



SCHOOLS AND NUTRITION

FACTS

- Healthy eating* reduces the risk of heart disease and stroke. Healthy eating also helps to prevent and control modifiable risk factors for heart disease and stroke including diabetes, obesity, high blood pressure, and high blood cholesterol.¹
- Unhealthy eating during childhood may interfere with optimal growth and development and contribute to poor eating habits during adolescence and adulthood.²
- There are clear links between nutrition and academic performance. For example, studies show that students who maintain a healthy diet have improved memory, problem solving skills, and creative abilities.^{3,4} In particular, reducing nutritional deficiency and food insufficiency among students holds promise for improving academic outcomes.⁵
- Weight gain during adolescence and young adult life may be one of the most important determinants of the development of heart disease and stroke during adulthood.⁶
- 31.5 % of Canadian children and youth are either overweight (19.8%) or obese (11.7%).⁷
- According to a Canadian survey, 7 out of 10 children aged 4 to 8 eat less than the recommended number (for this age group) of 5 servings of vegetables and fruit each day.⁸ At the same time, 28% of Canadian children eat French fries 2 or more times per week, and 30% consume 1 or more soft drinks per day.⁹
- Sugar-sweetened beverage consumption is believed to contribute significantly to the development obesity¹⁰ and has been associated with increased risk of coronary heart disease.¹¹
- Between the ages of six and twelve, children develop eating habits and attitudes that they may carry with them for the rest of their lives.¹²

* In this Position Statement, healthy eating refers to adhering to a diet consistent with Canada's Food Guide, including choosing a variety of foods from the four food groups (Vegetables and Fruit, Grain Products, Milk and Alternatives and Meat and Alternatives) and choosing foods lower in fat, sugar and sodium.



- Schools are an ideal setting to establish and promote healthy eating among children and youth.¹³ The school environment influences healthy eating in children and youth through the foods that are available, nutrition policies, health curricula, as well as teacher and peer-modeling.¹⁴
- Adopting food policies that promote healthy food choices at school (e.g. healthy menus for school meals, snacks, and tuck shops, as well as guidelines for healthy bag lunches) has been shown to have a moderate to high impact on children's eating practices.¹⁵
- Research indicates that food marketing influences children's food preferences and their purchasing behaviour¹⁶ and that the majority of foods marketed to children are unhealthy.¹⁷
- A combination of food labeling and "point of purchase" signage on school campuses was shown to affect students' food choices.¹⁸
- Schools that permit frequent snacking and the consumption of foods and beverages high in calories and low in nutrients throughout the school day (e.g., soft drinks and 'junk foods') tend to have more overweight and obese children than schools that discourage these practices.¹⁴
- School based gardens have demonstrated potential for contributing to nutrition education and improving vegetable and fruit intake among students.¹⁹
- In a recent Canadian study, students who attended schools with three or more fast food outlets within one kilometre had less healthy overall nutritional intakes than students who attended schools with no fast food outlets nearby.²⁰



RECOMMENDATIONS

The Heart and Stroke Foundation recommends that:

CANADIAN PARENTS, GUARDIANS AND TEACHERS

1. Model healthy eating for students by consuming a healthy, balanced diet that includes foods from the four food groups in *Canada's Food Guide*.²¹
2. Encourage and support schools to implement nutrition policies and nutrition-related education for children and youth.
3. Encourage municipalities to improve access to healthy food near schools (in particular, fruits and vegetables) while decreasing access to unhealthy choices† through the establishment of appropriate zoning by-laws and other applicable policies.

PROVINCIAL/TERRITORIAL GOVERNMENTS AND SCHOOL BOARDS

1. Introduce programs into the school curriculum that:
 - Teach students about a healthy, balanced diet including healthy bag lunches and snacks.
 - Teach students the facts about nutrition and healthy eating and how to understand nutritional information (e.g., how to read and understand Canada's Nutrition Facts table).
 - Help students to develop meal planning and food preparation skills.
2. Develop, implement and monitor school food policies that increase access to affordable healthy food and beverages while decreasing access to unhealthy choices. For example:
 - Introduce nutrition standards for food and beverages provided at school venues such as cafeterias and vending machines.
 - Offer guidance to parents and students on healthy bag lunch and snack options.

- Make healthy food (particularly fruit and vegetables) readily available. This can be accomplished, for example, through supporting and participating in programs that help bring healthy food to schools (e.g., Farm to Cafeteria Canada's *Farm to Schools* ²² program, *FoodShare* ²³, and *Breakfast Club of Canada* ²⁴) and the establishment of school community gardens.
 - Use healthy foods and beverages or non-food alternatives for school fundraising efforts.
3. Restrict the marketing of unhealthy food and beverages on school property.

MUNICIPAL GOVERNMENTS

1. Establish urban zoning by-laws and policies designed to limit the proliferation of fast food outlets and to increase access to establishments selling healthy and affordable food in school vicinities.
2. Provide resources and support for the establishment of school and community gardens.

