Actions to cultivate healthier food environments in Canada:
Nova Scotia policies and progress

2023



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Background

Diet-related noncommunicable diseases

Unhealthy dietary patterns remain one of the biggest public health concerns of our century. Diet-related noncommunicable diseases (NCDs) like cardiovascular disease, type 2 diabetes, obesity and cancer were responsible for more than 1 in 5 deaths worldwide in 2019. The average Canadian is not consuming a healthy diet. For example, 78% of those ages 12 and over in Canada did not consume at least five servings of fruits and vegetables in 2021, compared to 68% in 2015. Diet-related NCDs continue to be a leading cause of preventable death. This comes at tremendous cost, with an economic burden of disease linked to suboptimal dietary patterns in Canada of around \$15.8 billion dollars annually.

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Food environments represent the physical, economic, political, and sociocultural surroundings, opportunities and conditions that can influence consumers' food choices and dietary patterns—in short, all the factors that influence what consumers buy and eat.

78%

of Canadians do not eat 5 servings of fruits and vegetables daily



46%

of energy intake among Canadians comes from ultra-processed foods



58%

of Canadians exceed recommended limits of sodium intake



Diet-related health inequities

There are systematic differences in diet quality and related health outcomes like obesity and NCDs in Canada between those in the higher and lower social positions^{13–15}, highlighting current health, social and racial inequities. This underscores the importance of the social determinants of health, and the range of personal, social, economic and environmental factors that influence the health of individuals and the health of the population.

Importance of food environments

Poor diets are consequences of unhealthy food environments. Food environments represent the physical, economic, political, and sociocultural surroundings, opportunities and conditions that can influence consumers' food choices and dietary patterns—in short, all the factors that influence what consumers buy and eat. Current Canadian food environments are dominated by nutrient-poor, energy-dense foods which are more accessible and heavily marketed than their healthier counterparts.

In 2022, Canada experienced its highest rate of food inflation in 40 years²², making healthy eating even less accessible. Canada is also in a period of rising food prices and rates of food insecurity. In 2022, it was estimated that 18.4% of people living in the 10 Canadian provinces lived in a food-insecure household, a record number since food insecurity monitoring began in Canada.²³ This may have important health implications, as food insecurity can have serious long-term consequences on people's physical and mental health beyond the effects of poor nutrition.²⁴

With increasing barriers to healthy eating, the concept of "individual responsibility" for making healthier food choices is often used to blame individuals and deflect governments' responsibility to ensure equitable access to healthier, sustainable diets. Comprehensive government policies aiming to improve food environments and reduce health inequities could alleviate some of Canada's biggest health, social, financial, and environmental burdens.

This program of research aimed to evaluate current policies and actions that provincial, territorial and federal governments are taking to create healthier food environments in Canada, and to propose specific recommendations for action to address important policy gaps.

International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support

The INFORMAS network was founded in 2013 and has since expanded to include dozens of researchers and non-governmental groups with expertise in food environments from more than 80 countries across the globe. INFORMAS aims to 'monitor and benchmark food environments and policies globally to reduce obesity, diet-related noncommunicable diseases and their related inequalities', in alignment 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. 1-6

The INFORMAS group is led by Prof. Boyd Swinburn from University of Auckland. Dr. Lana Vanderlee leads INFORMAS Canada and is the Canadian liaison for INFORMAS. For more information, visit www.informas.org and www.informascanada.com



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 standardized, common tools.²⁷

The Food-EPI framework distinguishes government actions based on 2 components:

1) Policy and 2) Infrastructure Support.

Policy Component

Within the **Policy component**, there are 7 domains or policy areas that can be implemented to improve food environments:

Policy Domain



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)

Policy Indicator

- Composition targets for sodium in packaged foods¹
- Composition targets for added sugars in packaged foods¹
- Composition targets for saturated fats in packaged foods¹
- Composition targets for trans fat in packaged foods¹
- Composition targets for packaged foods²
- Composition targets for out-of-home meals



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

- Nutrition information on labels
- Health and nutrition claim regulations
- Front-of-package labelling on packaged foods
- Menu labelling policies in restaurant settings



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

- Restrict promotion of unhealthy food on broadcast media
- Restrict promotion of unhealthy food on digital and social media¹
- Restrict promotion of unhealthy food on food packaging¹
- Restrict promotion of unhealthy food in sponsorship¹
- Restrict promotion of unhealthy food in public settings¹
- Restrict promotion of unhealthy food in retail settings¹
- Restrict promotion of unhealthy food on non-broadcast media²
- Restrict promotion of unhealthy food in children's settings





Food Prices: Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make nutritious food more accessible and less costly

- Minimize taxes on healthy foods
- Increase taxes on unhealthy foods
- Subsidies favouring healthy foods
- Food-related income support for healthy foods



Food Provision: The government ensure 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

- Food Provision : The government ensures School nutrition policies for healthy food provision
 - Nutrition policies in public sector settings
 - Support and training systems for the public sector
 - Support and training systems for private companies



Food Retail: Government policies and programs are implemented 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)

- Policies and zoning laws for retailers selling less healthy foods
- Policies and zoning laws for retailers selling healthier foods
- In-store availability of healthy and unhealthy foods
- Food availability in food service outlets



Food Trade and Investment:

The government ensures that trade and investment agreements promote 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

- Trade agreement impacts are assessed
- Protect regulatory capacity nutrition

¹ for federal ratings, several indicators in the Composition and Promotion domains were separated into individual policy components to facilitate ratings 2 rated in provincial and territorial ratings only 3 Indicator not rated in this exercise

Infrastructure Support Component

In the **Infrastructure Support component**, there are 6 support domains that outline government practices that enable the implementation of successful government policies and actions. These include:

Infrastructure Support Domain

Infrastructure Support Indicator



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 inequities

- Political support
- Population intake targets
- Dietary guidelines
- Implementation plan linked to national needs
- Priorities for reducing inequities



Governance: The government has 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 inequities

- Restrict commercial influence on policy development
- Use of evidence in food policies
- Transparency in policy development
- Public access to government information



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 inequities, and to measure progress on achieving the goals of nutrition and health plans

- Monitoring food environments
- Monitoring nutrition status and intakes
- Monitoring Body Mass Index (BMI)³
- Monitoring NCD risk factors and prevalence
- Evaluation of major programs³
- Monitoring health inequities



Funding and Resources:

Sufficient funding is invested in actions related to population-level nutrition to create healthy food environments, improved dietary patterns, reductions in obesity, dietrelated NCDs and related inequities

- Budget dedicated to population-level nutrition efforts³
- Research funding for obesity and NCD prevention³
- Health promotion agency³



Platforms for Interaction: There are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (NGOs, 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 inequities

- Coordination mechanism across government
- Coordination mechanism with commercial food sector
- Coordination mechanism with civil society
- Systems-based approach to improve food environments¹



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

- Assessing the health impacts of food policies
- Assessing the health impacts of non-food policies

Global Food-EPI

Over the past 10 years, the Food Environment Policy Index (Food-EPI) has been implemented in over 37 countries. Using adapted methods, country-level analyses continue to support governmental globally in achieving healthier food environments and NCD prevention.

These global efforts foster cross-country comparisons and international policy evaluation worldwide.



1 for federal ratings, several indicators in the Composition and Promotion domains were separated into individual policy components to facilitate ratings 2 rated in provincial and territorial ratings only 3 Indicator not rated in this exercise

Food-EPI Canada

Food-EPI Canada is an ongoing process first conducted in 2017 that aims to continually assess government progress in implementing food environment policies over time. 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, federal government policies were evaluated as well as the policies implemented by provincial and territorial governments. In this report, we will be covering results for the **Nova Scotia** government specifically. Results for the other provincial and territorial governments, along with results for the federal government, can be found at www.informascanada.com/food-epi-canada-2023.

