December 16, 2022

TO: The Hon. Karina Gould, Minister of Families, Children and Social Development, PC, MP
AND TO: The Hon. Minister of Health, Honourable Jean-Yves Duclos, PC, MP
AND TO: The Hon. Marie-Claude Bibeau, Minister of Agriculture and Agri-Food, PC, MP
House of Commons, Parliament of Canada
Ottawa, Ontario, ON K1A 0A6
By email to: hcminister.ministresc@canada.ca, karina.gould@parl.gc.ca, and marie-claude.bibeau@parl.gc.ca

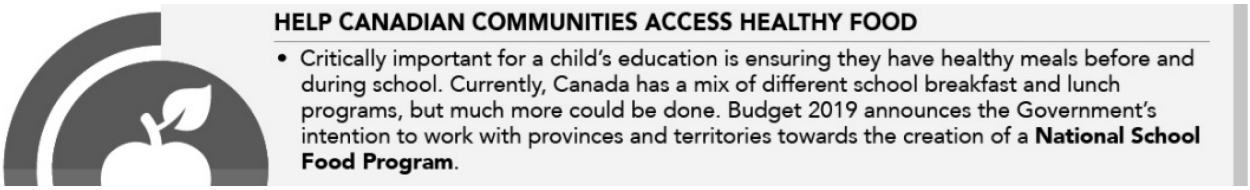
Re: "Pan-Canadian School Food Online Consultation Questionnaire"

Dear Ministers:

According to the Seattle-based Institute for Health Metrics and Evaluation, poor diet caused approximately one-fifth of preventable disease in Canada in 2019: nearly 36,000 Canadians died prematurely and 675,000 disability-adjusted life-years were lost due to poor diet.[1] Canadian researchers estimate that poor diet causes a $14 billion drag on the economy (in 2014 dollars) annually.[2] In fact, approximately half of *all* preventable, premature death is due to the combined impact of poor diet, excess alcohol, and tobacco. The costs of excess alcohol consumption ($15 billion) and tobacco ($12 billion which is on the decline due to falling smoking rates resulting largely from taxes and limits on advertising) are on par with the costs of poor nutrition.[3]

Much of the personal and family harm caused by poor nutrition, tobacco, and alcohol is financially back-stopped by government-funded healthcare and social protection programs, so governments (and taxpayers) stand to benefit from healthier populations. However, no other industrial sector—with the long-term exception of fossil fuel industries—makes products or services that so pervasively undermine the productivity of so many *other* workforces throughout the economy.

To its great credit, the Government of Canada promised a publicly funded National School Food Program to be negotiated with the provinces in the 2019 *Federal Budget Plan* which stated on page 163:



HELP CANADIAN COMMUNITIES ACCESS HEALTHY FOOD

- Critically important for a child's education is ensuring they have healthy meals before and during school. Currently, Canada has a mix of different school breakfast and lunch programs, but much more could be done. Budget 2019 announces the Government's intention to work with provinces and territories towards the creation of a **National School Food Program**.

The government deserves more credit for continuing this effort with this month's consultation.

The scientific evidence and expert opinion favouring a school food program (i.e., one that delivers nutritious meals daily to students) is ample and well-established. Over the years, a national, universal, healthy school food program has been recommended by a House of Commons Standing Committee on Finance,[4] a Senate Committee,[5] a former Chief Public Health Officer[6] a seminal Harvard University study,[7] an advisory committee appointed by the Ontario Government,[8] the Federation of

Canadian Municipalities,[9] and scores of provincial and local politicians. Evidentiary support has been published by the World Food Program,[10] and the World Cancer Research Fund.[11] Recent displays of leadership from the Governments of British Columbia, Prince Edward Island, and the City of Toronto indicate progress and many other provincial governments have increased funding marginally in recent years. So, there is plainly widespread support for such a program, though the political resolve to fully fund it in Canada has been missing until now. Likewise, as you know, Canada is now a (somewhat silent) partner in the global School Meals Coalition along with more than 70 other national governments and as many civil society organizations including the Centre for Health Science and Law and the Coalition for Healthy School Food (a network of more than 220 Canadian non-profit organizations). The current President of France and former Prime Minister of the United Kingdom (Gordon Brown) play leadership roles in the global Coalition.

Please consider the following issues which are not adequately addressed by the *Discussion Paper* or survey questionnaire.

1. **Clarify the government's commitment to universality.** The questionnaire does not clearly offer respondents the option of supporting a universal program, though providing food at little or no cost to students from a certain grade range technically includes the option of doing so for all students enrolled in kindergarten through grade 12.[12] Framing the question in this way appears to undermine Guiding Principle #2 of the Canadian Coalition for Healthy School Foods, which states:

   > *UNIVERSAL Ensure that ALL children in a school can access the program in a non-stigmatizing manner. Over time, all children in Canada will be able to participate in a school food program.*

   The consultation questionnaire also seems dismissive of the principle of universality by focusing on the "15.9% of households that are food secure" (at page 4) and contemplating a means-testing and targeting approach (also at page 4) rather than the 5.5 million school-aged children in Canada. Saving money in health and education by making public funds available only to poor families would seem unconscionable and contrary to Canadian values. Restricting school meals in this way also seems unconscionable and will lead inexorably to stigma and undermining the potential for achieving all of the health, social, and scholastic benefits of school food programs. Targeting seems like an effort to save public funds by keeping some kids off the books as if political support for feeding school children is so low that the government can defend teaching and treating all children, but not feeding all of them.

