



## HEALTHY BEHAVIOURS – PROMOTING PHYSICAL ACTIVITY AND HEALTHY EATING

### Introduction

The Canadian Medical Association (CMA) supports the promotion of healthy lifestyles in order to improve individual health and well-being and the overall health status of the population. Healthy lifestyles refer to patterns of individual practices and personal behavioural choices that are associated with optimal health. Two of the most important behaviours to create or maintain optimum health are healthy eating and physical activity. For many Canadians, their diet and physical activity levels can have a negative rather than positive impact on their overall health. There is a particular concern for children and youth who are growing up in increasingly obesogenic environments that reinforce practices that work against a healthy lifestyle.<sup>1</sup> Childhood obesity research tells us that overweight and obese children are more likely to stay the same into adulthood.<sup>2</sup> To reverse this trend, determined action is required for children and youth to learn and acquire healthy behaviours that they will maintain throughout their life. Healthy lifestyles are central to successful aging and improving the likelihood of recovery after poor health.<sup>3</sup>

This policy paper discusses the importance of physical activity and healthy eating, and the role that individuals and families, schools, workplaces, communities, the food industry and all levels of governments can play in promoting healthy lifestyles. We know that collaborative action is required to make it easier for Canadians to incorporate healthy eating and physical activity into their daily lives – to make the healthy choice the easy choice.

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### What are the health impacts of unhealthy diets and physical inactivity

Diet is the leading risk factor for death, disability and life-years lost; being estimated to cause over 65,000 deaths and 864,000 life years lost in Canada in 2010.<sup>4</sup>

Unhealthy diet has been consistently linked with cardiovascular diseases (heart disease, stroke, hypertension, diabetes, dyslipidemia) and some cancers,<sup>5</sup> which constitutes the

majority of the disease burden in Canada. An estimated 80% of hypertension, which affects over 7 million Canadians, is directly or indirectly attributed to unhealthy diet.<sup>6</sup>

An estimated 60% of Canadian adults and close to one-third of children are overweight or obese, largely caused by unhealthy diets.<sup>7</sup> Overweight and obesity (and the lifestyle choices associated with them) are contributors to more than 18 chronic conditions.<sup>8</sup> This includes diabetes, cardiovascular disease, hypertension and liver disease, as well as breast, colon and prostate cancer.

Obesity is a public health issue not unique to Canada as the rates are increasing worldwide. Obesity is generally attributed to the fact that, as a society, we are increasing our calorie intake while at the same time burning less energy in physical activity. While it is difficult to determine how many deaths are directly attributable to obesity, we know that obesity often co-exists with other risk factors such as the lack of physical activity.

Exercise is one of the top modifiable risk factor for chronic disease.<sup>9</sup> Regular physical activity is associated with a reduced risk of cardiovascular disease, some types of cancer, diabetes, obesity, hypertension, bone and joint diseases, and depression.<sup>10</sup> The risk for many of these conditions is reduced by 20 – 40% in adults with the highest levels of physical activity compared to those with the lowest levels of physical activity. Recent research has shown that a sedentary lifestyle is associated with higher risk for chronic conditions such as obesity, diabetes and cancer independent of physical activity levels.<sup>11</sup>

According to the most recent Canadian Health Measures Study physical activity levels for children and youth are low with 6 out of 10 waking hours devoted to sedentary pursuits. Obesity is rising and physical fitness is declining.<sup>12</sup>

Canadians who do not achieve adequate levels of physical activity or eat unhealthy foods are vulnerable to preventable chronic diseases, premature death, and contribute to high health care costs. For instance, in 1999, \$2.1 billion

<b>Top dietary risks for death in Canada, both sexes, all ages 2010</b>	
1	Diet low in fruits
2	Diet low in nuts and seeds
3	Diets high in sodium
4	Diet high in trans fatty acids
5	Diet low in omega 3 fatty acids
6	Diet low in vegetables
7	Diet high in processed meat
8	Diet low in fibre
9	Diet low in whole grain
10	Diet low in polyunsaturated fatty acids
11	Diet high in sugar-sweetened beverages
12	Diets low in calcium
13	Diet low in milk (low fat)
14	Diet high in red meat

**\*\* Dietary risks are ranked from greatest to lowest**

World Health Organization. Noncommunicable diseases country profiles 2011. WHO Global Report. Available at: [http://www.who.int/nmh/publications/ncd\\_profiles2011/en/](http://www.who.int/nmh/publications/ncd_profiles2011/en/). Accessed December 9, 2013

or 2.5% of the total direct health care costs were attributable to physical inactivity.<sup>13</sup> To understand why the rates of obesity and overweight are rising, it may be helpful to look at what we already know about healthy eating and physical activity.

