

Consultation on the Ontario Health and Physical Education Curriculum

December 14, 2018

The Canadian Cancer Society is a national, community-based organization of volunteers whose mission is to eradicate cancer and enhance the quality of life of Canadians living with and beyond cancer. Prevention is a central pillar to our mission. Prevention offers a cost-effective long-term strategy for the control of cancer and other noncommunicable diseases and can be achieved through policies that shape healthier environments and promote active and healthy lifestyles.

Healthy Living and Cancer

About half of all cancers can be prevented through healthy living and policies that protect the health of Ontarians.¹

The reasons for unhealthy lifestyles and the causes of obesity are complex and encompass social, economic, physiological and environmental factors.

Promoting healthy living in Ontario requires a comprehensive approach², which needs to:

- include multiple tools of influence (legislation, regulation, healthy public policy, education, information, programs, services and research);
- involve multiple sectors (whole of government, industry, civil society, health charities), and;
- be delivered in multiple settings (community, school, work, home) over a sustained period of time and across the life course.

The government has a critical role in helping shape policies that support healthy choices. The Health and Physical Education curriculum is one area of opportunity for the government to support the development of healthy physical activity and eating habits, thereby reducing cancer risk.

Physical Activity

Results from the 2014-15 Canadian Health Measures Survey (CHMS) indicate that fewer than 1 in 10 (8%) Canadian children and youth are getting 60 minutes of physical activity every day.³

The Canadian Society for Exercise Physiology (CSEP) 24-Hour Movement Guideline for school-aged children specifies that all children between the ages of five and seventeen should get at least 60 minutes of moderate-to-vigorous physical activity every day. Vigorous activities should take place at least three times per week, and activities that strengthen muscle and bone should also take place at least three times per week. The Guideline also includes recommendations on limiting sitting for extended periods

¹ World Cancer Research Fund/American Institute for Cancer Research. *Diet, Nutrition, Physical Activity and Cancer: a Global Perspective*. Continuous Update Project Expert Report 2018. Available at: www.dietandcancerreport.org.

² Healthy Families BC Policy Framework: A Focused Approach to Chronic Disease and Injury Prevention, 2014. Available at <https://www.health.gov.bc.ca/library/publications/year/2014/healthy-families-bc-policy-framework.pdf>.

³ Statistics Canada. 2014-15 Canadian Health Measures Survey: Activity monitor data. <https://www150.statcan.gc.ca/n1/daily-quotidien/170419/dq170419e-eng.htm>

and reducing the time that children spend on sedentary activities such as watching TV, playing computer games and surfing the Internet.

Developing healthy childhood habits at an early age has been shown to have long-term benefits. Active transportation to and from school is an opportunity to develop healthy habits. Walking to school can lead to increased physical activity in the community outside of school and build life-long healthy physical active habits. When walking to school, children will experience immediate benefits of increased physical activity and become more aware of active travel as an enjoyable mode of transportation. By walking through their community to school, children will also become more familiar with their surroundings and learn road safety skills, improving the confidence and ability to be more physically active in other aspects of their everyday lives.

There is strong evidence that being physically active decreases the risk of colon, breast and uterine cancers. There is also strong evidence that *vigorous* physical activity (e.g. running or fast cycling) decreases the risk of breast cancer.⁴

Given the low proportion of children meeting recommended physical activity guidelines in Ontario, there is a need for programs that support youth and their families to be more active.

Recommendation

The Canadian Cancer Society recommends that the physical activity component of the curriculum include a focus on:

- The CSEP 24-Hour Movement Guideline for school-aged children;
- Providing access to inclusive, quality physical education with a physical activity credit mandatory in every grade;
- Providing daily physical activity opportunities;
- Active transportation projects through the development of safe routes to school, the provision of important components such as bike racks, and;
- Reducing sedentary behaviours

Healthy Eating

In 2017, only 24% of Ontarians aged 12 to 17 reported that they consumed vegetables and fruit five or more times a day.⁵ Across Canada, 14.7% of children (ages 3 to 17) report drinking soft drinks, fruit drinks or sports drinks every day.⁶

The Canadian Cancer Society supports Health Canada's food guide and Eat Well Plate⁷, including through our work on the Half Your Plate initiative. This illustrates a well-balanced diet using the example of a

⁴ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Physical activity and the risk of cancer. Available at www.dietandcancerreport.org.

⁵ Statistics Canada. [Table 13-10-0096-12 Fruit and vegetable consumption, 5 times or more per day, by age group](#)

⁶ Ontario food and nutrition strategy: a comprehensive evidence informed plan for healthy food and food systems in Ontario. Toronto: Ontario Food and Nutrition Strategy Group; 2017, page 8.

