policy development and proposal processes, including explicit details about the consideration of potential impacts of policies on population nutrition and health
- 
16. Establish stable and ongoing provincial research funding opportunities for food environment and obesity and NCD prevention research

# Provincial & Territorial Results



Each province or territory was rated by 5–7 experts. The inter-rater reliability ranged from 0.33 to 0.92, with average inter-rater reliability of 0.64, and 9 of 12 jurisdictions with a coefficient greater than 0.5. A minimum of 3 experts conducted the prioritization activity for each province or territory.

The evidence documents summarizing the current policy status for all provinces and territories that were rated by experts are available at: [www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017).

## Provincial and Territorial Policy Highlights

### Provincial highlights and areas where provinces and territories are meeting international benchmarks:

- **Quebec** is an international benchmark for banning all marketing to children across all media and is a world leader in restricting marketing to children
- **Ontario** has implemented mandatory calorie labelling in chain restaurants and other regulated food service premises, meeting the international benchmark
- **British Columbia** has set limits for the composition of out-of-home foods with regards to trans fat in all foodservice outlets
- **Alberta** has mechanisms for funding food environment research and monitoring, and has funded large food environment research projects in the previous 12 months
- **Quebec** has taken steps to move towards a health-in-all-policies approach for both food and non-food policies
- **All provinces** and territories have some form of monitoring for NCD prevalence and risk factors
- **All provinces** and territories have legislation that makes government information available upon request, therefore increasing public access, and all provinces and territories have budgets available online

### Areas where little or no policy implementation was evident across most provinces or territories compared to some of the most promising international practices:

- Policies regarding advertising to children
- Taxes on unhealthy foods or beverages
- Retail-related policies or support for retailers and food service outlets to offer and promote healthier food choices
- Monitoring of food environments
- Providing opportunities for communication with the food sector
- Concrete actions to incorporate health-in-all-policies approaches

## Summary of Provincial & Territorial Results

**Table 4. Provincial and territorial ratings regarding implementation for 39 policy and infrastructure support indicators**

Indicator	AB	BC	MB	NB	NL	NWT	NS	ON	PEI	QC	SK	YK
Composition targets for out-of-home foods	Low	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Menu labelling	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Promotion to children via broadcast media	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Promotion to children via non-broadcast media	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Promotion to children in children's settings	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Minimize taxes on healthy foods	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Increase taxes on unhealthy foods	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Subsidies on foods	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Food-related income support	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little
School nutrition policies	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Moderate	Moderate	None or Very Little	Moderate	Moderate	None or Very Little
Public sector nutrition policies	Low	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Support for nutrition policies	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Private company nutrition policies	Moderate	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Planning policies for unhealthy food outlets	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Planning policies for healthy food outlets	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Food availability in food stores	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little
Food availability and promotion in restaurants	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Political support	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Population intake targets	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Strategy/plan to improve food environments	None or Very Little	Moderate	Low	None or Very Little	Moderate	None or Very Little	None or Very Little	Moderate	Low	None or Very Little	None or Very Little	Moderate
Priorities for inequalities	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Restrict commercial influence	Moderate	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	Moderate
Evidence in policymaking	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Transparency in policy development	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Public access to information	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Monitoring food environments	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Monitoring population intakes	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little	None or Very Little	Low	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Monitoring overweight and obesity	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	Moderate	None or Very Little
Monitoring NCD prevalence and risk factors	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Evaluation of programs and policies	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Monitoring health inequalities	None or Very Little	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Sufficient population nutrition budget	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Government-funded research	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Health promotion agency	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	Moderate	None or Very Little	None or Very Little
Coordination mechanism across government	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Coordination mechanism w/ food sector	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Coordination mechanism with civil society	None or Very Little	None or Very Little	Moderate	Moderate	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Health considerations in all food policies	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little
Health impact assessments in non-food policies	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little	None or Very Little

None or Very Little    Low    Moderate    High

# Provincial & Territorial Priorities

The priority rankings for the policy and infrastructure support actions across the 12 provinces and territories were examined to identify emerging patterns regarding actions that were frequently ranked as higher priority. The below list represents actions that were rated as highly important and achievable across many provinces and territories. Coordinated efforts from provincial and territorial governments to achieve these actions are likely to have a significant positive impact on the food environment in Canada.