A depiction of the overall Food-EPI Canada process is shown in Figure 1.

Figure 1. Food-EPI Canada 2023 process

- 1 Collection of relevant policy documents and gathering evidence of implementation as of January 1, 2023
- Online ratings of federal, provincial and territorial government policy implementation by National Expert Panel, using evidence gathered in Step 1
- National Expert Panel participates in prioritizing exercise to rank the final policy action and infrastructure recommendations

- January 1, 2023
 - Validation of evidence by government officials and assembling of National Expert Panel
- 4. In-person and online workshops to present rating results and collectively develop preliminary policy and infastructure support recommendations for the provincial/territorial and federal governments
- Data analysis and knowledge translation

Gathering relevant policy documents and validation of evidence

Evidence documents summarizing existing policy and infrastructure support actions relating to food environments that governments had taken **up until January 1, 2023** were developed, using publicly available information. Overall, 13 evidence documents were created—one federal and one per province/territory, excluding Nunavut*—which contained detailed information for each of the Food-EPI indicators. To the extent possible, evidence documents

were validated by relevant government officials to ensure that governmental policy and infrastructure support actions were comprehensively and accurately portrayed.

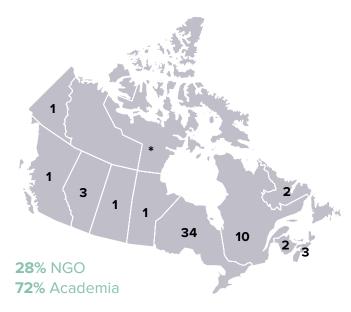
The 2023 Federal and Provincial/Territorial evidence documents that were used for this exercise can be found at www.informascanada.com/food-epi-canada-2023.

National Expert Panel

A National Expert Panel was assembled, including representatives from academia and relevant health and nutrition-related organizations with expertise in food environments, nutrition and/or public health. Experts declared potential conflicts of interest (defined as financial interests related to the food and beverage industry), and only those free of financial conflicts of interest were invited to attend.

Of 103 experts invited to participate, 58 agreed to be part of the panel. Most experts worked at institutions in Ontario (n=34) and Québec (n=10), with others from all provinces and territories except PEI, Northwest Territories and Nunavut. Experts came from various fields, including dietetics, nutrition, public health, health policy, health economics, health law, and epidemiology, among others. A breakdown of experts by region and sector can be found in Figure 2.

Figure 2. Geographic location of experts



Online rating exercise

In Food-EPI Canada 2023, experts were provided with the evidence gathered on policies and infrastructure supports implemented by governments, which were rated against their respective Food-EPI Good Practice Statements, with reference to international best practice benchmarks. Good Practice Statements represent what governments are ideally doing to create healthier, more supportive food environments. A table with the Good Practice Statements and International Benchmarks of some of the most promising practices being implemented globally for each indicator can be found in **Appendix A**.

Experts completed an online survey prior to the workshops to rate the extent to which governments were implementing policies in comparison to the Good Practice Statements. Experts rated the extent of implementation while considering the various stages of the policy cycle (agenda-setting and initiation, policy development, implementation, enforcement, etc.) using a Likert scale of 1 to 5 (0–20%, 20–40%, 40–60%, 60–80% or 80–100% implemented). Policies on the lower end of the scale (0–20%) would likely be weak and/or early in the stages of the policy cycle, and policies rated at 80–100% would address all the criteria in the Good Practice Statement and be fully implemented.

Workshops

A total of 55 experts participated in a full-day in-person workshop in Toronto (n=32) or a half-day online workshop (n=28) in May 2023 (n=5 experts attended both workshops). In addition, 16 research trainees from research groups across the country participated in the exercise as observers. Results from the rating exercise were presented at both the in-person and online workshops, and a set of preliminary policy and infrastructure support recommendations for the provincial/territorial and federal governments were collectively developed and discussed.

*A Note on Nunavut

The current Food-EPI process did not include Nunavut due to the novel food environment in Nunavut and the unique nutrition challenges faced by the Nunavummiut.

Prioritization exercise

Following the workshops, experts completed an online prioritizing exercise to rank a set of refined policy and infrastructure support recommendations according to elements of *importance* and *feasibility/achievability*, as shown in Table 1.

Table 1. Criteria for 'Importance' and 'Feasibility/Achievability' elements

Importance

Need	Size of the implementation gap
Impact	Effectiveness of the action to improve food environments and dietary patterns (including reach and effect size)
Equity	Progressive/regressive effects on reducing diet-related health inequities
Other Positive Effects	For example, protecting rights of children and consumers more broadly
Other Negative Effects	For example, regressive effects, infringement on personal liberties
Feasibility/Achie	evability
Feasibility	How easy or hard the action is to implement
Acceptability	The anticipated level of support from key partners including government, the public, public health and industry
Affordability	The cost of implementing the action

The cost-effectiveness of the action

Data analysis

Efficiency

Results from the rating exercise were used to calculate the mean score for each policy indicator, which were recategorized as:

- **0–25**% as "none or very little implementation"
- 25.1–50% as "low implementation"
- 50.1–75% as "moderate implementation"
- 75.1%–100% as "high implementation"

Several indicators were adjusted to account for response outliers, and inter-rater reliability between indicators was calculated using Gwet's AC2.

Participants ranked a total of 15 Provincial/Territorial Policy Action recommendations and 13 Provincial/Territorial Infrastructure support recommendations that would apply across all or most provinces or territories in order of most important/achievable to least important/achievable. Each recommendation received a weighted score based on the ranked score it received, and the sum of all scores for each recommendation was used to determine the overall ranking.



Nova Scotia Results



For this exercise, experts chose a minimum of 4 policy domains to rate based on their areas of expertise, and rated all provinces and territories for each selected indicator. Within the domains, each indicator was rated by a minimum of 16 experts, with an average of 25 raters per indicator.

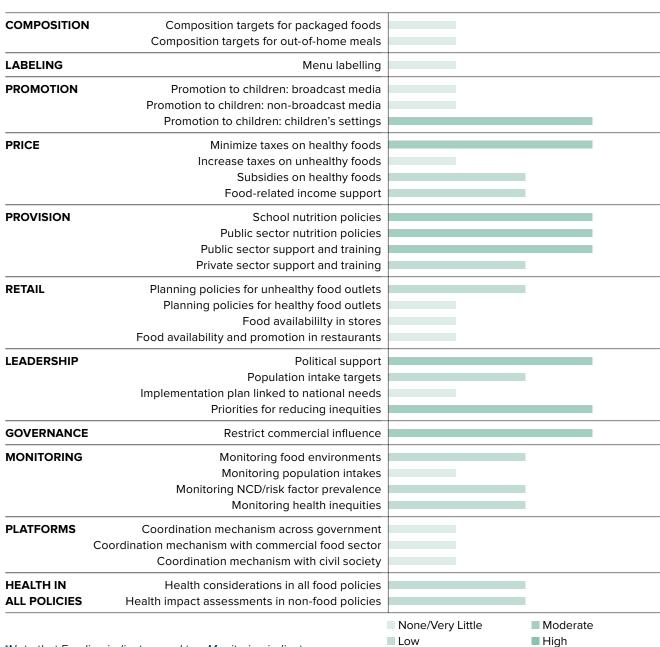
Nova Scotia highlights

Here are the highlights for the Nova Scotia government, which stems from the results of the rating exercise carried out by a group of 56 experts.

