Canadian policy interventions supporting healthy eating in schools

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FLEdGE (Food: Locally Embedded Globally Engaged) and Food Secure Canada

This discussion paper was developed as a part of a community-academic collaborative project between Food Secure Canada and FLEdGE (Food: Locally Embedded, Globally Engaged) to map the existing agri-food policy landscape in Canada. The views presented are those of the author and do not necessarily present those of either FSC or FLEdGe.



Table of Content

Introduction	3
Methodology	4
Jurisdictional challenges over school food	5
Federal jurisdiction	5
Provincial and sub-provincial jurisdictions	6
Healthy food availability in schools	7
Nutrition standards	7
Public investment in school food programs	8
Comprehensive farm-to-school programs	9
Monitoring, evaluation and barriers	10
Discussion	12
Good practices	12
Gaps and obstacles	12
Opportunities	12
Bibliography	14

Introduction

The 1986 Ottawa Charter for Health Promotion was an international landmark to increase national commitments in health prevention that set the goal of Health for All by the year 2000. The Centre for Chronic Disease Prevention indicates the sizable challenges facing Canada: "Treatment of chronic disease consumes 67% of all direct health care costs and costs the Canadian economy \$190 billion annually", a figure that is predicted to increase in the years to come. Long-term thinking and strategic investments are needed to holistically improve the population's health and well-being.

The focus of this discussion paper is on children and youth, who are often the main populational target of government health promotion strategies and programs. Indeed, "These years are key periods of biological and social change, laying the foundations for future adult health and economic well-being" (Langford et al., 2015). Children spend most of their waking hours in school, from child care services to primary and secondary institutions. Schools therefore play a critical role in improving children's health and well-being, knowledge and skills, and sense of belonging.

The first section of this discussion paper addresses the jurisdictional authorities, and challenges, over healthy eating in educational settings. As with other aspects of food and social policy in Canada, the landscape has been quite uneven since the end of the Canadian Assistance Plan in 1996. The policy landscape indicates that most school food programs² are situated at the intersection of the health and education sectors. In some provinces, such as in Quebec and Manitoba, programs were originally framed from a poverty reduction standpoint. Health and education are provincial responsibilities and are, in many cases, organized through regional authorities. There have, however, been modest attempts at the national level to develop a "common vision, shared responsibilities, and harmonized actions" (JCHS, 2016).

The second section looks at school nutrition standards, public investment in school food programs and farm-to-school pilot programs to identify good practices and barriers. The final section looks at evaluation and monitoring.

One limitation in drafting this paper was to access up-to-date data on the scope of government intervention. A further limitation of this paper is its focus on provincial and federal policies, with less emphasis on local government³ or institutional-level change (e.g. schools and school districts).

This paper draws on the Health Promoting Schools (HPS) framework, an approach that has been promoted by the WHO and that is generally privileged by FPT government. A HPS is a "school that is constantly strengthening its capacity as a healthy setting for living, learning and working." HPS is a comprehensive and coordinated approach comprised of three pillars: (I) Curriculum, teaching and learning; (2) School organisation, ethos and environment; and (3) Partnerships and services. The HPS framework is meant to complement the educational curriculum by providing opportunities for hands-on

¹ "Against the Growing Burden of Disease", a presentation by Kimberly Elmslie, Director General of the Centre for Chronic Disease Prevention affiliated with the Public Health Agency of Canada (PHAC) at the 22nd Canadian Conference on Global Health (November 5-7, 2015) http://www.ccgh-csih.ca/assets/Elmslie.pdf.

² Generally involves the preparation and distribution of healthy meals at different times of the day for low to no cost with a nutritionist or community worker. Broadly speaking, it can also imply skill building (cooking, gardening).

³ Municipalities can play a role through urban planning, zoning and bylaws to make it difficult for new convenience stores and fast food outlets to open around schools and therefore improve the surrounding food environments of students (Mah et al., 2016; Winson et al., 2012).

learning, physical activity and recreation. Further, it moves away from individual and behavioral approaches and focuses instead on the school environment, of which food is an essential part. HPS principles pay particular attention to the connections and partnerships between schools, teachers, staff, parents and the broader community, including health services and community centres, to develop healthy living outcomes for pupils (McIsaac et al., 2012).

