

SCHOOLS AND NUTRITION

FACTS

- Rates of obesity amongst children and youth aged 2 to 17 in Canada are increasing. In 1978/79, 3% of Canadian children and youth were obese. By 2004, 8% or an estimated 500,000 were obese.¹
- An additional 18% of Canadian children and youth are overweight. Combined, one quarter (26%) of Canadian children and youth are either overweight or obese.¹
- Weight gain during adolescence and young adult life may be one of the most important determinants of future development of heart disease and stroke. Eating a healthy diet from a young age and continuing throughout life are important to achieving and maintaining a healthy weight. Unhealthy eating during childhood may interfere with optimal growth and development and contribute to poor eating habits during adolescence and adulthood.²
- Between the ages of six and twelve, children are learning to make decisions and beginning to make more choices on their own. They are developing eating habits and attitudes they may carry with them for the rest of their lives. Peer pressure influences children and youth of all ages and is particularly strong in the early teen years.³
- Schools are an ideal setting to establish and promote healthy eating amongst children and youth.⁴ Schools have an important influence on what children and youth eat. The school environment influences healthy eating in children and youth through the foods that are available, nutrition policies, school nutrition and the health curricula, and teacher and peer-modeling.⁵
- Adopting food policies that promote healthy food choices at school (e.g. healthy menus for school meals and student stores, guidelines for healthy bag lunches) has been shown to have a moderate to high impact on children's eating practices.⁶
- Schools that permit frequent snacking and the consumption of foods and beverages high in calories and low in nutrients throughout the school day (for example carbonated beverages and 'junk foods') tend to have more overweight and obese children than schools that discourage these practices.⁵



SCHOOLS AND NUTRITION

RECOMMENDATIONS

The Heart and Stroke Foundation of Canada recommends that:

Parents, Guardians and Teachers

1. Consume a healthy, balanced diet that includes foods from the four food groups in *Canada's Food Guide to Healthy Eating*.
2. Encourage schools to implement healthy nutrition policies and improve nutrition-related education to children and youth.
3. Visit www.heartandstroke.ca for tools and tips on healthy eating.

Provincial Governments and School Boards

1. Develop and implement school food policies that provide students with easy access to healthy foods at an affordable cost. Make the healthy choice the easy choice in schools.
2. Work with organizations such as the Heart and Stroke Foundation to improve awareness and knowledge about the health risks associated with obesity and the benefits of healthy nutrition and physical activity programs in schools.
3. Use healthy foods or non-food alternatives for school fundraising efforts.
4. Introduce programs into the school curriculum for boys and girls that:
 - Teach students about a healthy, balanced diet and healthy 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).
 - Teach students how to plan and prepare healthy meals.
 - Allow students to participate in the cooking of healthy meals.

Researchers

1. Expand on applied research that evaluates the most effective school-related nutrition programs as well as the factors in school environments that contribute to overweight and obesity amongst children and youth at school.

Food Industry

1. Promote nutritional foods to students and eliminate the advertising of 'junk foods' (energy dense, nutrient deficient foods) to children in schools and when sponsoring student-related products and events.
2. Develop more nutritious foods and make them more accessible than 'junk foods' (energy dense, nutrient deficient foods).
3. Propose healthy choices to children and youth and improve the nutritional quality of foods that are available in school environments. Remove 'junk foods' from elementary and high school vending machines and cafeterias, including high fat foods and high sugar fruit and sport drinks.
4. Make the healthy choice the less expensive choice in school cafeterias. Provide healthy food choices (e.g., vegetables and fruit) in ways that are easy to eat (cut up vegetables in single portion sizes). Align portion sizes to portion sizes recommended in *Canada's Food Guide to Healthy Eating*.
5. Implement frequent purchase reward programs for healthy choices purchased in school cafeterias.

Health Professionals

1. Teach students about the components of a healthy, balanced diet and the important physical and mental health benefits of eating a healthy, balanced diet.



Finding answers. For life.

SCHOOLS AND NUTRITION

BACKGROUND INFORMATION

*Canada's Food Guide to Healthy Eating*⁷ provides nutrition recommendations for people aged 4 years and older. The Food Guide recommends that Canadians:

- Enjoy a variety of foods from each food group every day;
- Choose whole grain and enriched products more often;
- Eat 5 to 10 servings of vegetables and fruit per day, choosing dark green and orange vegetables and orange fruit more often;
- Choose lower-fat milk products more often; and
- Choose leaner meats, poultry and fish, as well as dried beans and lentils more often.