- Regulations prohibit the use of promotional materials that advertise specific brands or characters during meals and snacks in all regulated childcare centres
- Nova Scotia Health Authority's (NSHA) Healthy
 Eating Policy supports healthier food environments
 in retail food services with nutrition criteria for foods
 that can be sold in health care facilities, gifts shops,
 foundations, special functions and fundraising
- Recent audit by the Auditor General on the implementation of the provincial School Food and Nutrition policy in schools and establishment of priorities for continuous quality improvement and commitments from relevant governmental departments

Rating scores were categorized as none or very little implementation, low implementation, moderate implementation and high implementation (see Figure 3). The Gwet's AC2 inter-rater reliability coefficient was 0.85 (95%CI 0.76–0.94), which is considered relatively high.

Figure 3. Expert ratings of implementation of 32 policy and infrastructure support indicators for Nova Scotia*



^{*}Note that Funding indicators and two Monitoring indicators were not rated due to the lack of publicly available information or limited relevance in the Canadian context.

Comparisons in Nova Scotia ratings over time



The Food-EPI process was previously conducted in 2017, allowing assessment of changes over time.

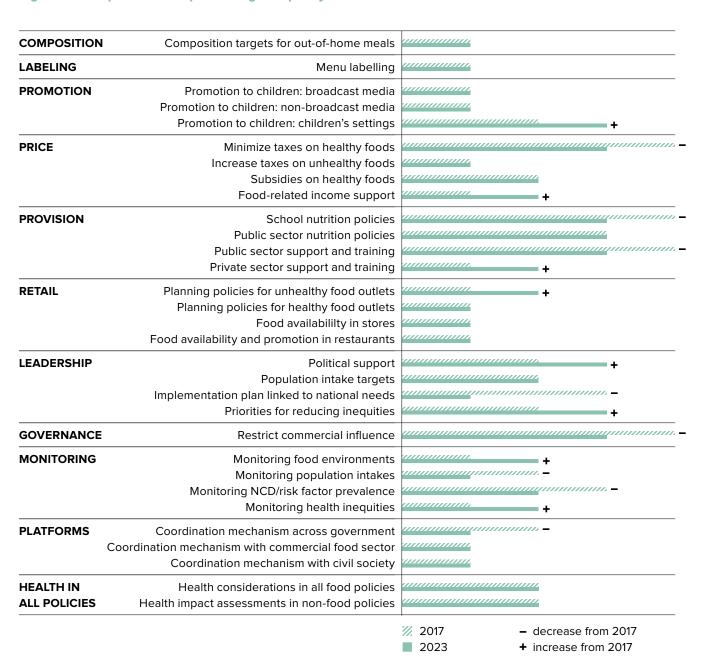
Several changes were made to the Food-EPI process in Canada between 2017 and 2023 that limit direct comparison of the results. In particular, ratings in 2023 were conducted against the Good Practice Statements instead of the International Benchmarks. After evaluating the previous Food-EPI process, Canadian experts suggested that the International Benchmarks were a limitation in the evaluation exercise because of the lack of international examples in some policy areas, as well as the limited empirical evaluation to identify the true 'best practices', thus introducing some subjectivity in the assessment. The use of Good Practice Statements (rather than International Benchmarks) aligns with several other countries conducting the Food-EPI, which have used a similar approach.

Some indicators indicating poorer performance are likely to be a result of the change in methodology. For example, the application of GST on foods has not changed in the provinces and territories, but this was rated lower by experts. In this case, the Best Practice Statement is stronger than the International Benchmark, and so experts gave lower ratings to the same policy. Regardless of these changes, the ratings indicate gaps in current policies.

With this context in mind, Figure 4 outlines some of the areas where there appears to be meaningful progress and other areas where performance has worsened in regard to food environment policy in Nova Scotia.



Figure 4. Comparison of expert ratings for policy indicators in 2017 and 2023 for Nova Scotia



For full results from the Food-EPI Canada 2017 evaluation, please visit: https://labbelab.utoronto.ca/Food-EPI-Canada-2017/

Results for all provinces and territories

Average provincial and territorial rating scores were categorized as none or very little implementation, low implementation, moderate implementation and high implementation. The Gwet's AC2 inter-rater reliability coefficient ranged for all provinces ranged 0.54 to 0.90, with an average inter-rater reliability of 0.81.

Rating scores for each indicator, by province or territory, are presented in Figure 5 and Figure 6 below.

Figure 5. Expert ratings of implementation of 18 policy indicators for all participating provinces and territories





Figure 6. Expert ratings of implementation of 14 infrastructure support indicators for all participating provinces and territories

Indicator	АВ	вс	МВ	NB	NL	NS	NWT	ON	PEI	QC	SK	ΥK
Political support												
Population intake targets												
Implementation plan linked to national needs												
Priorities for reducing inequities												
Restrict commercial influence												
Monitoring food environments												
Monitoring population intakes												
Monitoring NCD/risk factor prevalence												
Monitoring health inequities												
Coordination mechanism across government												
Coordination mechanism with commercial food sector												
Coordination mechanism with civil society												
Health considerations in all food policies												
Health impact assessments in non-food policies												
	259	6	50%	75	%	100%						



Highlights and areas where provinces and territories are implementing particularly innovative policies that could be considered best practice

- Quebec has banned all marketing to children 12 years and under across all broadcast media since 1980
- Ontario has mandatory calorie labelling in chain restaurants
- Newfoundland and Labrador implemented a \$0.20 per litre tax on sugarsweetened beverages and British Columbia changed their taxation policy to now apply provincial sales tax to sugar-sweetened beverages
- Quebec's Politique gouvernmentale de prévention en santé is a multi-sectorial approach that includes a broad vision and ongoing updated implementation plans to ensure longevity, populationlevel indicators for nutrition and other population health outcomes, and investments in evaluation and monitoring over time
- Newfoundland has explicit mentions of healthy eating and making the healthier choice the easier choice in ministerial mandate letters and the Speech from the Throne.
- BC and Manitoba have implemented voucher programs to support lowincome households in purchasing fresh and local fruits and vegetables
- Ontario funds additional data collection of the nationallyrepresentative Canadian Community Health Survey to have better data on diet and health-related outcomes in Ontario





Areas where most provinces and territories were performing well:

- Most provinces have nutrition standards for schools (mandatory or voluntary with the expectation of implementation), although the quality of these policies differs
- 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
- All provinces and territories do not charge additional taxes on basic groceries



Provincial/territorial areas for improvement

Overall, few actions were observed at the provincial and territorial level with regards to:

- Few provinces/territories have current plans or strategies with specific goals related to healthy eating and improving the food environment
- Few provinces/territories have mandatory menu labelling regulations for restaurant foods
- Limited actions have been taken by provinces/territories to support healthy food retail, including both location and access to healthy and less healthy food outlets and promotion of healthy foods within stores and restaurants
- There is limited political leadership regarding efforts to support healthy eating and creating healthier food environments from premiers across most provinces and territories
- Few provinces and territories were doing any monitoring of the food environment



Comparisons in provincial and territorial ratings over time



Keeping in mind the previously described limitations, below outlines some of the areas where there appears to be meaningful progress and other areas where performance has worsened in regard to food environment policy in the Canadian provinces and territories (see Figure 7 and Figure 8).



- More jurisdictions with policies restricting marketing in schools
- More provinces with taxes or considering taxes on sugary drinks.