From a policy perspective, there are several ways in which healthy food is integrated into the HPS approach. McKenna's literature review (2010) provides an overview of five policy options to encourage healthy food in schools: (1) food availability, which includes nutrition standards, school meal programs and contracts (i.e. requests for proposals); (2) the food environment (i.e. marketing, fast food outlets near schools and staff availability during lunch hours); (3) health education; (4) health services and counselling; and (5) family and community outreach. This background paper specifically looks at healthy food availability in schools, although other policy options are discussed as relevant.

Methodology

This discussion paper is one of six discussion papers on the Canadian food policy and institutional landscape. The research was the result of a partnership between Food Secure Canada⁴ (FSC) and Food: Locally Embedded, Globally Engaged (FLEdGE), led out of Wilfrid Laurier University's Centre for Sustainable Food Systems.

The research questions, analysis and results were co-developed with community leaders in the FSC network. The starting point of the research was to better understand enabling frameworks, good practices, gaps and obstacles in provincial and federal policy interventions.

The topic of this discussion paper was selected following a short survey with provincial/territorial food policy networks. The concept of Health Promoting Schools aligns with FSC's direct engagement on the issue through the Coalition for Healthy School Food⁵ and the Eat Think Vote campaign (2015).

In the context of this paper, we draw from semi-structured interviews with four informants from British Columbia, Alberta, Nova Scotia and personal communications with an informant from New Brunswick. To complete these interviews and provide a more complete policy context, we consulted relevant government websites, academic and grey literature. Furthermore, we designed two policy summary tables (see Annexes 3 and 4), which review the main policy instruments and institutional arrangements at both the federal and inter-provincial/territorial level.

We also relied on informal scoping conversations and available documentation. The maps were used in two workshops (October 2016) and were sent to FSC's provincial/territorial food policy networks, which provided opportunity for feedback. A first draft of this discussion paper was also reviewed by

⁴ A national coalition of individuals and organizations working towards zero hunger, healthy and safe food, and sustainable food systems. See: <u>foodsecurecanada.org</u>

⁵ The Coalition for Healthy School Food is a group of more than 30 organisations from across Canada seeking federal investment in a national, universal, healthy school food program. See: foodsecurecanada.org/coalitionforhealthyschoolfood

Rachel Engler-Stringer, Associate Professor in the College of Medicine at the University of Saskatchewan and Sasha McNicoll, Coordinator of the Coalition for Healthy School Food.⁶

As with the other papers, we paid particular attention to provincial/territorial and federal jurisdictions and good practices upon which a joined-up approach to food policy could build. There is less emphasis on school-level, municipal or Indigenous governance.

The reader can also refer to the annexes, in which a policy table and maps summarize and illustrate the discussion paper. The policy matrix provides both a federal and inter-provincial outlook.

Other discussion papers were also developed on: Community and household food security, Indigenous food sovereignty, Regional food systems, Sustainable agriculture, and New farmers.

Jurisdictional challenges over school food

Federal jurisdiction

Under the separation of power of the Constitution Act, health and education fall under the jurisdiction of provinces and territories. Further, since the 1980s, there has also been a devolution of power to First Nations, Métis and Inuit governments (Kaufman & Roberge, 2015)⁷. Health, social and educational funding is allocated through federal-provincial/territorial arrangements: the Canada Health Transfer and the Canada Social Transfer. Since the end of the Canadian Assistance Plan in 1996, provincial and territorial governments have greater discretion on how they spend their funds (De Schutter, 2012).

Over the past decade, the federal government has adopted a health promotion lens in an effort to address childhood obesity. Federal, provincial and territorial governments developed the Integrated Pan-Canadian Healthy Living Strategy in 2005. That same year, following a proposal from PEI and BC, the Pan-Canadian Joint Consortium for School Health (JCSH) was initiated. The JCSH is a partnership between the health and education ministries of all provincial and territorial governments (with the exception of Quebec) and is responsible for developing a "common vision, shared responsibilities, and harmonized actions" (JCSH, 2016). Most recently, the JCSH has focused on evaluation and school health assessment tools. In addition, as part of its Innovation Strategy, the Public Health Agency of Canada delivered targeted grants expressly aimed at healthy eating interventions in school settings in the Saskatoon Region, SK, and City of Kelowna, BC.

Over the years, several studies have been commissioned federally to identify policy options around child health, including the <u>Healthy Weight for Healthy Kids</u> report presented by the Standing Committee on Health (2007), the <u>National Dialogue on Healthy Weights</u> report by the Public Health Agency of Canada (2011), and the <u>Obesity in Canada</u> report by the Standing Senate Committee on Social Affairs, Science

⁶ The author would also like to acknowledge the contributions of FSC staff in editing and formatting the final draft of this paper.