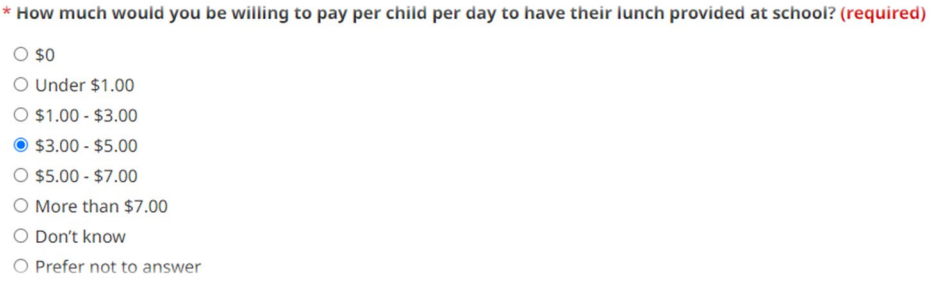
   In June 2022, the United Nations Committee on the Rights of the Child[13] published its "Concluding Observations" on Canada's child rights record (the first since 2012). The Committee cautioned Canadian governments against using user fees at school (such as commercial food services to raise funds or using means-testing to provide food programs). It recommended:

   > *"Take immediate measures to remove the need for user fees at the level of compulsory education…"*

   In 2013, the Committee issued *General Comment No. 15* to all governments stressing that:

   > *"School feeding is desirable to ensure all pupils have access to a full meal every day, which can also enhance children's attention for learning and increase school enrolment. The Committee recommends that this be combined with nutrition and health education, including setting up school gardens and training teachers to improve children's nutrition and healthy eating habits."* [emphasis added]

Furthermore, in asking respondents a question about how much they would be willing to pay for school meals, the Government of Canada leaves the impression that it intends to be a coordinator of a fee-for-service program, rather than a publicly funded program. That question reads as follows:



Because this question appears to only be available to respondents who are parents to school-aged children, it deprives governments of insight into the willingness of other taxpayers to support such a program. Knowing the willingness of others to shoulder the burden seems valuable. For instance, the government might benefit from knowing how much support exists among parents of pre-school children, adults expecting to have children, childless respondents, parents of adult children, grandparents, etc. All of this said, the survey will not generate responses that are representative of population at large because respondents will not be randomly selected or otherwise representative of the general population.

Canadian history (and the experience of other countries) makes it clear that establishing financially divergent ways to access health care service and education creates inequities, interferes with program success, and diminishes support for publicly funded programs. Please consider that doing so for accessing school food programs needlessly invites similar problems of equity and effectiveness.

While the *Discussion Paper* acknowledges the need to scale-up school food programs to make them available to all students progressively and to begin by helping current programs and starting new ones (p. 4, part A), the Government should clarify that it is committed to universality and should establish a timetable to achieve universality in, for instance, 3-5 years.

2. **Clarify the government's commitment to ensuring that funded school food programs serve only nutritious foods.** It is essential to ensure that nutrition standards for school meal programs are precise and actionable. *Canada's Food Guide*, by itself, is too vague to underpin enforceable nutrition standards for programs supported by federal funds. It would be a public health, accountability and public relations fiasco if federal funds were used to subsidize the sale of the likes of candy, soft drinks, french fries, and hamburgers.

   Money is fungible and claims in the future that federal funds were used only for fruits and vegetables will seem like hollow justifications for cafeterias serving copious amounts of junk food. Provincial auditors-general in Ontario (twice), Nova Scotia, and Newfoundland have revealed major failures in overseeing adherence to nutrition standards and clear indications that programs dependent on donated foods and driven by profit motives serve food that is not nutritious enough to achieve a caring standard. See, for instance, CHSL's November 2019 summary and references at: Next Steps in Creating a National Universal Healthy School Food Program.

   The most recent existing Canadian school food nutrition guidance is a decade-old, 58-page list of highly detailed voluntary nutrition rules that are esepcailly poorly suited to being implemented by

small foodservice operations and are already based on outdated science and nutrition guidance. The *Provincial and Territorial Guidance Document for the development of Nutrient Criteria for Foods and Beverages in Schools 2013* is no longer even housed on a government website.

By contrast, though the attached 2007[14] nutrition standards for school food developed by the U.S. National Academy of Medicine are also outdated, they describe quantitative nutrition standards in only two pages and explain 11 other program guidelines in only eight pages. Although it could also benefit from a scientific update, its brevity makes it more actionable. If additional details are needed, Health Canada could create an online calculator and database of common nutritionally eligible and ineligible foods to help school food operations follow nutrition standards based on its Canada Nutrient File database.

Despite hopeful early indications to the contrary, Health Canada has not provided detailed guidance on the application of *Canada's Food Guide* to ensure that school food programs serve nutritious foods. The guidance inherent in the *Canada Food Guide Snapshot* (a picture of a plate illustrating approximately nutritious proportions of nutritious foods) lacks the specificity to mandate procurement decisions, especially by commercially motivated food service providers that may take a nutritionally permissive view of feeding students. Perhaps Health Canada officials are awaiting directions to develop nutrition standards from the Minister of Health.

Please consider ensuring that federal funds not be given to school food programs that sell nutrient-poor foods and ensuring that sufficient food procurement, menus, recipes, and sales data are reported to ensure that nutrition standards are met in practice to qualify for continued funding.