Indicators where provincial/ territorial performance has worsened:

- Fewer provinces and territories with high ratings for school nutrition policies, as many of these policies haven't been updated since the previous evaluations or have been since demonstrated to not be implemented
- Fewer provinces and territories are acknowledging targets for sodium intakes, a pledge which was made in 2013 (10 years ago)

Figure 7. Variations in provincial and territorial ratings of policy indicators from 2017 to 2023 (increase, decrease or no change)

- indicates no change

Indicator	АВ	ВС	МВ	NB	NL	NS	NWT	ON	PEI	QC	SK	YK
Composition targets for out-of-home foods	▼25%	▼25 %	_	-	-	-	-	_	-	▼25 %	-	_
Menu labelling	-	▲25%	_	-	-	_	-	▼25 %	_	-	_	_
Promotion to children: broadcast media	_	_	_	-	-	_	-	_	-	-	_	_
Promotion to children: non-broadcast media	_	_	_	▲25 %	_	_	-	_	-	▼25 %	_	_
Promotion of children: children's settings	_	▲25%	▲25 %	▲25%	▲50 %	▲25%	-	_	▲25 %	▼25 %	▲25%	_
Minimize taxes on healthy foods	▼25%	▼25 %	▼25 %	▼25%	▼25 %	▼25%	▼25 %					
Increase taxes on unhealthy foods	-	▲50 %	_	-	▲50 %	_	▲25 %	-	-	-	-	_
Subsidies on healthy foods	▼25%	▼25 %	_	▲25%	▲25%	-	▼50 %	_	▲25%	▼25 %	-	▲25 %
Food-related income support	-	-	▲25 %	<u> </u>	▼25 %	▲25%	▲25%	-	▲25%	-	▲25%	_
School nutrition policies	▼25 %	. ▼25 %	▼25 %	▼25 %	▲25 %	▼25 %	▼50 %	▼25 %	▲25%	-	-	_
Public sector nutrition policies	_	▼50 %	▲25 %	-	-	_	-	_	▲25 %	_	▲25%	_
Public sector support and training	▼25 %	. ▼25 %	▼25 %	▼25 %	▼50%	▼25%	▼25 %	▼25 %	_	▲25 %	▲25%	_
Private sector support and training	▼50 %	5 ▼50 %	▲25%	▼25 %	▼25 %	▲25%	_	_	_	-	▲25%	_
Planning policies for unhealthy food outlets	-	_	_	▲25%	_	▲25%	_	▲25%	_	▲25 %	▲25%	_
Planning policies for healthy food outlets	▲25 %	<u> </u>	_	_	-	_	-	_	_	▲25 %	_	_
Food availability in stores	_	-	-	▲25%	_	_	-	-	-	▼25%	_	_
Food availability and promotion in restaurants	_	-	-	-	-	-	-	-	-	_	_	-

Note: Composition targets for packaged foods is not compared as it was not rated in 2017.

Figure 8. Variations in provincial and territorial ratings of infrastructure support indicators from 2017 to 2023 (increase, decrease or no change)

- indicates no change

Indicator	АВ	вс	МВ	NB	NL	NS	NWT	ON	PEI	QC	SK	YK
Political support	▲25%	_	▲25 %	▼25 %	-	▲25 %	▼25 %	▼25 %	▲25%	▲25 %	_	▲25%
Population intake targets	-	_	_	-	_	_	-	▲25%	▲25%	▲25 %	▲25 %	_
Implementation plan linked to national needs	▲25%	▼25 %	▼25 %	▲25%	▼50%	▼50%	-	▼25 %	▼25%	▲50 %	▲25 %	▼25%
Priorities for reducing inequities	-	▲50 %	s -	▼25%	▼25 %	▲25 %	▼25 %	_	▲25%	▲25 %	▲25 %	▼25%
Restrict commercial influence	-	_	▲25%	-	_	▼25%	▲25%	▲25%	▲50 %	-	▲50 %	_
Monitoring food environments	▼25%	▲25 %	-	_	_	▲25 %	-	▲25%	_	▼25 %	_	_
Monitoring population intakes	▼25%	_	▼50%	▼50 %	▼25 %	▼25%	_	▼50 %	▼25%	▲25 %	▲25 %	_
Monitoring NCD/risk factor prevalence	▼25%	_	▼25%	▼50 %	▼50%	▼25 %	_	▼25 %	▼25%	▼25 %	_	▼25%
Monitoring health inequities	-	▼25%	▼25 %	▼25 %	▼25 %	▲25 %	▲25 %	_	_	▲25 %	▲25 %	
Coordination mechanism across government	-	▲25%	<u> </u>	▼25%	▼50%	▼25 %	▼25 %	▼50%	▲25%	▼25 %	_	_
Coordination mechanism with commercial food sector	-	_	▼25%	_	▼25 %	_	-	_	▲25%	-	_	▼25%
Coordination mechanism with civil society	-	-	▼50%	▼50 %	▼50%	_	-	▼50 %	▼25 %	▼25 %	_	
Health considerations in all food policies	▼25%	_	_	_	▲50 %		_	_	_	▼25 %	_	▲25%
Health impact assessments in non-food policies	▼25 %	_	-	-	-	-	-	-	-	▼25 %	-	▲25%

Actions necessary to support healthy food environments

Experts (n=44) conducted an online survey to rank a set of proposed provincial/territorial Policy Action recommendations and Infrastructure Support Action recommendations that would apply across all or most provinces or territories from most important/achievable to least important/achievable. Results from this ranking exercise can be found in Table 2 (Policy Action recommendations) and Table 3 (Infrastructure Support recommendations) below.

From this list of general recommendations for all provincial and territorial governments, tailored policy recommendations for each province and territory were developed based on the indicator ratings and existing policies in place in each jurisdiction. Individualized recommendations were then shared with sub-committees of experts who self-nominated to review recommendations for each province and territory to refine and validate these final recommendations.

Experts recommended 5 Policy Actions and 4 Infrastructure Support Actions for Nova Scotia.

Policy Actions

- Invest in inclusive strategies to support the affordability of healthy foods for those with lower incomes. Recommended approaches include implementing a Basic Income Guarantee and developing and funding effective affordable housing initiatives.
- Prohibit all advertising for less healthy food and beverage products and brands in school settings, as well as in and around other publicly owned or managed settings, including public transport infrastructure, public spaces, and within 500m of schools. Ensure policies developed align with eventual federal policies to restrict marketing of unhealthy food.
- Update the Food and Beverage Standards for Nova Scotia Public Schools Standards and the Food and Nutrition Standards in Regulated Childcare to align with Canada's Dietary Guidelines. Ensure there are reporting mechanisms, incentives for compliance and sufficient support systems to achieve healthy food provision in these settings.
- 4 Ensure that the School Healthy Eating Program is providing comprehensive and providing universal access to school nutrition programs in all schools from kindergarten to grade 12. Ensure that nutrition standards are applied so that foods served are healthier options.
- Improve alignment of food taxes to encourage healthier choices. Advocate for changes in the application of GST/HST such that they are applied to foods in a way that considers nutritional value. In addition, implement a sugary drink levy, publicly report on revenue raised from this tax, and invest any revenue to address health inequities.

Infrastructure Support Actions

- 1 Develop a provincial strategy for healthy eating and diet-related noncommunicable diseases. The strategy should acknowledge the impact of diet-related disease using a coordinated whole-of-government approach to improve population diets, including representation and accountability from each department, and long-term funding commitment.
- **Establish integrated efforts for provincial-level monitoring and reporting** of policy-relevant diet, health and food environment outcomes.
- Establish concrete health-in-all-policies and equityin-all-policies processes across government. This
 should include explicit consideration of the impacts
 of policies on population dietary patterns and health,
 with clear methodologies for conducting these
 impact assessments and definitions of when such
 assessments are required.
- 4 Establish measurable goals to identify and close the gaps in nutrition and health outcomes between Indigenous and non-Indigenous individuals. This should include public, annual progress reports and assess long-term trends, as recommended in the Truth and Reconciliation Commission Calls to Action.