⁷ That said, civil society organizations point out to the federal government's legal jurisdiction over certain Indigenous communities to argue for greater investment in healthy eating programs for youth.

and Technology (2016). The Senate's report calls for a review of the recommendations in Canada's Food Guide, as well as of how it is used in various contexts (i.e. schools, health care institutions, etc.) (p. 25). The consultations on Canada's Food Guide will have direct implications on the implementation of nutrition guidelines in schools. Further, the Senate report also recommends "that the Minister of Health in discussion with provincial and territorial counterparts as well as non-governmental organizations . . . Advocate for childcare facility and school programs related to breakfast and lunch programs . . . and nutrition literacy courses" (p. 36). Finally, it recommends the exploration of taxation and other fiscal measures to incentivize healthy eating and deter unhealthy food consumption (p. 22); and limiting advertising to children (in the spirit of Quebec's Consumer Protection Act) (p. 21).

Provincial and sub-provincial jurisdictions

In practice, school food falls under the jurisdiction of provincial and territorial governments. All provinces have implemented some sort of health promotion strategy in the education system. Three main actions are prioritized across provinces: (I) providing grants to community-based and school-based activities, (2) developing information resources and toolkits, and (3) providing nutrition guidelines. In some cases, government interventions emphasized awareness raising, such as in the territories with the Drop the Pop campaign. Provincial interventions are generally connected through programs or strategies, such as the Healthy Kids Strategy (ON), Québec en Forme (QC), and Healthy Schools BC (BC). A complete list is available in the annexes. These initiatives play an important role in the implementation of nutrition standards through school food programs.

The health and education systems are organized as regional health authorities⁸ and school divisions, and their governance is hence relatively decentralized⁹ at the regional level. One policy scan in Nova Scotia indicates "that there were many supportive policies at different levels of jurisdiction but incongruence of priorities and enforcement practices between the province and school districts" (McIsaac et al., 2012, abstract). School divisions (or school districts/boards) are autonomous and independently elected. They set their own priorities, which might mean privileging school safety over healthy living (McIsaac et al., 2012), or physical activity over healthy food (Chircop et al., 2013).

This reality is echoed in Manitoba, where there is no formal link between Regional Health Authorities (RHAs) and school divisions: "Decentralization of RHAs and school divisions poses a challenge. Because RHAs and school divisions are autonomous and set their own priorities, there is no control over the rate or approach used in implementation" (JCSH, 2014, p. 4). In Quebec and Prince Edward Island, governments have supported the creation of regional coalitions or roundtables to support cross-sectoral collaboration at the sub-provincial level.

⁸ Under Alberta's Health Governance Transition Act, the province centralized nine previous regional health authorities and three provincial boards in 2009. Recent policy reforms in Quebec and Nova Scotia have also merged public health into more centralized structures.

⁹ There are differences between publicly funded schools, charter or Catholic schools, independent schools and homeschooling (JCSH 2016). Schools are often responsive to the cultural realities and broader community in which they are situated.

Healthy food availability in schools

Nutrition standards

Since 2005, all provinces have independently developed or renewed their respective school nutrition guidelines, which set standards on what kind of foods can be made available in schools. This excludes the territories, although Nunavut and the Northwest Territories have announced the development of guidelines. School nutrition guidelines vary a great deal in length, detail, and scope (Leo, 2007). One review noticed several shortcomings, including weak baselines that permit the sale of nutrient-poor foods and the lack of limits on trans fats¹⁰, salt and sugar content (Leo, 2007). As the report indicates, few provinces were 'making the grade'.

The policy landscape becomes further uneven taking into account considerations as to whether guidelines apply to specific grades and age groups, to which meals (breakfast, snacks and/or lunch) and whether they include volunteer-based programs and vending machines (Leo, 2007). A systematic review of school-based breakfast guidelines revealed that "Breakfast programs and other foods that are offered for free within schools are not captured within many provincial guidelines" (Godin et al., 2015, p. 9). This is critical, considering that breakfast is widely acknowledged to be the most important meal of the day (Adolphus et al., 2013).