3. Beware inadvertently splintering support for school food.

Experts have demonstrated a wide range of benefits of school food programs. including improvements to:

- the healthfulness of children's diets and nutrition knowledge, which can establish healthy lifelong dietary practices;
- school attendance, completion, and scholastic achievement;
- student behaviour (requiring less disciplinary action) and feelings of belonging to a community (improving mental health outcomes);
- like universal education and healthcare, leveling the playing field (to a small extent) among students with high and low socioeconomic status (though this leaves untouched all other forms of financial inequality and varied degrees of food security at home); and
- bringing home dietary improvements and nutrition knowledge for the benefit of their families.[15]

Asking forced-choice questions about what benefits respondents prefer seems like an effort to seek a narrower constituency to serve. While many of the questions seek practical, objective information about the operation of current programs, these surveys are not representative of the population and the act of asking reveals the paucity of proactively disclosed information from administrators. Such information should be provided by provincial government funders.

For instance, it would be unconscionable, likely illegal, and potentially dangerous for any program to refuse to accommodate the dietary needs of children with health-consequential food allergies/sensitivities or religious-based dietary restrictions. Asking respondents to use up their program priorities advice to convey whether they support such program features impliers that the government's commitment to them is contingent on sufficient expressed public support. By the

same token, respondents who do not choose those elements as priorities may feel that their responses are interpreted as accepting program standards that violate human rights, are unconscionable, and are potentially dangerous.

4. **Be careful not to take a limiting perspective of culturally appropriate food.** While it is important to ensure that students are served culturally appropriate food (especially to accommodate religious-based dietary restrictions or to be welcoming of Indigenous cultures; ref. page 5), be careful not to promote food separatism. Food can also be a vector for cross-cultural learning in Canada's multicultural society and a means of helping students learn about social life in societies beyond Canada's borders. For instance, nearly all students can consume halal, kosher, or Indigenous country foods. Likewise, while Canadian adaptations of Chinese, Italian, Mexican, and Lebanese foods may be widely available near schools in even the smallest Canadian towns, Canadian students with British or French parentage, for instance, can sample and learn a great deal from foods prepared from recipes and plants originating from Ethiopia, Poland, or Indonesia.

5. **Ensure accountability of federally funded school food programs though compliance and enforcement rules and conflict of interest safeguards.** To its credit, the *Discussion Paper* does acknowledge the importance of accountability and enforcement,[16] and the survey does ask respondents whether they consider the following is a top-five priority for a pan-Canadian school food policy:

   "Ensure the collection of data on school food programs to measure progress."

   However, Prime Minister Trudeau's mandate letter to all members of his cabinet state:

   "We will work to build that brighter future through continued collaboration, engagement, and the use of science and evidence-based decision-making."

   Presumably, a lack of uptake on the priority of compliance data by respondents to the questionnaire would not diminish the government's commitment to this kind of data collection and ensuring that school food programs deliver on the program goals that the federal funding aims to achieve. The need for accountability is clear, as noted in relation to the various unflattering provincial auditors-general reports noted above.

   Finally, the *Discussion Paper* and questionnaire are ambiguous about the role of the private sector. The questionnaire invites respondents to indicate the extent to which the goal of a student feeding programs should be to support local economies, suppliers, and businesses, in contrast to "Protect children from marketing and private interests."

   To further illustrate the extent of ambivalence of the government's approach, Employment and Social Development Canada and Agriculture and Agri-food Canada provided $76 million grants and contributions in the past three years to a school meal program that is significantly directed by a CEO of McDonald's Restaurants (BCC's board chair), While the bulk of its funds comes from government now, prior to COVID-19, Breakfast Club of Canada was funded extensively by restaurants, food retailers, meat, dairy, catering, and food manufacturing companies, including Coca-Cola, McDonalds, Tim Hortons, Danone, Walmart, and Costco, some of which provided representatives to served on Breakfast Club of Canada's board of directors. Providing such generous amounts of funding repeatedly to a school food program that is so extensively controlled by sellers of food that harm the health or children and are in a position to steer program procurement benefits back toward their operations seems to reflect a low commitment to safeguards against conflict of interest and unhealthy impacts of food companies.

6. **Ensure that school food standards promote procurement of environmentally sustainable foods.** A great deal of progress toward reducing greenhouse gas emissions can be achieved by reducing the consumption of food from ruminant animals (esp. due to methane emissions), though beef burgers and milk have been mainstays of school food programs in the past. This will be so, according to the evidence, even if the *Discussion Paper* and responses to the questionnaire do not clearly reflect support for environmental sustainability. For instance, the United Nations Intergovernmental Panel on Climate Change estimated that 21% to 37% of GHG emissions came from food systems of which the vast majority came from livestock, particularly cattle, sheep, and goats.[17] See, for instance, CHSL's November 2022 evidence summary, *Beef production and a warming planet*.

I encourage your efforts to design an effective, environmentally sustainable, and equitable school food program and offer the assistance of my organization to best design such a program, especially before the summer preceding the 2023-2024 school year, which is the optimal time for conducting kitchen and cafeteria retrofits in the early-adopter schools where some improvements may be necessary.