In all provinces and territories, experts recommended a self-evaluation of capacity and resources dedicated to nutrition, and an increase in the government's capacity (number of staff and their capabilities) to undertake actions related to public health nutrition, including greater diversity in skills and lived experience and a focus on Indigenous peoples, fostering collaboration and capacity building across all government departments and agencies.

Table 2. Prioritized list of general policy action recommendations the provincial and territorial governments could take to improve food environments

Provincial/Territorial Policy Action Recommendations

- Develop a strategy to address the affordability of healthy foods which may include measures such as a Basic Income Guarantee for all individuals within the province/territory and policies related to affordable housing.
- 2 Fund a school food nutrition program that is comprehensive and universal in all schools from kindergarten to grade 12 providing resources to establish the required infrastructure support to effectively implement with compliance and monitoring
- Prohibit all advertising for less healthy food and beverages (and related brands) in and around publicly owned or managed settings, including public transport infrastructure, public spaces, and within 500m of schools
- 4 Update existing school and early childhood education policies and nutrition standards to align with Canada's food guide, requiring reporting mechanisms, incentives for compliance with sufficient support systems to achieve healthy and environmentally sustainable food provision in school settings
- 5 Align provincial/territorial food taxes with nutrition recommendations to ensure that nutritious foods are not taxed and nutrient-poor foods are taxed
- 6 Implement a sugary drink levy on all sugary drinks, and invest the revenue to address social inequities in health
- Provide evidence-based resources to support the implementation of policies and programs that aim to achieve healthier early childhood education and school food environments and increase food literacy among professionals working in these environments
- Implement clear, consistent policies to provide and promote healthy and environmentally sustainable food choices in food service activities in settings under government control (in public sector workplaces, and in government-owned, funded or managed services), with a strong focus on implementation, support and compliance monitoring
- 9 Require all organizations, such as community groups and sports teams to remove all promotion and sponsorship related to less healthy food and beverages (and related brands) as a condition of receiving funding
- 10 Apply existing FOP high-in labelling regulations for sodium, sugar and saturated fat to menus of chain restaurants
- 11 Prohibit the promotion of less healthy foods and drinks in retail outlets and on online retailers, including requirements for healthy checkouts and restrictions on temporary price reductions / promotions on less healthy foods and drinks, coupled with policies to increase in-store marketing of healthy foods and drinks
- 12 Develop and implement healthy and environmentally sustainable food provision guidelines policies for community settings and events, including sport and recreation facilities and community events (government-owned, funded or managed)
- Develop guidelines and offer co-ordinated support to local governments on ways to improve the availability of healthy foods and decrease the availability and promotion of less healthy foods in food retail outlets and for online retailer
- 14 Prohibit sales of 'energy drinks' (formulated caffeinated beverages) to children and young people (under 18 years)
- 15 Explore levers to prohibit offers on unlimited sugary drinks for free or at fixed prices in restaurants

Table 3. Complete list of prioritized infrastructure support recommendations the provincial and territorial government could take to improve food environments

Provincial/Territorial Infrastructure Support Recommendations

- Develop a provincial/territorial strategy for diet-related noncommunicable diseases that acknowledges the impact of diet-related disease using a coordinated whole-of-government approach to improve population diets, including representation and accountability from each department, and long-term funding commitment to achieve sustained outcomes for physical and mental health
- Establish integrated efforts for provincial-level monitoring for policy-relevant diet, health and food-environment outcomes, or conduct provincial-level analysis of key outcomes using available data when possible
- 3 Establish concrete health-in-all-policies and equity-in-all-policies processes across government, including explicit consideration of the impacts of policies on population nutrition and health
- Increase the capacity (number of staff and their capabilities) of the government to undertake actions related to public health nutrition, including greater diversity and a focus on Indigenous peoples, fostering collaboration and capacity building across all government department and agencies
- Establish measurable goals to identify and close the gaps in health outcomes between Indigenous and non-Indigenous communities, and publish annual progress reports and assess long-term trends, as recommended in the Truth and Reconciliation Commission Calls to Action
- 6 Establish publicly stated P/T population-level intake targets for sodium, saturated fat, free sugar, and vegetables and fruit, and monitor progress over time
- 7 Include robust evaluation (including nutrition-related outcomes) in the design and routine review of nutrition-related programs and policies, with results made publicly available
- 8 Establish a Food and Nutrition Committee with balanced representation from government, academia, community groups and non-governmental organizations with established practices to prevent participation of those with potential conflict of interest
- Ensure a robust system to manage conflict of interest in all food policy development ensure openness and transparency in the policy making process that includes: 1) extending limits on food industry involvement in policy making beyond Canada's food guide to all public health nutrition-related policies, including food marketing; 2) applying the transparency policies being applied to the Healthy Eating Strategy to the development of all food and nutrition policies; 3) posting all comments submitted to policy consultations and regulatory changes publicly, as is done in the US Dockets system; and 4) improving the quality of data available in communication reports in the Lobbying Registry including amounts spent on lobbying activities and content of discussions
- 10 Develop guidelines for Health Impact Assessments in food and non-food policies with a mechanism for implementation and support to implement
- 11 Transparently communicate the resources dedicated to public health nutrition prevention policies and programs, including human resources and program funding
- 12 Establish mechanisms and resources for vertical integration of key food environment policy governmental partners to improve policy synergies
- 13 Establish adequately-resourced platforms with balanced representation from government with academic, community groups and non-governmental organizations with established practices to prevent participation of those with potential conflict of interest

Evaluation, challenges and limitations



Strengths of the Food-EPI process

Internationally- applied methods	This research used internationally developed and applied methods created by leading experts in food environment policy and implemented in over 55 countries to date.
Broad expertise	A large National Expert Panel with a broad range of expertise from across the country from a variety of types of organizations.
Comparisons to best practices	Canadian policies were compared to the Food-EPI Good Practice Statements instead of the International Benchmarks used in 2017. This approach is now increasingly common in other countries using the Food-EPI, as International Benchmarks are not always comprehensive and can lack empirical evidence of impact.
Conflict of interest	All potential participants declared financial conflicts of interests, and those with a potential conflicts were not permitted to participate.
Transparency	Government actors were kept up to date throughout the process to increase transparency.

Challenges of the Food-EPI Canada Process

Diverse expertise required	Typically, experts have expertise in one or two food environment domains, and few experts have knowledge across all food environment policy areas. As a result, each expert brings a certain lens that is applied to their evaluation of the importance and achievability of these actions. This may have introduced some level of individual bias in each individual prioritization exercise; however, using average scores may help to minimize this individual influence.
Broad scope	In Canada, responsibility for many policies that can influence food environments is split between federal and provincial/territorial governments, which increases the scope of this work. Shared regulatory responsibility for some policy domains places policy responsibility in the hands of both levels of government. The Food-EPI process highlights the reality that leadership is needed at both levels to successfully develop and implement policy. Also, this Food-EPI process did not include local or municipal level policies, which are known to play a significant role in food environment policy.
Differences in interpretation	The Food-EPI process requires experts to apply knowledge and experience in food environment policy to conduct the ratings, which can lead to varied interpretation of both Food-EPI Good Practice Statements and policy implementation. Group discussions during workshops aimed to clarify differences in interpretation.
Recommendations reviewed by small samples of experts	Only a small group of experts reviewed each set of provincial or territorial recommendations, who may have been less familiar with the current policy context. All recommendations were reviewed by the report authors.