⁷ <http://www.healthycanadians.gc.ca/eating-nutrition/healthy-eating-saine-alimentation/tips-conseils/interactive-tools-outils-interactifs/eat-well-bien-manger-eng.php>

single dinner plate: half of the plate should be vegetables and fruit, more than a quarter from grain products and less than a quarter should be meat or alternatives.

There is strong evidence that:

- Wholegrains and foods containing dietary fibre decrease the risk of colorectal cancer
- Foods preserved by salting increase the risk of stomach cancer⁸
- Lots of red meat and any processed meat increases the risk of colorectal cancer⁹

While sugar as an ingredient does not increase the risk of developing cancer, what it does to the body can. Eating too much sugar means a person is more likely to put on weight. And research shows that obesity increases the risk of cancer.

Recommendation

CCS recommends that the physical activity component of the curriculum be based on Canada's Food Guide and include the Half Your Plate initiative. Food literacy training that focuses on food preparation information, nutrition and fostering the skills necessary to develop lifelong health eating habits should be provided. A positive relationship has been found between cooking skills and healthy food consumption in youth.

Body Weight

In Ontario, 27.5% of children have excess weight or obesity.¹⁰

Besides not smoking, having a healthy body weight is one of the best things you can do to prevent cancer.¹¹ If children with obesity remain obese as adults, they are at an increased risk of cancer.¹² There is strong evidence that having excess weight or obesity throughout adulthood increases the risk of:

- Mouth, pharynx and larynx cancers
- Oesophageal cancer
- Stomach cancer
- Pancreatic cancer
- Gallbladder cancer
- Liver cancer
- Colorectal cancer
- Breast cancer
- Ovarian cancer
- Endometrial cancer

⁸ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Wholegrains, vegetables and fruit and the risk of cancer. Available at www.dietandcancerreport.org.

⁹ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Meat, fish and dairy products and the risk of cancer. Available at www.dietandcancerreport.org.

¹⁰ Ontario food and nutrition strategy: a comprehensive evidence informed plan for healthy food and food systems in Ontario. Toronto: Ontario Food and Nutrition Strategy Group; 2017, page 12.

¹¹ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Body fatness and weight gain and the risk of cancer. Available at www.dietandcancerreport.org.

¹² World Health Organization. Facts and figures on childhood obesity. Available at <https://www.who.int/end-childhood-obesity/facts/en/>

- Prostate cancer (advanced)
- Kidney cancer¹³

Recommendation

To reduce cancer risk, it is important to keep weight within the healthy range and avoid weight gain in adult life.

The causes of obesity are complex and encompass social, economic, physiological, environmental and political factors. Tackling obesity requires a comprehensive approach. The reality is that no one policy option is going to solve the increasing incidence of overweight and obesity in Ontario. Coordinated action is necessary across all levels of government and sectors to reduce obesity, including making healthy food and physical activity choices easier for Ontarians.

Providing education and opportunities to develop healthy physical activity and eating habits at school is one way in which the government can address the complex and multifaceted issue of excess weight and obesity.

Tobacco

The latest Canadian Student Tobacco, Alcohol and Drug Survey (CSTADS) showed that 5% of Ontario students in grades 7 to 12 smoked one or more cigarettes in the past 30 days.¹⁴

Smoking is responsible for an estimated 30% of all cancer deaths in Canada. It also causes about 85% of lung cancer cases. Every year, approximately 16,000 Ontarians die from tobacco use. Tobacco use costs Ontario \$2.1 billion in direct health care costs every year.

The more often and longer a person smokes, the more they increase their risk of developing lung and other cancers.

Recommendation

We recommend that the curriculum provide the latest information about the risks of tobacco use. All students should be encouraged to live smoke-free.

E-Cigarettes

In the 2016-17 CSTADS, 6.6% of Ontario students in grades 7 to 12 had used an e-cigarette in the past 30 days, an increase from 4% in 2014-15. Prevalence of past-30-day use of e-cigarettes was higher among those in grades 10 to 12 (9.9%) than students in grades 7 to 9 (2.8%).¹⁵ It was noted in the 2014-15 CSTADS that 26% of Ontario students who had tried both e-cigarettes and cigarettes reported trying e-cigarettes first.¹⁶

¹³ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Body fatness and weight gain and the risk of cancer. Available at www.dietandcancerreport.org.

¹⁴ 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey.

¹⁵ 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey.

¹⁶ Cumming, T., Patton, R., Rynard, V., Manske, S. 2016 (December). 2014/2015 Canadian Tobacco, Alcohol and Drugs Survey: Health Profile for Ontario. Waterloo (ON): Propel Centre for Population Health Impact, 1- 14.