Respectfully submitted,

Bill Jeffery, BA, LLB, Executive Director
Centre for Health Science and Law

References

[1] Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Reference Life Table. Seattle, United States of America: Institute for Health Metrics and Evaluation (IHME), 2021. Dietary risks in Canada in 2019 at: http://ghdx.healthdata.org/gbd-results-tool?params=gbd-api-2019-permalink/1b67a15e143d05f289fc9ac5fc1312cd

[2] Lieffers JRL, Ekwaru JP, Ohinmaa A, Veugelers PJ (2018) The economic burden of not meeting food recommendations in Canada: The cost of doing nothing. PLoS ONE 13(4): e0196333. https://doi.org/10.1371/journal.pone.0196333

[3] Canadian Substance Use Costs and Harms. See: https://www.ccsa.ca/sites/default/files/2019-12/CSUCH-Canadian-Substance-Use-Costs-Harms-Infographic-2018-en.pdf

[4] House of Commons Standing Committee on Finance. 1997: http://www.ourcommons.ca/DocumentViewer/en/36-1/FINA/report-2/page-45#D which stated:

> *The Committee further recommends that the federal government partner with communities, parents, provincial governments, private corporations, the agri-food industry and voluntary organizations such as the Canadian Living Foundation to create a national school nutrition program. This type of partnership approach could apply to other organizations and initiatives as well. [citing Martha O'Connor, former Director General of the, now defunct, Breakfast for Learning Program:] 70% of Canadians believe that child hunger in Canada is more important than national unity or the deficit. Strategic investment in a national school nutrition program is an investment in the future of all Canadians.*

[5] Standing Senate Committee on Social Affairs, Science and Technology, *Obesity in Canada*, 2016: https://sencanada.ca/content/sen/committee/421/SOCI/Reports/2016-02-25_Revised_report_Obesity_in_Canada_e.pdf recommended:

that the Minister of Health in discussion with provincial and territorial counterparts as well as non-governmental organizations already engaged in these initiatives:... Advocate for childcare facility and school programs related to breakfast and lunch programs...and nutrition literacy courses;

[6] David Butler-Jones, *The Chief Public Health Officer's Report on the State of Public Health in Canada 2008*, (Ottawa: Public Health Agency of Canada, 2008) at 41 states:

When children go to school hungry or poorly nourished, their energy levels, memory, problem-solving skills, creativity, concentration and behaviour are all negatively impacted. Studies have shown that 31% of elementary students and 62% of secondary school students do not eat a nutritious breakfast before school. Almost one quarter of Canadian children in Grade 4 do not eat breakfast daily and, by Grade 8, that number jumps to almost half of all girls. The reasons for this vary – from a lack of available food or nutritious options in low-income homes, to poor eating choices made by children and/or their caregivers. As a result of being hungry at school, these children may not reach their full developmental potential – an outcome that can have a health impact throughout their entire lives.

[7] J Larry Brown, William H. Beardslee, Deborah Prothrow, *Impact of School Breakfast on Children's Health and Learning: An Analysis of the Scientific Research* (Nov. 2008) Unpublished Manuscript. Harvard School of Public Health. Available at: http://www.sodexofoundation.org/hunger_us/Images/Impact%20of%20School%20Breakfast%20Study_tcm150-212606.pdf, A November 2008 scientific literature review by experts at Harvard University concluded that, even before the U.S. government strengthened its nutrition standards:

...more than 100 published research articles, provides the scientific basis for concluding that the [US] federal School Breakfast Program is highly effective in terms of providing children with a stronger basis to learn in school, eat more nutritious diets, and lead more healthy lives both emotionally and physically…significantly improves their cognitive or mental abilities, enabling them to be more alert, pay better attention, and to do better in terms of reading, math and other standardized test scores. Children getting breakfast at school also are sick less often, have fewer problems associated with hunger, such as dizziness, lethargy, stomach aches and earaches, and do significantly better than their peers who do not get a school breakfast in terms of cooperation, discipline and inter-personal behaviors."

[8] Ontario Healthy Kids Panel, *No Time to Wait: The Healthy Kids Strategy*, 2013 (Toronto: Ontario Ministry of Health and Long-term Care): recommended:

2.8 Establish a universal school nutrition program for all Ontario publicly funded elementary and secondary schools.

2.9 Establish a universal school nutrition program for First Nations communities.

Available at: http://www.health.gov.on.ca/en/common/ministry/publications/reports/healthy_kids/healthy_kids.pdf

[9] Federation of Canadian Municipalities resolved in its 2018 annual meeting to:

WHEREAS, 1.7 million Canadian households experience food insecurity, and the current patchwork of school food programming reaches only a small percentage of our over 5 million students, with Canada remaining one of the only Organization for Economic Co-operation and Development nations without a national school food program;

WHEREAS, the Coalition for Healthy School Food is working at a national level to advocate for the creation of a cost-shared Universal Healthy School Food Program that will enable all students in Canada to have access to healthy meals at school, serving culturally appropriate, local, sustainable food to the fullest extent possible;

RESOLVED, that the Federation of Canadian Municipalities advocate for a Universal Healthy School Food Program to the federal government.

See: https://www.fcm.ca/home/about-us/corporate-resources/fcm-resolutions.htm?lang=en-CA&resolution=8cf4c343-602c-e811-adbf-005056bc2614&srch=%25food%25&iss=&filt=false

[10] World Food Program, *State of School Feeding Programs Worldwide* (Rome: WFP, 2013): https://documents.wfp.org/stellent/groups/public/documents/communications/wfp257481.pdf?_ga=2.30297657.706889 65.1531516853-1353648354.1531516853 and World Scientific. *Global School Feeding Sourcebook*. Lessons from 14 countries. 2016. (Singapore/Geneva: World Scientific, 2016).

[11] World Cancer Research Fund, Policy and Action for Cancer Prevention Food, Nutrition, and Physical Activity: a Global Perspective, (London: WCRF, 2009): https://www.wcrf.org/sites/default/files/Policy_Report.pdf recommended:

Provide healthy daily meals for all staff and pupils, together with facilities for active recreation, activity and sports

Incorporate food and nutrition (including food preparation and cooking skills) and physical education into the mandatory core curriculum

Ensure that teaching materials are independently originated and free from commercial bias

Do not allow vending machines that offer snacks high in sugar, fat or salt, or sugary drinks and withdraw such 'fast' foods and drinks from school canteens.