Implications for policy for Nova Scotia

Bold and comprehensive policy actions are needed to reduce the burden of unhealthy dietary patterns and noncommunicable diseases in Canada. The results from this report show that there are important actions that the Government of Nova Scotia can take to improve the dietary patterns of the Nova Scotia population. Although there are considerable efforts needed from all provincial, territorial and federal decision makers to improve food environments in Canada, this report highlights concrete actions that the Nova Scotia government could take to improve dietary patterns and reduce dietrelated noncommunicable diseases. These policies should be pursued in concert with federal and municipal strategies to create healthier food environments, ensuring alignment and synergism. The recommendations underscore the importance of the social determinants of health, and the role that strong social policy can play in improving the health of Canadians by improving access to healthier diets. We hope that this research will help to inform the food and nutrition policy agenda in Nova Scotia and in Canada more broadly.

What's next?

We aim to repeat the Food-EPI Canada process in 2–3 years, to examine progress in implementing policy and infrastructure to improve food environments. This ongoing monitoring of policies and efforts will increase accountability of governments to implement policies, and help establish a roadmap for food environment policies in Canada.

Outcome Evaluation

A post-workshop evaluation form was completed by 44 experts and observers, to evaluate both the Food-EPI process as well as personal development of the Expert Panel. Overall:

90%

of participants agreed or strongly agreed that their knowledge of food environments and related food and nutrition policies increased

88%

of participants agreed or strongly agreed that they increased their knowledge of best practices and actions other governments are taking internationally to improve food environments

61%

agreed or strongly agreed that they had made new professional connections or strengthened existing relationships

88%

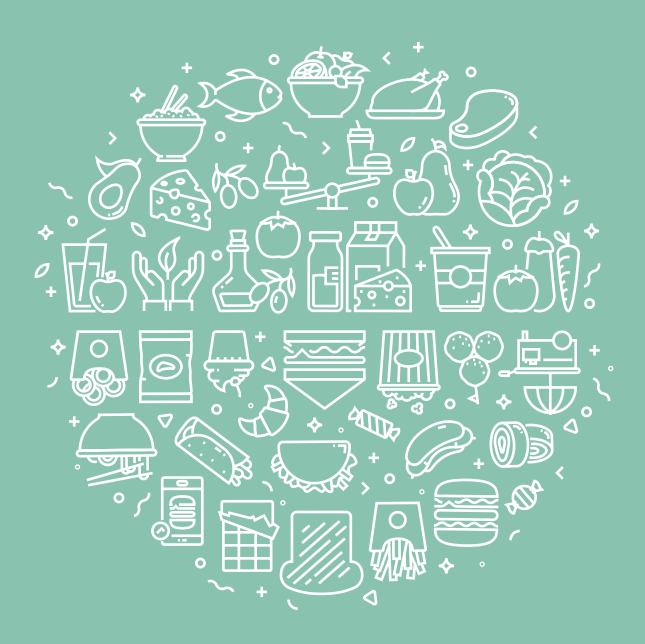
agreed or strongly agreed that the Food-EPI Canada process was likely to contribute to beneficial policy change

95%

felt it was important to repeat the Food-EPI to monitor government progress

93%

stated that they would definitely or possibly like to be involved in the Food-EPI project again in 2-3 years



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Appendix A

Indicators, Good Practice Statements and examples of International Benchmarks

Indicator	Good Practice Statement	Sample of International Benchmarks
Composition targets for sodium in processed foods	The government has established food composition targets/ standards for processed foods for the content of the sodium in relevant foods or food categories	ARGENTINA (2013): mandatory maximum sodium levels in various food categories SOUTH AFRICA (2013): mandatory maximum sodium levels permitted in 13 food categories
Composition targets for added sugars in processed foods ¹	The government has established food composition targets/standards for processed foods for the content of the added sugars in relevant foods or food categories	PORTUGAL (2019): voluntary reduction target for sugar (7-10%) in various food categories
Composition targets for saturated fats in processed foods ¹	The government has established food composition targets/ standards for processed foods for the content of saturated fat in relevant foods or food categories.	NORWAY (2016): partnership signed between Norwegian health authorities and the food industry with specific goals related to reducing the population's saturated fats intake (from 15 to 13% of total energy) AUSTRALIA (2020): Healthy Food Partnership has set voluntary food product reformulation targets for the food industry for saturated fats
Composition targets for trans fat in processed foods ¹	The government has established food composition targets/standards for processed foods for trans fat in relevant foods or food categories	CANADA (2018): prohibits the use of Partially Hydrogenated Oils (PHOs) in foods
Composition targets for processed foods ²	The government has established food composition targets/standards for processed foods for the content of the nutrients of concern in certain foods or food groups if they are major contributors to population intakes of these nutrients of concern (trans fats and added sugars in processed foods, salt in bread, saturated fat in commercial frying fats)	ARGENTINA (2013): mandatory maximum sodium levels in various food categories PORTUGAL (2019): voluntary reduction target for sugar (7-10%) in various food categories NORWAY (2016): partnership signed between Norwegian health authorities and the food industry with specific goals related to reducing the population's saturated fats intake (from 15 to 13% of total energy) CANADA (2018): prohibits the use of Partially Hydrogenated Oils (PHOs) in foods

Composition targets for out-of-home meals

The government has established food composition targets/standards for out-of-home meals in food service outlets for the content of the nutrients of concern in certain foods or food groups if they are major contributors to population intakes of these nutrients of concern (trans fats, added sugars, salt, saturated fat)

CANADA (2018): prohibits the use of Partially Hydrogenated Oils (PHOs) in foods ARGENTINA (2013): Mandatory maximum sodium levels in various food categories NORWAY (2016): partnership signed

between Norwegian health authorities and the food industry with specific goals related to reducing the population's salt, added sugar and saturated fats intake

Mandatory ingredient lists/ nutrient declarations

Ingredient lists and nutrient declarations (including warning labels) in line with Codex recommendations are present on the labels of all packaged foods **MANY COUNTRIES**: producers and retailers are required by law to provide a comprehensive nutrient list on pre-packaged food products (with limited exceptions)

Regulatory systems for health and nutrition claims

Robust, evidence-informed regulatory systems are in place so that consumers are protected against unsubstantiated and misleading nutrition and health claims **AUSTRALIA/NEW ZEALAND (2018)**: law in place that regulates the use of nutrition content and health claims on food labels

Front-of-package labelling on packaged foods

A single, consistent, interpretive, evidence-informed front-of-pack (FOP) supplementary nutrition information system, which readily allows consumers to assess a product's healthiness, is applied to all packaged foods **UK** (2013): voluntary 'traffic light' labelling for use on the front of pre-packaged food products **AUSTRALIA/NEW ZEALAND** (2014): government approved a 'Health Star Rating' (HSR) system as a voluntary scheme for industry adoption **CHILE** (2012): all foods that exceed the established limits for nutrients of concern need to have a front-of-package black and white warning message inside a stop sign that reads "HIGH IN" followed by CALORIES, SATURATED FAT, SUGAR or SODIUM, as well as "Ministry of Health".