E-cigarettes are less harmful than conventional cigarettes, but they still cause harm.¹⁷ Furthermore, we do not want youth to become addicted to nicotine by starting on e-cigarettes and then switching to tobacco products, which cause cancer.

Recommendation

E-cigarettes should not be used by youth, non-smokers or ex-smokers who have quit altogether. We recommend that the curriculum provide the latest available information on the risks of using e-cigarettes, and that this information be updated as emerging research becomes available.

Alcohol

The prevalence of use of alcohol in the past 12 months by Ontario students in grades 7 to 12 was 40.1%, according to the 2016-17 CSTADS. 20.3% of Ontario students, reported high risk drinking behaviour (i.e., five or more drinks on one occasion) in the past 12 months.¹⁸

The International Agency for Research on Cancer (IARC) classifies alcohol as a cancer-causing agent.¹⁹ There is strong evidence that consuming alcoholic drinks increases the risk of head and neck, breast, colorectal and liver cancers.²⁰

Current evidence does not identify a “safe” level of drinking that does not increase a person’s risk of cancer. The less a person drinks, the more that person reduces their risk.

Recommendation

CCS recommends that adults who choose to drink alcohol keep their consumption to less than 1 drink a day for women and less than 2 drinks a day for men, in order to reduce cancer risk. The curriculum should provide latest available information on the risks of consuming alcohol, and this information should be updated as new research is released.

Cannabis

The 2016-17 CSTADS showed that 15.1% of Ontario students in grades 7 to 12 reported using cannabis in the 12 months preceding the survey.²¹

It is possible that cannabis can increase cancer risk as cannabis smoke contains many of the same cancer-causing substances as tobacco smoke. We need more evidence to know for sure if cannabis is a cancer risk.

Recommendation

We recommend that the curriculum provide the latest available information on the risks of using cannabis, and that this information be updated as emerging research becomes available.

¹⁷ Pisinger, C., MD, PhD, MPH. 2015 (December). A systematic review of health effects of electronic cigarettes. https://www.who.int/tobacco/industry/product_regulation/BackgroundPapersENDS3_4November-.pdf

¹⁸ 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey.

¹⁹ International Agency for Research on Cancer. IARC Monographs of Carcinogenic Risks to Humans and Handbooks of Cancer Prevention. Updated 13 June 2018.

²⁰ World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Alcoholic drinks and the risk of cancer. Available at www.dietandcancerreport.org.

²¹ 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey.

Sun Safety

Skin cancer is the most common type of cancer diagnosed in Canada and it is on the rise. 1 in 7 people will be diagnosed with skin cancer in their lifetime. The main cause of skin cancer is exposure to ultraviolet radiation (UVR), which causes about 90% of skin cancer cases.²² A survey of Canadians between 2005 and 2014 found that of those who spent time in the sun, fewer than half took action to protect themselves from UVR: 45% applied sunscreen to their face, 41% sought shade, 39% wore a hat, and 38% used sunscreen on the body.²³ Research indicates that childhood exposure to UVR is an important contributing factor to the development of skin cancer later in life. People who have had at least one blistering sunburn as a child or teenager have a higher risk of developing melanoma later in life. The more sunburns a person has had, the greater the risk of melanoma.²⁴

Skin cancer can be prevented by seeking protection from UV radiation.

Recommendation

CCS recommends that children and youth have access to shaded areas outside, wear protective clothing, apply (and re-apply) broad-spectrum sunscreen with an SPF 30 or higher on any exposed skin not covered by their clothing, and wear sunglasses to be protected from UV radiation.

Given students are at school during the highest UVR risk period of the day - between 11:00 AM and 3:00 PM - schools can play a major role in both minimizing student's exposure and positively influencing student behaviour by providing education, establishing routines, and developing policies that foster healthy, safe enjoyment of the outdoors.

Final Thoughts

Healthy living is about more than eating and exercise habits. Where we live and go to work or school has an impact; healthy choices may be hard to find or they may cost a lot. To reduce cancer risk in Ontario, strategies that positively impact the socio-economic environment and lead to opportunities for healthy lifestyle choices are needed.

The integration of the above recommendations into the Health and Physical Education Curriculum will create school environments that support healthy behaviours early in life and make healthy choices more accessible for all.

²² Canadian Cancer Society. *Canadian Cancer Statistics 2014: Special Topic: Skin Cancers*. 2014. Available at: www.cancer.ca/statistics

²³ Canadian Community Health Survey optional content: Sun Safety Module, 2005 to 2014.

²⁴ <http://www.cancer.ca/en/cancer-information/cancer-type/skin-melanoma/risks/?region=on>