[12] The options include some write-in options and:

Which of the following models do you think could help feed the most children while reducing stigma? Select one option. (required)

- Offer meals at no or low-cost to children attending schools in lower-income neighbourhoods
- Offer meals at no or low-cost to children from a specific grade or range of grades
- Offer meals to children through a "pay what you can" model. In this model anyone who wants to participate can and has the option to pay what they are able to pay
- Offer meals to children on a sliding scale of cost based on household income
- Other, please specify:
- Don't know
- Prefer not to answer

[13] See, generally, Centre for Health Science and Law. Media Statement: Canada Needs to Walk the Talk UN Human Rights Council's Committee on the Rights of the Child publishes "Concluding Observations" on Canada's implementation of a treaty it ratified in 1991. June 9, 2022. Available at: http://healthscienceandlaw.ca/wp-content/uploads/2022/06/CHSL.UN-Child-Rights.Statement.2022.pdf

[14] Institute of Medicine 2007. *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*. Washington, DC: The National Academies Press. https://doi.org/10.17226/11899

[15] See, generally: https://www.healthyschoolfood.ca/why-it-matters

[16] The Discussion Paper states:

F. Ensure accountability and governance
School food programs could have safeguards against marketing branded or highly processed foods and beverages to children. Collecting and sharing data on school meal programs across Canada should also be a key part of a school food policy. This data will help measure progress on the expanded access to school food. It could also create communities of practice to enhance coordination, share best practices and develop evidence-informed programming.

[17] Intergovernmental Panel on Climate Change. Energy Systems. 2020. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter7.pdf and Intergovernmental Panel on Climate Change (IPCC). Special Report: Special Report on Climate Change and Land, CH05, Food Security. Executive Summary. 2019. Available at: https://www.ipcc.ch/srccl/chapter/chapter-5/

Nutrition Standards for Foods in Schools

Leading the Way Toward Healthier Youth

Committee on Nutrition Standards for Foods in Schools
Food and Nutrition Board

Virginia A. Stallings and Ann L. Yaktine, *Editors*

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the intake recommendations of the DGA for other nutrients such as fat and sodium. Examples of Tier 2 foods include processed foods such as baked potato chips, low-sodium whole wheat crackers, graham crackers, or animal cracker cookies. Foods and beverages that are not consistent with the DGA do not meet the standards defined for Tier 1 and Tier 2 items. The committee developed specific nutrient standards for both Tier 1 and Tier 2 foods and beverages, discussed below. Table S-1 shows Tier 1 and 2 foods and beverages.

RECOMMENDED STANDARDS

The committee's Guiding Principles and the concept of Tier 1 and Tier 2 foods form the basis of its recommendations for nutrition standards for competitive foods offered in schools. These standards have two major objectives: first, to encourage children to consume foods and beverages that are healthful—fruits, vegetables, whole grains, and nonfat or low-fat dairy products—and second, wherever possible in all competitive foods and beverages offered at schools, to limit food components that are either not healthful when consumed at levels exceeding the DGA or fall outside DGA recommendations. Standards that contain specified ranges for fats, energy, added sugars, and sodium are the committee's best judgment based on its interpretation of limited available evidence.

Standards for Nutritive Food Components

Standard 1: Snacks, foods, and beverages meet the following criteria for dietary fat per portion as packaged:

- **No more than 35 percent of total calories from fat**
- **Less than 10 percent of total calories from saturated fats**
- **Zero trans fat**

Americans, including children, consume too much fat, especially saturated fat. Although some fat intake is needed to meet requirements for essential fatty acids and to utilize fat-soluble vitamins, fats are energy dense, and a high fat intake contributes to the high caloric intake of overweight and obese individuals. Consistent evidence shows that diets high in saturated fat are associated with increased risk and higher rates of coronary heart disease. Like saturated fats, trans fats found in hydrogenated oils increase low-density lipoprotein (LDL) cholesterol; trans fats also decrease high-density lipoprotein (HDL) cholesterol.

TABLE S-1 Foods and Beverages That Meet Tier 1 and Tier 2 Standards

Foods	Beverages
Tier 1 for All Students	
Tier 1 foods are fruits, vegetables, whole grains, and related combination products* and nonfat and low-fat dairy that are limited to 200 calories or less per portion as packaged and: • No more than 35 percent of total calories from fat • Less than 10 percent of total calories from saturated fats • Zero trans fat (≤ 0.5 g per serving) • 35 percent or less of calories from total sugars, except for yogurt with no more than 30 g of total sugars, per 8-oz. portion as packaged • Sodium content of 200 mg or less per portion as packaged	Tier 1 beverages are: • Water without flavoring, additives, or carbonation • Low-fat* and nonfat milk (in 8 oz. portions): —Lactose-free and soy beverages are included —Flavored milk with no more than 22 g of total sugars per 8-oz. portion • 100 percent fruit juice in 4-oz. portion as packaged for elementary/middle school and 8 oz. (two portions) for high school • Caffeine-free, with the exception of trace amounts of naturally occurring caffeine substances
À la carte entrée items meet fat and sugar limits as listed above and:** —Are National School Lunch Program (NSLP) menu items —Have a sodium content of 480 mg or less	
*Combination products must contain a total of one or more servings as packaged of fruit, vegetables, or whole-grain products per portion **200-calorie limit does not apply; items cannot exceed calorie content of comparable NSLP entrée items	*1-percent milk fat
Tier 2 for High School Students After School	
Tier 2 snack foods are those that do not exceed 200 calories per portion as packaged and: • No more than 35 percent of total calories from fat • Less than 10 percent of total calories from saturated fats • Zero trans fat (≤ 0.5 g per portion) • 35 percent or less of calories from total sugars • Sodium content of 200 mg or less per portion as packaged	Tier 2 beverages are: • Non-caffeinated, non-fortified beverages with less than 5 calories per portion as packaged (with or without nonnutritive sweeteners, carbonation, or flavoring)

Standard 2: Snacks, foods, and beverages provide no more than 35 percent of calories from total sugars per portion as packaged.