## The policy actions that were most consistently ranked as higher priority across the 12 provinces and territories included:

1. Provide a universal fruit and vegetable program in all schools
2. Strengthen school nutrition standards, and harmonize these standards to have a consistent guideline for foods served in settings where children gather, including early childhood education centres, and other public sector settings frequented by children
3. Strengthen nutrition standards and procurement policies for public sector settings and provide support for successful implementation of these policies, including long term care facilities, hospitals, recreation centres, and correctional services, etc.
4. Examine current school curricula with regards to food literacy, and introduce food literacy and food skills training as a mandatory component of school curricula
5. Introduce a comprehensive provincial or territorial policy restricting marketing of unhealthy food and beverages as identified by a comprehensive, evidence-based nutrient profiling system to children under the age of 17 in public settings frequented by children, such as arenas and community centres with a sufficient enforcement mechanism to ensure compliance
6. Implement a point-of-sale sales tax on all sugary drinks, as defined by comprehensive, evidence based nutrient profiling criteria. Invest the revenue from the tax to targeted areas that address public health as appropriate to provincial context, and advertise the re-investment of the tax dollars to the public



## The infrastructure support actions that were most consistently ranked as higher priority across the 12 provinces and territories included:

22

1. Establish an up-to-date strategy or framework for public health nutrition and healthy eating with comprehensive food environment considerations, and specific actions and policies in the health strategy to improve population nutrition among vulnerable and disadvantaged populations
2. Acknowledge and endorse the importance of public health nutrition and obesity and non-communicable disease prevention strategies in political platforms, mandate letters and speeches from the throne
3. Work with First Nations/ Inuit/ Metis leadership and others to develop a comprehensive strategy to promote access, availability, and affordability of healthy foods for Indigenous populations on and off reserve within the context of local foodways and cultural traditions
4. Establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and publish annual progress reports and assess long-term trends, as recommended in the Truth and Reconciliation Commission Calls to Action
5. Establish a Healthy Eating Committee that includes representation from all sectors (government, private sector and civil society) with sufficient resources to support participation of non-governmental groups



# Implications for Policy

Canadian provincial, territorial and federal governments met global best practice in some, but not all, policy areas that are the most critical to improve the food environment in Canada. Leadership is needed from all federal, provincial, and territorial decision makers to establish a comprehensive strategy to address unhealthy diets and rates of diet-related NCDs. This research demonstrates that food environment policies differ greatly across jurisdictions in Canada, and that there are many areas where governments could act to improve the food environment. Comprehensive, cohesive and coordinated action between jurisdictions, departments and agencies are often needed to provide a comprehensive policy framework to achieve targeted public health nutrition goals. It is our hope that this research will help guide the food and nutrition policy agenda in Canada in the coming years.

Policy makers and others are encouraged to also examine the broad range of policy actions in other Canadian and international jurisdictions beyond those rated as the current priority actions. These contain a wealth of additional actions for consideration, particularly as the policy landscape nationally and globally continues to strengthen and evolve in many areas.

Nutrition related risk factors account for the largest mortality burden in Canada and across the world. Globally, many governments are demonstrating significant leadership by implementing policies and government infrastructure to support healthier food environments, and to make the healthy choice the easier choice. High rates of NCDs are thought to be one of the greatest obstacles in achieving the United Nations' Sustainable Development Goals. As international governments innovate with novel policies to address rising rates of diet-related NCDs and obesity, Canadian governments will need to continue to act and build upon current policies to ensure they do not fall behind in their duty to protect and promote the health and wellness of Canadians. Monitoring and evaluating policy implementation and impact is also critical to ensure that policies are achieving the desired results, and will contribute to our understanding of the effectiveness of these policies more broadly.

## What next?

We will be repeating the Food-EPI Canada process in several years, to examine progress in implementing policy and infrastructure supports to improve the food environment. Ongoing monitoring of policies and efforts will increase accountability of governments to implement policies, and help establish the roadmap for food environment policy in Canada in the years to come.

Additionally, as governments world wide continue to introduce and evaluate innovated policies directed at improving the food environment, a richer inventory of possible policy actions for consideration will no doubt continue to develop.

# List of Canadian Experts

The experts that contributed to the provincial, territorial and federal assessment of policies and prioritization, and their respective affiliations, are listed below. Note that participants may or may not have lived and worked in the province or territory that they rated. All experts took part on their own behalf, and were not formally representing the organizations to which they belong. Experts were involved in the ratings and scoring for the prioritization exercise. The final preparation of this report and the contents here within are solely the responsibility of the authors, and experts have not explicitly endorsed the contents of this report.