In 2013, the FPT Group on Nutrition Working Group on Improving Consistency of School Food and Beverage Criteria published a technical document to assist provinces in the review of their nutritional criteria. The document highlights the coherence and strength of nutrition guidelines in Nova Scotia, as well as the experience of British Columbia in adding a "checklist tool for assessing freshly made foods and beverages" (2014, p. 50). This technical document is a step towards ensuring consistency of nutritional criteria across provinces and territories.

Alberta is considered to be the 'provincial champion' by the Public Health Network for its nutrition guidelines in childcare and school settings. The provinces of Ontario (Bill 8, Healthy Food for Healthy Schools Act) and Manitoba (Public Schools Amendment Act) are the only ones where nutrition guidelines are legislated and where trans fats are limited or eliminated in schools.

In reviewing nutrition guidelines, McKenna¹¹ distinguishes three types of policies:

- Mandatory provincial policy: provincial policy document intended to be implemented province-wide, as in the cases of British Columbia, Ontario, New Brunswick, Nova Scotia and Prince Edward Island

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¹⁰ It should be noted here that Health Canada plans to ban trans fat in 2018, in accordance with the 2015 mandate letter to the Minister of Health.

¹¹ Personal communication, 2017

- Provincial guidelines for mandatory district policy: a provincial document provides guidance to districts, which are required to develop policies (i.e., there may be variation among the policies at the district level), as in the cases of Manitoba and Saskatchewan
- Recommended provincial guidelines: a provincial document provides guidance to districts and schools; however, there are no requirements for implementation, as in the cases of Alberta, Newfoundland and Labrador and Quebec

These results are reiterated in Leonard's scan (2017, p. 105), who notes, "Starting in 2005, six Canadian provinces implemented bans on the sale of junk food: foods considered to be low in nutritional quality because of high fat content, calories, sugar, or salt." These include the five provinces that have a mandatory provincial policy, and Quebec.

Public investment in school food programs

Infrastructure, equipment, technical support and funding are all needed to operationalize school food guidelines, to purchase and prepare healthy foods, and to include them in student learning experiences. In 1997, the House of Commons Standing Committee on Finance was already calling for a strategic investment in a national school food program in order to reduce long-term health care expenses. A patchwork of initiatives exists in the absence of such a program. These are developed independently and at various levels depending on the involvement of not-for-profits, charities and producers' associations (i.e. dairy producers). The lack of data on the reach of voluntary/non-profit activities and programs may be problematic for future policy initiatives attempting to draw from good practices and existing programs.

Data on provincial public investment are also limited. The Centre for Science in the Public Interest collected figures in 2009 and updated documents were made available (Jeffery, 2015). The recent version indicates provincial investment based on the number of students attending school year-round and on the remote food price index, which help in estimating and comparing provincial investments (Jeffery, 2015). There are no reliable, updated figures for Quebec and New Brunswick. In the context of this research, informants helped update the data for British Columbia, Alberta and Nunavut, which were included in the policy table summary.

Between 2009 and 2015, funding increased in the Yukon, Ontario, Manitoba, Alberta and British Columbia. BC, which allocates funding through the <u>CommunityLINK</u> and <u>BC Fruit and Vegetable Nutritional</u> programs, is the healthy school food champion, with the biggest investment per student per school day (\$0.16), followed by the Yukon (\$0.11), Newfoundland (\$0.09) and Ontario (\$0.08).

No funding is allocated federally for school food programming outside of Indigenous communities, and provincial investment remains marginal when compared to the United States, which allocates \$1.57 per child per day (Jeffery, 2015). Although public institutions agree on the HPS comprehensive framework, several barriers limit the implementation of school food programs, including a "lack of support, complexity of guidelines, and a top-down approach" (Watts et al, 2014, 7 referring to McKenna, 2003).

Community groups, such as the more than thirty non-profit organization making up the <u>Coalition for Healthy School Food</u>, argue that a national school food program could be appropriately funded by a cost-shared model whereby municipal, provincial and federal governments, as well as parents and the non-profit and private sectors, would each contribute.

The ethos of programming may vary from province to province depending on whether it is informed by the government's poverty reduction or health promotion mandate. In Quebec, for example, programs have specifically targeted schools and families in low-income areas. With the Act on Poverty and Social Exclusion (2001), the government invested an additional \$21 million in disenfranchised secondary schools and partnered with the Breakfast Club of Quebec (\$3.8 million). This contrasts with Nova Scotia, where the Thrive health promotion strategy led to the creation of Nourish Nova Scotia to support meal and food literacy programs in school communities. The non-profit convenes an Allocation Task Force and engages with schools in a dialogue in order to prioritize funding. In the province, over 90% of schools now operate a breakfast program.