Sugars contribute calories without substantial amounts of micronutrients. Limiting foods high in added sugars is recommended because high levels of added sugars are associated with increased calorie and decreased micronutrient consumption. Decreases in micronutrient intake are greatest when added sugars exceed 25 percent of the total caloric intake. However, the committee decided that a 35 percent limit on total sugars (for non-dairy products) would be achievable while contributing to improvement in the eating patterns of school-age children.

Recent data show that added sugars from soft drinks, fruitades, and other sweetened fruit drinks contribute from 35 to more than 50 percent of the total intake of added sugars in children's diets. Decreases in allowable added sugars are intended to provide an incentive for food manufacturers to develop an array of acceptable products that contain less than 35 percent of calories from total sugars. Many food products already in the marketplace approach this limit, and through modest reformulation will conform to the committee's recommendation. With the exceptions noted, the recommendation of 35 percent of calories from total sugars is viewed by the committee as an interim recommendation until added sugars information is more readily available to school foodservice operators.

Exceptions to the standard are

- **100 percent fruits and fruit juices in all forms without added sugars;**
- **100 percent vegetables and vegetable juices without added sugars; and**
- **unflavored nonfat and low-fat milk and yogurt. Flavored nonfat and low-fat milk can contain no more than 22 grams of total sugars per 8-ounce portion, and flavored nonfat and low-fat yogurt can contain no more than 30 grams of total sugars per 8-ounce serving.**

Dairy product exception Dietary intake of calcium-rich foods and beverages is very important throughout the school years, but many of the dairy products popular among school-age children that can make a positive contribution contain added sugars in excess of the recommended limit set by the committee. To avoid elimination of these dairy products due to sugar content, the committee made an exception to the recommended limit on added sugars.

In setting the proposed higher standards for these foods and beverages, the committee sets limits that are both attainable and maintain product palatability, while still reducing intake of added sugars. In making the

recommendations, the committee is also mindful of the positive efforts of some states and school districts, sometimes working together with the dairy industry, to successfully develop products lower in added sugars.

Standard 3: Snack items are 200 calories or less per portion as packaged and à la carte entrée items do not exceed calorie limits on comparable National School Lunch Program (NSLP) items.

Entrée items served à la carte are exempt from the 200-calorie limit; their caloric content does not exceed that of comparable NSLP entrée items.

Most U.S. children consume at least one snack per day, and children consume nearly one quarter of their dietary energy intake as snacks. Energy intake should be commensurate with energy expenditure in order to achieve energy balance in adults and avoid overweight and obesity; only a small positive energy balance is required for growth in school-age children. The energy density of foods is higher for snacks compared to meals, and excess weight gain may develop over time from a relatively small daily excess of calories consumed.

The committee determined that discretionary energy consumption from snacks should represent no more than about 9 percent of total daily energy intake. A 200-calorie maximum limit per portion for snacks may be high for some younger or smaller children, but it is assumed that variations in other daily energy intake will compensate for shortfalls or excesses. Furthermore, à la carte entrée items should not provide more calories than the comparable NSLP entrée items they replace. The standard is established for whole servings rather than half servings because, in the committee's judgment, a whole serving of fruit, vegetable, or whole grain per portion would contribute to the goal of helping school-age children meet DGA recommendations in a portion size that food manufacturers can achieve in formulating new products.

Standard 4: Snack items meet a sodium content limit of 200 mg or less per portion as packaged or 480 mg or less per entrée portion as served à la carte.

Although sodium is an essential dietary mineral, it is widely overconsumed. Research evidence in adult subjects strongly supports a correlation between higher salt intake and increased blood pressure, although associations in children and adolescents are not as well documented.

The exception to the sodium recommendation for federally reimbursable school meal entrée items purchased à la carte reflects the fact that they generally represent greater energy value than the recommended limit for snacks (Standard 3 above). These entrée items are components of meals that meet U.S. Department of Agriculture school meal nutrition standards

and their inclusion allows greater flexibility for students with higher energy needs.

Standards for Nonnutritive Food Components

Standard 5: Beverages containing nonnutritive sweeteners are only allowed in high schools after the end of the school day.

In considering nonnutritive sweeteners in competitive foods and beverages for school-age children, four related issues were evaluated: safety; displacement effect on intake of other foods and beverages to be encouraged (fruits, vegetables, whole grains, and nonfat or low-fat dairy products); efficacy for maintenance of healthy weight; and the role of choice and necessity.

Safety The Food and Drug Administration (FDA) sets safety standards for food additives, including nonnutritive sweeteners. Those that are approved for use have been evaluated extensively and have met the standards. Yet there is still uncertainty, particularly about long-term use and about low-level exposure effects on the health and development of children.

Displacement Nonnutritive-sweetened beverages may be chosen instead of nutrient-dense beverages. Nutrient displacement occurs when a beverage or food of lesser nutritional value is substituted for one of greater nutritional value, resulting in reduced intake of nutrients.