Menu labelling policies in restaurant settings

A consistent, single, simple, clearlyvisible system of labelling the menu boards of all quick service restaurants (e.g., fast food chains) is applied by the government, which allows consumers to interpret the nutrient quality and/or energy content of foods and meals on sale SOUTH KOREA (2010): the Special Act on Safety Control of Children's Dietary Life has required all chain restaurants with 100 or more establishments to display nutrient information on menus USA (2018): the Patient Protection and Affordable Care Act requires that all chain restaurants with 20 or more establishments display energy information on menus

Restrict promotion of unhealthy food on broadcast media

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through broadcast media (TV, radio) **QUEBEC, CANADA (1980)**: prohibits all advertising to children under 13 years through all media

Indicator	Good Practice statement	Sample of International Benchmarks
Restrict promotion of unhealthy food on digital and social media	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through digital and social media	PORTUGAL (2019): restricts advertising to children under age 16 for foods high in nutrients of concern (applies to online content intended for this age group)
Restrict promotion of unhealthy food on food packaging ¹	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through food packaging	CHILE (2016): restricts advertising to children under age 14 for foods high in nutrients of concern (including on food packaging)
Restrict promotion of unhealthy food in sponsorship	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through sponsorship	AMSTERDAM, NETHERLANDS (2016): prohibits sponsorship by unhealthy food or drink manufacturers of children sports events WESTERN AUSTRALIA (2010) and VICTORIA, AUSTRALIA (2020): "Healthway" will generally not engage in any funding agreements with organisations with co-sponsors that promote unhealthy brands or messages
Restrict promotion of unhealthy food in public settings	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children in public settings (e.g., outdoor advertising and public transport advertising)	CHILE (2015): ten municipalities adopted legislations banning outdoor marketing one block around schools PORTUGAL (2019): restricts advertising to children under age 16 for foods high in nutrients of concern in and around many public spaces where children gather AMSTERDAM, NETHERLANDS (2013): banned billboard advertisements for unhealthy products targeted at children up to 18 years of age in metro stations
Restrict promotion of unhealthy food in retail settings ¹	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children in retail settings (point-of-sale in supermarkets or restaurants)	CHILE (2016): restricts advertising of unhealthy foods targeting children in shop windows and on point-of-sale boards.
Restrict promotion of unhealthy food on non- broadcast media ²	Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through non-broadcast media (e.g., Internet, social media, food packaging, sponsorship, outdoor and public transport advertising)	PORTUGAL (2019): restricts advertising to children under age 16 for foods high in nutrients of concern online and in and around many public spaces where children gather CHILE (2012): restricts advertising to children under age 14 for foods high in nutrients of concern AMSTERDAM, NETHERLANDS (2016): prohibits sponsorship by unhealthy food or drink manufacturers of children sports events

Indicator	Good Practice statement	Sample of International Benchmarks
Restrict promotion of unhealthy food in children's settings	Effective policies are implemented by the government to ensure that unhealthy foods are not commercially promoted to children in settings where children gather (e.g., preschools, schools, sport and cultural events)	CHILE (2015): restricts advertising to children under age 14 for foods high in nutrients of concern on school grounds, with ten municipalities adopted legislations banning outdoor marketing one block around schools PORTUGAL (2019): restricts advertising to children under age 16 for foods high in nutrients of concern in in pre-schools, schools, sports, cultural and recreational activities organised by these, in public playgrounds and within a radius of 100 metres of all of these spaces
Reduce taxes on healthy foods	Taxes or levies on healthy foods are minimized to encourage healthy food choices where possible (e.g., low or no sales tax, excise, value-added or import duties on fruit and vegetables)	MANY COUNTRIES: goods and services tax (GST) exemption exists for basic foods, including fresh fruits and vegetables TONGA (2013): reduced import duties for imported fish to increase affordability FIJI (2013): removed excise duty on imported fruits, vegetables and legumes
Increase taxes on unhealthy foods	Taxes or levies on unhealthy foods (e.g., sugar-sweetened beverages, foods high in nutrients of concern) are in place and increase the retail prices of these foods by at least 10% to discourage unhealthy food choices where possible, and these taxes are reinvested to improve population health	MANY COUNTRIES: more than 50 countries around the globe have varying taxes applied to sugar sweetened beverages, energy drinks and similar products ETHIOPIA (2020): excise tax on food products such as sugar-sweetened beverages and fats and oils with high levels of saturated or trans fats
Subsidies favouring healthy foods	The intent of existing subsidies on foods, including infrastructure funding support (e.g. research and development, supporting markets or transport systems), is to favour healthy rather than unhealthy foods in line with overall population nutrition goals	SINGAPORE (2018): provides transitional support to oil manufacturers and importers to help them increase the sale of healthier oils to the food service industry
Food-related income support for healthy foods	The government ensures that food-related income support programs are for healthy foods	UK (2006): program provides pregnant women and/or families with young children with weekly vouchers to spend on healthy foods including milk, plain yoghurt, and fruit and vegetables.

Indicator

Good Practice statement

Sample of International Benchmarks

School nutrition policies for healthy food provision

The government ensures that there are clear, consistent policies (including nutrition standards) implemented in schools and early childhood education and care services for food service activities (canteens, food at events, fundraising, promotions, vending machines etc.) to provide and promote healthy food choices

CHILE (2016): prohibits foods and beverages that exceed limits for calories, saturated fat, sugar and sodium from being sold in schools

FINLAND (2017): nutrition guidelines provide food and nutrient recommendations for salt, fibre, fat, and starch content for school meals and does not allow sugar sweetened beverages to be served at school

BRAZIL (2001): school food procurement law bans the procurement of unhealthy drinks and limits the amount of processed foods purchased by schools **JAMAICA** (2018): prohibits beverages that exceed limits for sugar to be sold in children public educational institutions

AUSTRALIA (2007–2015): mandatory school standards that ban or heavily restrict certain foods identified as unhealthy implemented in six states and territories

Nutrition policies in public sector settings

The government ensures that there are clear, consistent policies in public sector settings for food service activities (canteens, food at events, fundraising, promotions, vending machines, public procurement standards etc.) to provide and promote healthy food choices

LATVIA (2012): established salt limits for all foods served in hospitals and long-term social care institutions

SAN FRANCISCO, **USA** (2016): Food and drinks sold in vending machines on city property must meet specified nutrition requirements for certain nutrients of concern

BRAZIL (2016): procurement guidelines (based on the Brazilian Food Guide) in place for food served or sold in the Ministry and its entities

NEW SOUTH WALES, AUSTRALIA (2017): NSW health facilities created a healthy food and drink framework that applies to all food outlets where food and drink is available to visitors and staff THE NETHERLANDS (2017): nutritional guidelines designed to make workplaces healthier PORTUGAL (2014): Provides basic

guidelines for the preparation of healthy menus for social care entities.