The difference in mandates reveals a tension in programming. Delivering school meal programs that prioritizes low-income demographics may cause stigma among pupils if not all students have access to the same service. A health promotion lens brings greater emphasis on creating inclusive, safe and supportive environments. Further, health criteria take precedence in terms of selecting food items, which might not be the case when those are donated by agri-food operators (retailers and manufacturers). That said, targeted approaches also can help prioritize funding. "We recognize that schools around the province have different capacities and challenges. Resources and support need to be tailored to each school" (15, 2016). Future programming could thus learn from the ethos of both universal and targeted programming.

Comprehensive farm-to-school programs

In New Brunswick, the <u>Make Menus Matter</u> project was launched to assess the quality of meals in schools. Of the 132 menus analyzed, 27% complied with provincial nutritional guidelines, whereas 54% did not (NB Medical Society, 2015). The report highlights schools preparing wholesome foods on site and integrating a pedagogical dimension to the food programs. Among the models featured in the report are those that include environmental and social criteria in their procurement contracts, develop partnerships with farmers or engage students in cooking and gardening. The Réseau des cafétérias communautaires is known as being a model for food service contracts (Farm to Cafeteria 2015).

Farm to Cafeteria Canada's "School Food Map", features hundreds of schools aiming to reconcile the three interlocked goals of (a) community connectedness, (b) healthy and local food, and (c) hands-on learning (Farm to Cafeteria, 2016). The non-profit organization recently partnered with the federal

¹² The Plan Pagé in 1992 known as the *mesure alimentaire en milieu scolaire* was started in response to increase of child hunger in 1980s. This targeted subsidy for school meals in low-income neighbourhoods in urban areas still represents half of the Montreal school board's annual food service budget.

government through the Canadian Partnership Against Cancer, on the Nourishing School Communities Project, to develop pilots in six provinces (Farm to Cafeteria 2016).

There are only a handful of provinces that are independently piloting these types of programs, such as Ontario (Student Nutrition Program Bulk Purchasing) and British Columbia (BC Farm to School Salad Bar). These complement existing programs like the Northern Fruit and Vegetable Program that provides fruit and vegetable snacks twice a week to 37,000 children in 190 schools in northern Ontario.

There is more provincial uptake for fresh school food fundraising (MB, ON, QC, NS, YT). Schools receive funding to replace unhealthy/imported food items (i.e. chocolate or oranges) with healthy/local options to sell during their annual fundraising activities and generate revenues for local producers. These models recognize that schools are often financially constrained and therefore leverage food sales and exclusive, contractual relationships with food manufacturers to raise funds for various activities (Gidney 2015).

In order to scale up farm-to-school initiatives in Canada, Farm to Cafeteria Canada emphasizes the need to build greater capacity through dedicated staff, kitchen infrastructure and equipment for food-based education. Furthermore, network development can play a key role in sharing information across silos, providing technical support, proposing policy solutions and evaluating initiatives. Policy solutions include the adoption of institutional food procurement policies, the integration of food literacy and food skills into school curricula and the funding of a universal school food program.

Monitoring, evaluation and barriers

Assessing the implementation or degree of adherence to guidelines is a challenge (Taylor et al., 2010, McIsaac et al., 2012). Referring to the nutrition policy in Nova Scotia, one researcher indicates, "The majority of formal policies and written standards developed at the provincial level seemed to have more of an indirect influence on health promotion in schools as a result of a lack of strict criteria and monitoring (...) Similar to policies relating to other health promotion topics, there is no provincial protocol in place to monitor adherence" (McIsaac et al., 2012, 9).

Barriers to evaluating the impact of nutrition guidelines on child health (Taylor et al., 2010) include the lack of research capacity and sufficient funding and the absence of national standardized tools (like the US School Health Policies and Programs study) or of meal-based standards (like the US National School Lunch program) (Taylor et al., 2010).

Three recent province-wide studies shed light on the effects of school nutrition standards:

• In British Columbia, researchers studied the school food environment before and after the implementation of the provincial nutrition policy (between 2007-08 and 2011-12), concluding with encouraging results: "fewer middle/high schools offered unhealthy food and more elementary schools offered healthy food" (Watts et al 2014, 9).