Efficacy The DGA states that reduction of calorie intake is important in weight control. Nonnutritive sweeteners are used to replace sugars in foods and beverages and provide lower calorie choices to consumers.

Choice and necessity Beverages that meet Tier 2 standards make no caloric contribution and increase the variety of choices. These additional choices may be useful for those who wish to control or maintain body weight. The use of nonnutritive sweeteners to provide lower calorie foods and beverages, however, is not necessary to achieve the goal of weight control.

The committee considered these issues in the context of development in school age children and the public health concern of childhood obesity. Given the lack of clear evidence to evaluate their efficacy in weight control, intending to maintain clarity and avoiding complexity of standards across age groups and times of day, the committee took a cautious approach in its recommendations for the use of nonnutritive sweeteners in competitive foods and beverages.

Because of the uncertainties and limitations in evidence, especially concerning the safety and benefits for weight control, the committee does not recommend a standard for nonnutritive sweeteners in foods.

Safety Nonnutritive sweeteners meet the safety standards set by the FDA; however, there is no long-term evidence addressing their safety when consumption begins in early childhood, and in relation to a broader range of health and developmental outcomes. The committee also considered the limitations in testing and lack of evidence concerning the benefits or necessity for use of nonnutritive sweeteners in foods.

Displacement Displacement was not an important issue for nonnutritive sweeteners in foods that otherwise met the recommended standards.

Efficacy Based on the principle of energy balance, nonnutritive sweeteners in foods might provide a tool for weight management; however, studies to test this in children are not conclusive and the complexities of the relationship between nonnutritive sweeteners and appetite have not been studied in this age group.

Choice and necessity Although nonnutritive sweeteners may increase palatability, thereby increasing consumption of healthful foods, the potential increase in consumption may not be sufficient justification to include them in foods. There was also concern that children may not be able to distinguish between a food with nonnutritive sweeteners and a similar full-calorie food, which might encourage unintentional overconsumption. Improving dietary patterns and maintaining healthy weight in children does not require foods with nonnutritive sweeteners.

Standard 6: Foods and beverages are caffeine-free, with the exception of trace amounts of naturally occurring caffeine-related substances.

The evidence for adverse health effects, other than physical dependency and withdrawal, from caffeine consumption varies in severity of effects and consistency of results among studies (see discussion in Chapter 2) except for the two health effects mentioned. Tolerance and dependence on caffeine have been identified in all ages, including school-age children, and withdrawal from regular caffeine intake is followed by generally mild effects such as moodiness, headache, and shakiness.

Although there may be some benefits associated with caffeine consumption (see Chapter 2), the committee did not support offering products containing significant amounts of caffeine for school-age children because of the potential for adverse effects, including physical dependency and withdrawal (described in Chapter 2). Thus the committee judged that caf-

feine in significant quantities has no place in foods and beverages offered in schools. The committee recognized that some foods and beverages contain trace amounts of naturally occurring caffeine and related substances and did not intend to exclude such foods or beverages if the amounts of caffeine consumed are small and the product otherwise complies with the recommended nutritional standards.

Standards for the School Day

Standard 7: Foods and beverages offered during the school day are limited to those in Tier 1.

Because of their nutritional attributes, consumption of Tier 1 foods and beverages is to be encouraged. Thus it is appropriate to make them available as competitive foods during the school day. Evidence supports the use of Tier 1 foods and beverages to increase consumption of fruits, vegetables, whole grains, and nonfat and low-fat dairy products by school-age children, and to reinforce innovation by industry to create products more consistent with the DGA, thereby increasing healthful competitive food choices for school-age children.

Standard 8: Plain, potable water is available throughout the school day at no cost to students.

Water is essential to health, and is naturally calorie free with few known negative health consequences. Either tap or bottled water or water from fountains or other sources represents a safe, desirable way of maintaining hydration during the school day, and is therefore included as a Tier 1 beverage. The committee's interpretation of limited available evidence is that carbonated water, fortified water, flavored water, and similar products are excluded because such products are associated with displacement of more healthful beverages (see Chapter 2); they are unnecessary for hydration purposes; and the increasing variety of products increases the difficulty of making clear distinctions among them. In addition, if flavored or fortified waters are included, they may serve, in the committee's judgment, as implicit encouragement to produce more foods with nonnutritive components for children at the expense of more healthful foods.

Standard 9: Sports drinks are not available in the school setting except when provided by the school for student athletes participating in sport programs involving vigorous activity of more than one hour's duration.

The committee concluded that, in most contexts, sports drinks are equivalent to flavored water, and because of their high sugar content it is appropriate that they be excluded from both Tier 1 and 2 beverages. However, for students engaged in prolonged, vigorous activities on hot days, evi-

dence suggests sports drinks are useful for facilitating hydration, providing energy, and replacing electrolytes. The committee's recommended standard is consistent with conclusions of expert panels who considered this issue in adults. The committee suggests that the individual athletic coach determine whether sports drinks are made available to student athletes under allowable conditions to maintain hydration.

Standard 10: Foods and beverages are not used as rewards or discipline for academic performance or behavior.

Some schools have reported the use of foods and beverages as an aid in managing behavior. In the committee's judgment, such use of foods and beverages in schools is inappropriate. Establishing an emotional connection between food and acomplishment encourages poor eating habits, and in the committee's judgment should not be allowed.