24

Manuel Arango, Heart and Stroke  
Kayla Atkey, Alberta Policy Coalition for  
Chronic Disease Prevention  
Jennifer Black, University of British Columbia  
Chantal Blouin,  
Institut national de santé publique du Québec  
Beatrice Boucher, Cancer Care Ontario  
Paula Brauer, University of Guelph  
Diana Bronson, Food Secure Canada  
Norm Campbell,  
Hypertension Canada / University of Calgary  
Gwen Chapman, University of Guelph  
Donald Cole, University of Toronto  
Mary Collins, BC Healthy Living Alliance  
Jeff Critch, Canadian Pediatric Society  
Jamie Desautels, Alberta Food Matters  
Erica Di Ruggiero, University of Toronto  
Lise Dubois, University of Ottawa  
Rachel Engler-Stringer, University of Saskatchewan  
Jody Butler-Walker,  
Arctic Institute of Community-Based Research  
Lise Gauvin, Centre hospitalier de l'Université de Montréal  
Jason Gilliland, Western University  
Doris Gillis, St. Francis Xavier University  
Andrea Grantham, Canadian Nutrition Society  
David Hammond, University of Waterloo  
Rhona Hanning, University of Waterloo  
Erin Hobin, Public Health Ontario  
Elizabeth Holmes, Canadian Cancer Society  
Kristie Jameson, Food First NL  
Bill Jeffery, Centre for Health Science and Law  
Mats Juneke, NCDFREE  
Yan Kestens, Centre hospitalier de l'Université de Montréal  
Sharon Kirkpatrick, University of Waterloo  
Marie-Ève Labonté, Université Laval  
Benoît Lamarche, Université Laval  
Yann Le Bodo, Université Laval  
Gabrielle Lepage-Lavoie,  
Réseau Santé en français de la Saskatchewan

Rod MacRae, Ryerson University  
Catherine Mah, Dalhousie University  
Doug Manuel, University of Ottawa  
Mary McKenna, University of New Brunswick  
Leia Minaker, University of Waterloo  
Shawna Moore, Sustain Ontario  
Rob Moquin, Food Matters Manitoba  
Jean-Claude Moubarac, Université de Montréal  
David Mowat, Canadian Partnership Against Cancer  
Nazeem Muhajarine, University of Saskatchewan  
Seema Nagpal, Diabetes Canada  
Deborah O'Connor, University of Toronto  
Marie-Claude Paquette,  
Institut national de santé publique du Québec  
Monique Potvin Kent, University of Ottawa  
Julie Price, Northern Manitoba Food Culture &  
Community Collaborative  
Véronique Provencher, Université Laval  
Kim Raine, University of Alberta  
Janis Randall-Simpson,  
Canadian Foundation for Dietetic Research  
Margo Riebe-Butt, Nourish Nova Scotia  
Lynn Roblin, Nutrition Resource Centre  
(Ontario Public Health Association)  
Cecilia Rocha, Ryerson University  
Laura Rosella, University of Toronto  
Melissa Rossiter, University of Prince Edward Island  
Jacob Shelley, Western University  
Kelly Skinner, University of Waterloo  
Joyce Slater, University of Manitoba  
Donna Smith, Nutrition Resource Centre  
(Ontario Public Health Association)  
Celina Stoyles, Kids Eat Smart Foundation  
Rebecca Truscott, Cancer Care Ontario  
Pat Vanderkooy, Dietitians of Canada  
Barbara von Tigerstrom, University of Saskatchewan  
Tom Warshawki, Childhood Obesity Foundation  
Leslie Whittington-Carter, Dietitians of Canada  
Michael Widener, University of Toronto  
Patricia Williams, Mount Saint Vincent University  
Rickey Yada, University of British Columbia  
May-Fong Yee, University of Manitoba  
Gordon Zello, Canadian Obesity Network  
1 expert who wishes not to be identified

This study was approved by the University of Toronto Research Ethics Board (REB Application #33249).



Department of Nutritional Sciences  
Faculty of Medicine  
University of Toronto

FitzGerald Building  
150 College Street  
Toronto, ON, Canada  
M5S 3E2

[www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017)



UNIVERSITY OF  
**TORONTO**



Department of Nutritional Sciences  
Faculty of Medicine  
University of Toronto

FitzGerald Building  
150 College Street  
Toronto, ON, Canada  
M5S 3E2

[www.labbelab.utoronto.ca/Food-EPI-Canada-2017](http://www.labbelab.utoronto.ca/Food-EPI-Canada-2017)



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