Support and training systems: public sector

The government ensures that there are good support and training systems to help schools and other public sector organisations and their caterers meet the healthy food service policies and guidelines

JAPAN (2005): the Basic Law on Shokuiku (shoku='diet', iku='growth') stipulates that at least one dietitian should be assigned at any facility with mass food service. In schools, diet and nutrition teachers are responsible for supervising school lunch programs and formulating menus

Support and training systems: private companies

The government actively encourages and supports private companies to provide and promote healthy foods and meals in their workplaces **VICTORIA, AUSTRALIA (2016)**: guide available to public and private workplaces that supports healthier food provision

Indicator	Good Practice statement	Sample of International Benchmarks
Policies and zoning laws: unhealthy foods	Zoning laws and related policies provide robust mechanisms and are being used, where needed, by local governments to place limits on the density or placement of quick serve restaurants or other outlets selling mainly unhealthy foods in communities	SOUTH KOREA (2010): 'Green food zones' around 200 m of schools can sell healthy foods only
Policies and zoning laws: healthy foods	Zoning laws and related policies provide robust mechanisms and are being used, where needed, by local governments to encourage the availability of outlets selling fresh fruit and vegetables	USA (2014): provides grants to states to attract healthier retail outlets in underserved areas
In-store availability of healthy and unhealthy foods	The government ensures existing support systems are in place to encourage food stores to promote the in-store availability of healthy foods and to limit the in-store availability of unhealthy foods	USA (2009): the WIC program requires authorized stores to stock healthier products
Food availability in food service outlet	The government ensures support systems are in place to encourage food service outlets to increase the promotion and availability of healthy foods and to decrease the promotion and availability of unhealthy foods	UK (2020): restrict the promotion by retailers of pre-packed products that are high in fat, sugar and salt SINGAPORE (2011): program to support food vendors with healthier options FRANCE (2017): Banned unlimited free refills in restaurants
Trade agreement impacts assessed	The government undertakes risk impact assessments before and during the negotiation of trade and investment agreements to identify and evaluate the direct and indirect impacts of such agreements on population nutrition and health	USA/EU: Environmental impact assessments sometimes incorporate Health Impact Assessments
Protect regulatory capacity – nutrition	The government adopts measures to manage investment and protect their regulatory capacity with respect to public health nutrition	GHANA (early 1990s): limits the level of fats in various type of imported meats
Political support	There is strong, visible, political support (at the Head of State / Cabinet level) for improving food environments, population nutrition, diet-related NCDs and their related inequalities	BRAZIL (2014): Minister of Health support for new dietary guidelines CARICOM COUNTRIES: NCD commissions in 6 member states

Indicator	Good Practice statement	Sample of International Benchmarks
Population intake targets	Clear population intake targets have been established by the government for the nutrients of concern to meet WHO and national recommended dietary intake levels	BRAZIL (2011): National targets for fruit and vegetable consumption and salt intake
Dietary guidelines	Clear, interpretive, evidence-informed food-based dietary guidelines have been established and implemented	BRAZIL (2014): national dietary guidelines address healthy eating from a cultural, ethical and environmental perspective
Implementation plan linked to national needs	There is a comprehensive, transparent, up-to-date implementation plan (including priority policy and program strategies) linked to state/national needs and priorities, to improve food environments, reduce the intake of the nutrients of concern to meet WHO and national recommended dietary intake levels, and reduce diet-related NCDs	IRELAND (2016): Created a policy and action plan that recommends steps to reverse obesity trends and prevent health complications
Priorities for reducing inequities	Government priorities have been established to reduce inequalities or protect vulnerable populations in relation to diet, nutrition, obesity and NCDs	NEW ZEALAND (1993): reports estimates from health and nutrition surveys by ethnic group and area level deprivation index AUSTRALIA (2019): the National Indigenous Reform Agreement (Closing the Gap)
Restrict commercial influence on policy development	There are robust procedures to restrict commercial influences on the development of policies related to food environments where they have conflicts of interest with improving population nutrition	USA (1995 and 2007): federal and state lobby registries which must disclose amount spent on lobbying NEW ZEALAND (2022): guidelines for Departments responsible for regulatory processes with commercial implications
Use of evidence in food policies	Policies and procedures are implemented for using evidence in the development of food policies	AUSTRALIA (1992): the National Health and Medical Research Council Act 1992 requires development of evidence-based guidelines
Transparency in policy development	Policies and procedures are implemented for ensuring transparency in the development of food policies	CANADA (2016): Health Canada publishes a table of all correspondence and meetings with stakeholders
Access to government information	The government ensures public access to comprehensive information and key documents (e.g. budget documents, annual performance reviews and health indicators) related to public health nutrition and food environments	AUSTRALIA (1982): the Freedom of Information Act

Indicator	Good Practice statement	Sample of International Benchmarks
Monitoring food environments	Monitoring systems, implemented by the government, are in place to regularly monitor food environments (especially for food composition for nutrients of concern, food promotion to children, and nutritional quality of food in schools and other public sector settings), against codes / guidelines / standards / targets	MANY COUNTRIES: food composition databases available
Monitoring nutrition status and intakes	There is regular monitoring of adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels	USA (1959–present): The NHANES assesses health and nutritional status of adults and children annually
Monitoring Body Mass Index (BMI) ³	There is regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements	UK (2006–present): measures all children in England in the first and last years of primary school.
Monitoring NCD risk factors and prevalence	There is regular monitoring of the prevalence of NCD risk factors and occurrence rates (e.g. prevalence, incidence, mortality) for the main diet-related NCDs	OECD COUNTRIES: have regular, robust prevalence, incidence and mortality data for diet-related NCDs and risk factors
Evaluation of major programs ³	There is sufficient evaluation of major programs and policies to assess effectiveness and contribution to achieving the goals of the nutrition and health plans	USA (2012): the NIH provides funding for natural experiments evaluating a new policy or program
Monitoring health inequities	Progress towards reducing health inequalities or health impacts in vulnerable populations and social determinants of health are regularly monitored	NEW ZEALAND (1993): all annual surveys report estimates by subpopulations (incl. ethnicity)
Population nutrition budget ³	The 'population nutrition' budget, as a proportion of total health spending and/or in relation to the diet-related NCD burden is sufficient to reduce diet-related NCDs	NEW ZEALAND (2008–2009): funding for population nutrition was estimated at 0.6% of the health budget
Research funding for obesity & NCD prevention ³	Government funded research is targeted for improving food environments, reducing obesity, NCDs and their related inequalities	AUSTRALIA (1997): obesity, diabetes and cardiovascular health have been designated as National Health Priority Areas

Indicator	Good Practice statement	Sample of International Benchmarks
Health promotion agency ³	There is a statutory health promotion agency in place, with a secure funding stream, that includes an objective to improve population nutrition	VICTORIA, AUSTRALIA (1987): the Victorian Health Promotion Foundation was created in 1987
Coordination mechanism across government	There are robust coordination mechanisms across departments and levels of government (national, state and local) to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies across governments	FINLAND (1954): inter-governmental nutrition council composed of representatives from different relevant government authorities
Platforms for government and food sector interaction	There are formal platforms between government and the commercial food sector to implement healthy food policies	UK (2010–2015): the UK 'Responsibility Deal' initiative brought together food companies and NGOs to voluntarily take steps to address NCDs
Platforms for government and civil society interaction	There are formal platforms for regular interactions between government and civil society on food policies and other strategies to improve population nutrition	BRAZIL (1993–1994, 2003–2019): the National Council of Food and Nutrition Security (CONSEA)
Systems-based approach to improve food environments	The government leads a broad, coherent, effective, integrated and sustainable systems-based approach with local organisations to improve the healthiness of food environments at a national level	NEW ZEALAND (2015–present): Healthy Families NZ
Assessing the health impacts of food policies	There are processes in place to ensure that population nutrition, health outcomes and reducing health inequalities or health impacts in vulnerable populations are considered and prioritised in the development of all government policies relating to food	SLOVENIA (2001): undertook a Health Impact Assessment (HIA) to assess the health effects of national agricultural policy
Assessing the health impacts of non-food policies	There are processes (e.g. HIAs) to assess and consider health impacts during the development of other non-food policies	FINLAND (since the early 1970s): has worked towards health-in-all- policies for over four decades

¹ for federal ratings, several indicators in the Composition and Promotion domains were separated into individual policy components to facilitate ratings

² rated in provincial and territorial ratings only

³ Indicator not rated in this exercise







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