Standard 11: Minimize marketing of Tier 2 snacks, foods, and beverages in the high school setting by

- **locating Tier 2 food and beverage distribution in low student traffic areas; and**
- **ensuring that the exteriors of vending machines do not depict commercial products or logos or suggest that consumption of vended items conveys a health or social benefit.**

The presence in some high schools of vending machines or other mechanisms to market Tier 2 snacks, foods, and beverages after school leaves open an opportunity to promote products during the regular school day, even if these vending machines operate only after the end of the regular school day. In making this recommendation, the committee concurs with the recommendations of the recent IOM report on food and beverage marketing to children.

Standards for the After-School Setting

Standard 12: Tier 1 snack items are allowed after school for student activities for elementary and middle schools. Tier 1 and Tier 2 snacks are allowed after school for high school.

The committee's recommended standard applies specifically to after-school activities that are attended mainly by students and thus represent an extension of the regular school day.

Many school-related activities that take place in the late afternoon and evening involve both students and adults or, in some instances, mainly adults. These include interscholastic sporting events, back-to-school nights,

parent-teacher association meetings, and use of the school for adult activities such as adult athletic leagues.

Some students remain on the campus and proceed directly to their after-school activities, while others leave campus and return for these activities. Some food consumed during the after-school period is provided by the school, while in other cases it is provided by students or others.

Given that high school students are often expected to decide what to eat, it is appropriate to give them more choice in the less formal environment after the school day ends. Tier 2 foods and beverages provide for an expanded variety while maintaining nutritional standards.

Standard 13: For on-campus fund-raising activities during the school day, Tier 1 foods and beverages are allowed for elementary middle, and high schools. Tier 2 foods and beverages are allowed for high schools after school. For evening and community activities that include adults, Tier 1 and 2 foods and beverages are encouraged.

Fund-raising or evening and community activities that include the use of foods and beverages should emphasize nutritious choices such as fruits or juices, vegetables, nuts, grain products, and nonfat or low-fat dairy products. The committee recognizes that attempting to regulate foods and beverages sold for fund-raising or offered at evening events attended by both students and adults is not practical and may not be desirable. The committee urges that when foods and beverages are used for such activities they be limited to items that meet Tier 1 and Tier 2 standards.

IMPLEMENTING THE RECOMMENDED STANDARDS

The recommended nutrition standards are among several elements of a school policy that could significantly improve the nutritional quality of foods offered in schools. While proposing a complete implementation and evaluation plan is beyond the scope of the study, the committee developed a framework and set of benchmarks on which such a plan can be developed. The key elements for success in implementing standards for competitive foods in schools are summarized in Box S-2, and recommended actions follow.

Action 1: Appropriate policy-making bodies ensure that recommendations are fully adopted by providing

- **regulatory guidance to federal, state, and local authorities;**
- **designated responsibility for overall coordination and oversight to federal, state, and local authorities; and**

BOX S-2
Key Elements for Success

1. Awareness and understanding of the standards by personnel in schools, school boards, school district administrators, parents, students, health professionals and child advocates, state agencies, state boards of education and legislatures, Congress, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, the U.S. Department of Education, food and beverage industry, and vendors.
2. Actions taken to implement nutrition standards by those same personnel, potentially including
   - Supportive legislation at federal,state, and/or local levels
   - Supportive regulations issued by federal, state, and/or local agencies
   - Technical and financial support as needed
   - Incorporation of standards into school wellness policies
   - Development of food and beverage products that meet standards
3. Changes in food availability in schools, including
   - Products offered in à la carte, in vending machines, stores, and snack bars consistent with the standards
   - Products used in celebrations, fundraising, and after-school activities consistent with the standards.
4. Changes in children's food and beverage sources and intake during the extended school day, including
   - Improved product profile (e.g., servings of food groups, types of beverages, etc.)
   - Improved nutrient composition of children's diets

- **performance-based guidelines and technical and financial support to schools or school districts, as needed.**

Implementing the recommended nutrition standards for competitive foods and beverages offered in schools will require policy changes. These changes may occur at multiple levels, such as local, state, and/or national levels, and may combine policy guidance, regulations, and/or legislative action. In order for the recommended standards to be implemented, an authoritative agency must be designated to coordinate and monitor progress.

Action 2: Appropriate federal agencies engage with the food industry to

- **establish a user-friendly identification system for Tier 1 and 2 snacks, foods, and beverages that meet the standards per portion as packaged**

- **provide specific guidance for whole-grain products and combination products that contain fruits, vegetables, and whole grains**

Implementing the standards recommended in this report for Tier 1 and 2 snacks, foods, and beverages will only be accomplished with coordination and cooperation among federal agencies and the food industry. Product information currently available to foodservice operators is not always sufficient to determine whether products meet nutrition standards. In order for school foodservice operators to identify and evaluate foods and beverages that meet specified standards, detailed product information must be provided by manufacturers.

CONCLUDING REMARKS

The federally reimbursable school nutrition programs are traditionally an important means to ensure that students have access to fruits, vegetables, whole-grain-based foods, and nonfat and low-fat dairy products during the school day. These programs are the main source of nutrition provided at school. However, there are increasing opportunities for students to select competitive snacks, foods, and beverages through à la carte services, vending machines, school stores, snack bars, concession stands, classroom or school celebrations, achievement rewards, after-school programs, and other venues. Schools are encouraged to limit these opportunities. When such opportunities arise, they should be used to encourage greater consumption of fruits, vegetables, whole grains, and nonfat or low-fat dairy products. The recommendations in this report are intended to ensure that competitive foods and beverages offered in schools are consistent with the DGA and, in particular, to encourage children and adolescents to develop healthful lifelong eating patterns.