A survey of 5,200 grade five students in Nova Scotia revealed that the dietary intake of students was relatively poor. Over half of children did not meet the minimum recommendations of *Canada's Food Guide to Healthy Eating* for the food category 'vegetables and fruit'. The survey found that children were more likely to have a poor diet if they skipped meals and purchased meals at school or fast-food restaurants.⁸ A smaller survey among 178 Canadian teenagers that asked about their food consumption over the last 24 hours found that top contributors to energy and other nutrients included foods of low nutrient density such as cakes, cookies, pastries, carbonated beverages, sugars, jams, syrups and salty snacks.⁹

The International Obesity Task Force found that schools can play an important role in promoting healthy eating and reducing overweight and obesity by:

- Improving the quality of foods available in schools, e.g. introducing nutrition standards for school meals.
- Encouraging choice of healthy foods e.g. providing vegetables and fruit in ways that are easy to eat (chopped vegetables in single portion sizes).
- Empowering students to prepare healthy meals, e.g. provide classes in practical food preparation and cooking.

School nutrition programs are a key source of information about healthy eating. Nutrition education in schools is more likely to be effective in an environment that limits exposure to non-nutritive foods and increases availability of healthy food choices.⁶ Education of children and youth about healthy eating in the classroom and reinforcing the messages taught with food available in schools as snacks and lunches is important to influencing healthy habits. Providing classes in food preparation and healthy modes of cooking can influence children and youth and help them develop skills to support healthy eating throughout their life.⁴

Not only is education of students important, but also the education of parents, teachers and staff who are influential in the decisions that children and youth make. Emphasis on the connection between healthy nutrition, regular physical activity, and healthy weight is needed.⁴

The food choices of students are influenced by the total food environment. The availability of healthy food choices like vegetables and fruit may not be enough to encourage healthy eating when other less healthy food items are easily accessible (for example high fat, high sugar, nutrient poor choices). Research suggests that offering a wide range of healthy foods can be effective in promoting better food choices among high school students.⁴ School food policies should include selection of foods available at special events, vending and catering contracts, and foods available within the school.

In addition to the food environment, food selection is influenced by price. High quality healthy foods sold in vending machines will be selected by students if they are competitively priced.⁴

School food practices that support frequent snacking and the consumption of foods and beverages high in calories and low in nutrients by students throughout the school day are associated with an increased BMI of students.⁵

Comprehensive school programs that include healthy lunches, health and nutrition education, more physical education, training of staff, parental involvement and a halt to sales of soft drinks, have been demonstrated to improve children's diets and to prevent overweight and obesity.¹¹



HEART &
STROKE
FOUNDATION
OF CANADA

Finding answers. For life.

SCHOOLS AND NUTRITION

The Heart and Stroke Foundation of Canada recognizes that the life-long heart health of Canadians is affected by both individual and social factors. Individual factors include genetic make-up, personal health choices and actions, and social support. Social factors include the social, economic and environmental conditions in which Canadians live, work, learn and play. The Foundation encourages Canadians to make heart-healthy choices and encourages governments and the private sector to develop policies and programs that support healthy communities and reduce inequalities that negatively affect health and well-being.

This position statement was last updated January 2008.

REFERENCES

1. Tjepkema M, Shields M. *Nutrition: Findings from the Canadian Community Health Survey – Overweight Canadian children and adolescents* (Catalogue 82-620-MWE2005001) Ottawa: Statistics Canada, 2005.
2. Connolly CR. Interventions Related to Obesity: A state of the evidence review. 2005. Report prepared for the Heart and Stroke Foundation of Canada.
3. Health Canada. *Canada's Food Guide to Healthy Eating: Canada's focus on children ages six to twelve*. Minister of Public Works and Government Services, Ottawa, 1997.
4. Institute of Medicine of the National Academies. Preventing Childhood Obesity – Health in the balance. The National Academies Press, Washington D.C., 2005.
5. Kubik MY, Lytle LA, Story M. School wide food practices are associated with body mass index in middle school students. *Arch Pediatric Adolescent Med* 2005;159:1111-1114.
6. Heart and Stroke Foundation of Canada Obesity Policy Statement. June 2005.
7. Health Canada. *Canada's Food Guide to Healthy Eating*. Minister of Public Works and Government Services Canada, Ottawa, 1997.
8. Veugelers PJ, Fitzgerald AL, Johnston E. Dietary intake and risk factors for poor diet quality among children in Nova Scotia. *Canadian Journal of Public Health* 2005;96(3):212-216.
9. Phillips S, Jacobs Starkey L, Gray-Donald K. Food habits of Canadians: Food sources of nutrients for the adolescent sample. *Can J Diet Pract Res* 2004;65(2):81-84.
10. Gidding SS, Dennison BA, Birch LL, Daniels SR, Gilman MW, Lichtenstein AH, et al. Dietary recommendations for children and adolescents: A guide for practitioners consensus statement from the American Heart Association. *Circulation* 2005;112:2061-2075.
11. Veugelers PJ & Fitzgerald AL. Effectiveness of School Programs in Preventing Childhood Obesity. *American Journal of Public Health* 2005;95:432-435.



HEART &
STROKE
FOUNDATION
OF CANADA

Finding answers. For life.