RESEARCHERS

1. Expand on intervention research that evaluates the most effective school-related nutrition programs and policies, as well as the factors in school environments that contribute to poor nutrition. Examine not only programs and policies, but also the processes by which they are developed and implemented in school settings.
2. Conduct further research on the relationship between school neighbourhood characteristics (e.g., the presence of fast-food restaurants, convenience stores, community gardens, grocery stores etc.) and children's nutrition.

FOOD INDUSTRY

1. Eliminate the marketing of unhealthy foods and beverages to children in schools and when sponsoring student-related events.
2. Improve the nutritional quality of foods and beverages that are available in school environments and provide appropriate portion sizes. Remove unhealthy food and beverages from school vending machines and cafeterias.

† In this Position Statement, 'unhealthy choices' and 'unhealthy food and beverages' refer to foods/beverages that are energy dense and nutrient poor, and those that are high in calories, unhealthy fat, sugar, and sodium.



BACKGROUND INFORMATION

Many Canadian children and youth have poor nutritional habits.^{25, 9} This puts them at increased risk for conditions such as cardiovascular disease, obesity, and diabetes, and potentially compromises their quality of life.¹ Given that children and youth spend a significant part of their day at school, there are many opportunities for schools to improve health outcomes for students. In addition, the well-established links between nutrition and academic performance³⁻⁵ make it clear that improved nutrition at school has the potential to positively influence not only health, but academic outcomes as well.

Accordingly, the Heart and Stroke Foundation (HSF) is committed to playing a leadership role in the promotion of healthy eating for students. For example, for the past four years the HSF has supported *FoodShare*²³, which strives to improve access to healthy food in Ontario's schools and to integrate nutrition education into the Ontario school curriculum. In addition, the HSF engages in partnerships, such as Manitoba's *Kids in the Kitchen*, which is an after-school program designed to teach children about nutrition and how to prepare healthy meals. Finally, the HSF provides a number of resources (tips on healthy eating, recipes, the *Fuel for Fun* kids' cookbook, and the *Heart Smart Families* newsletter) concerning children and healthy eating on our website, www.heartandstroke.ca.

Schools can promote healthy eating as part of a *Comprehensive School Health* (CSH) approach.²⁶ Briefly, CSH is an internationally recognized framework for supporting improvements in students' educational outcomes, while addressing school health in a planned, integrated and holistic way. Comprehensive School Health considers health promotion at school as taking place within all of the 4 following categories: 1) teaching and learning; 2) social and physical environments; 3) healthy school policy; and 4) partnerships and services.²⁷ Within these categories, schools can implement a variety of specific measures to help children improve their nutrition and levels of physical activity. Recognizing that the needs of children and youth can vary based on a number of factors including geography and socio-economic status, these measures can be tailored to the needs of individual school communities.

The *Alberta Project Promoting Active Living and Healthy Eating* (APPLE)²⁸ schools program, for example, has achieved

considerable success in improving school nutrition at participating schools through the implementation of a CSH-based approach. While specific initiatives vary from school to school, examples include the assignment of a designated School Health Facilitator in each school, the implementation of school nutrition policies, and the establishment of school community gardens. Two years after the implementation of the APPLE program, students in APPLE schools had significantly higher intakes of fruits and vegetables and better overall diet quality than they had previously.²⁹

Schools can support a healthy, balanced diet for students by improving both food literacy and access to appropriate food choices. Food literacy can be addressed, for example, through dedicated classes that teach students about food preparation and the importance of healthy eating. Providing instruction in food preparation and healthy modes of cooking can influence children and youth and help them develop skills to support healthy eating throughout their lives.³⁰

In addition to increasing students' knowledge about nutrition, increasing access to healthy foods such as fruit and vegetables, and limiting access to unhealthy food is also extremely important in supporting school nutrition. This can be accomplished, for example, by introducing nutrition standards for foods provided in cafeterias, vending machines, and at school special events. Some measures that schools can take in terms of increasing access to healthy foods include establishing school based gardens and participating in programs that help bring healthy food to schools (e.g., *Farm to Cafeteria Canada's Farm to Schools*²² program, *FoodShare*²³, and *Breakfast Club of Canada*²⁴). These initiatives can also incorporate education about nutrition and food preparation. As well, given the relationship between food marketing and nutrition choices among students, it is also important to eliminate the marketing of unhealthy foods and beverages on school campuses.

Finally, the selection of food that is available in school neighbourhoods has the potential to affect nutrition for children and youth. A recent Canadian study indicated that students who attended schools with three or more fast food outlets within one kilometer had less healthy nutritional intakes than students who attended schools with no fast food outlets nearby.²⁰ Municipalities would be advised, therefore, to give consideration to policies (e.g., by-laws, zoning restrictions, etc.) that limit the proliferation of venues



selling unhealthy food while making it easier for venues (e.g., farmers' markets, community gardens, stores selling fresh fruit and vegetables), to provide healthy food options in school neighbourhoods.

Based on the understanding that health, well-being and learning are intimately connected, schools have the potential to make a dramatic difference in the lives of Canadian children and youth. In order to accomplish this, schools require effective policies and dedicated funding for programs that promote healthy eating.

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