- One five-year study in PEI concludes that there are modest improvements: "increased consumption of LFWG [low-fat whole grain] products suggest that the SNP [school nutrition program] is having a targeted impact" on specific food items. However, the study also noticed "increases in consumption of higher fat grains from home and school, and decreases in LFVF [low fat vegetables and fruit] at school suggest that parent education and closer adherence to the SNP is needed" (McComber et al. 2015, abstract).
- One inter-provincial study concludes: "I find that exposure to provincewide junk food bans while in school has the expected negative effect on BMI. Point estimates of the policy effect are larger and significant at the 5 percent level for Canadians who were in school for five years or more in which the junk food ban was in place. The effect of the junk food ban is additive with respect to the number of years someone is exposed to it in school." (Leonard, 2017, p. 105)

These studies reveal that policy implementation may lead to desirable, targeted effects. Such effects may differ according to the settings (e.g. middle or high school) and types of food being consumed (e.g. fruits and vegetables, whole grain). While these targeted results are encouraging, greater public investment is necessary. Further, the difference between provinces that have adopted junk food bans and those that have yet to adopt such policies risks of creates an unequal playing field for children in Canada.

Among the conditions for success, one study concludes that the "support from the school superintendent and the work of a health champion facilitated the adoption and implementation of the [nutrition] guideline" (Quintanilha et al., 2013). One critical variable on the implementation of the HPS approach is the school's organizational capacity and the degree of involvement of educators, nurses, health professionals, parents and the broader community (McComber et al., 2015, MELS 2014).

Discussion

Good practices

- The provinces of Ontario (<u>Bill 8, Healthy Food for Healthy Schools Act</u>) and Manitoba (<u>Public Schools Amendment Act</u>) have legislated nutrition guidelines to limit/eliminate trans fats in schools.
- Alberta and BC are considered to be 'provincial champions' by the Public Health Network:
 Alberta for its school nutrition guidelines, and BC for its healthy families initiative (i.e. larger provincial public investment in school food programming)
- There are champions within schools and in municipalities eager to work across silos, implement policies and dedicate resources and staff to health promotion. Schools are leveraging their purchasing power to emphasize local and sustainable food through local food fundraising and farm-to-cafeteria initiatives. This is a potential market for many agricultural producers with a high multiplier effect on the local economy. Regional and provincial departments of agriculture are increasingly getting involved.

Gaps and obstacles

- The Joint Consortium for School Health was created to streamline information, but gaps persist
 in terms of adherence to nutrition guidelines, the scope of provincial public investment, the
 reach of non-governmental school food programs and the effects of these interventions on
 population health.
- Since 1997, when the <u>House of Commons Standing Committee on Finance</u> called for strategic investment in a national school food program, federal public investment has remained largely limited to project funding from the Public Health Agency of Canada.
- School food programming is split between poverty reduction and health mandates. Further, the
 gaps in cross-sector coordination across social development, health care, education and
 agriculture hamper the involvement of educators, nurses, health professionals, parents and the
 community groups.

Opportunities

- Quebec and the Northwest Territories are considering the application of a tax on soda to curb
 consumptions and invest in health. This indicates there is greater potential to apply a mix of
 policy instruments. For instance, a 20% tax on sugar sweetened beverages would project an
 estimated \$1.2 billion in annual tax revenue, assuming an average price of \$2.50 per litre. (Jones
 et al., 2017).
- Although education is mainly a provincial jurisdiction, the federal government has a mandate over public health and schools in Indigenous communities.
- The adoption of food policies in the <u>Healthy Eating Strategy</u> on salt reduction and trans fats and the upcoming changes to Canada's Food Guide could improve the overall quality of food in schools and of healthy eating guidelines, draw connections with agriculture and sustainability and

- make recommendations for curriculum. The implementation phase has the potential to improve healthy food environments in schools and healthcare institutions
- There is much room for legislation and policy to leverage institutional procurement without triggering trade disputes by bundling the local and sustainable dimensions of agri-food products (MacRae, 2014).

This policy scan spanned a number of policy instruments - grants and programs, information campaigns, regional capacity building, nutrition guidelines and unhealthy food bans, as well as fiscal tools - that are either already being implemented, or have the potential to improve population health. Further, the research highlighted the different layers of provincial commitments on healthy eating and some of the jurisdictional issues as they relate to health and education. In the future, it would be advantageous for policy researchers to generate data on the reach of the patchwork of existing school food programs in the country and to co-design growth and integration strategies.

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