### **What we know about healthy eating**

While modern science has allowed us to expand our knowledge of the impact of nutrients and food on human health we continue to be beset with illness and disease caused by the foods we consume. Having the right amount and type of food recommended in Canada's Food Guide is a first step towards healthy eating. But Canadians self-reported dietary intakes do not meet national dietary recommendations despite high reliance on public education concerning healthy eating and healthy diets. Children and adults are under-consuming the recommended servings of vegetables and fruits, an established proxy for healthy eating habits, and exceeding daily recommended intakes of sodium.<sup>14,15</sup>

As the links between nutrition and disease, and the impact on the health of our society are revealed it is more important than ever to understand what influences healthy eating behaviours. Food choices are structured by a variety of individual determinants of behaviour, ranging from one's physiological state, food preferences, nutritional knowledge, perceptions of healthy eating and psychological factors.

Many processed foods have become popular due to their accessibility and 'convenience factor', but these features have changed the way food and in particular these products are consumed compared to unprocessed foods: increased 'grazing', eating alone or eating while carrying out other activities such as work or driving. In addition, many calories consumed come in liquid form.<sup>16</sup>

Growth in the production and consumption of ultra-processed foods has increased drastically in the last decades in both higher and lower-income countries.<sup>17</sup> A number of studies have shown that because less healthy foods are cheaper than healthier food, individuals from lower socioeconomic classes tend to be more dependent on unhealthy foods for nourishment.<sup>18</sup>

Other determinants for healthy eating include a wide range of contextual factors, such as the interpersonal environment created by family and peers, the physical environment, which determines food availability and accessibility, the economic environment, in which food is a commodity to be marketed for profit, and the social environment. Within the social environment, social status (income, education and gender) and cultural milieu are determinants of healthy eating that may be working "invisibly" to structure food choice.<sup>19</sup>

### **What we know about physical activity**

Canada's Physical Activity Guidelines recommend that children and youth aged 5 to 17 get at least 60 minutes of moderate-to-vigorous physical activity (MVPA) per day; and adults get

150 minutes of physical activity per week.<sup>20</sup> In fact, about 94% of Canadian children and youth do not meet minimum physical activity guidelines.<sup>21</sup> Furthermore, about 85% of Canadian adults do not meet the minimum guidelines. Physical activity includes but is not limited to sports and recreation. Using active transportation to get to work as well as being active at work is an alternative form of MVPA and can also lead to improved health.

For most Canadians, the average day is spent on passive activities such as TV viewing, computer and game-console use, workplace sitting, and time spent in automobiles. Moreover, the sprawling suburban communities, in which many live, do not encourage physical activity.

Emerging research suggests that prolonged sitting time is associated with an increased health risk.<sup>22</sup> These findings mean that one can meet the minimum physical activity guidelines and still not engage in a healthy lifestyle. Spending a few hours a week at the gym or otherwise engaged in moderate or vigorous activity doesn't seem to significantly offset the risk. Hence too much sitting is a risk distinct from too little exercise.

While further research is required to identify which methods of exercise promotions work best for individuals,<sup>23</sup> it is clear that supportive environments and infrastructures are essential for Canadians to make physical activity part of their daily lives. CMA's policies about the [Built Environment](#) and [Active Transportation](#) support the role of the environment on our physical activity patterns.

### **How we can promote physical activity and healthy eating**

A sedentary lifestyle is a cue for physician advice.<sup>24</sup> Physical activity is a vital sign that may require as much attention as other traditional vital signs<sup>25</sup> - weight, blood pressure, or smoking history. Physicians are eager to initiate these conversations, especially with patients living with chronic diseases. A message must be repeated many times in order to effect a change in lifestyle. Physicians can reiterate the medical importance of physical activity and healthy eating by reinforcing this message during each office visit, and writing the recommendation on a prescription pad.<sup>26</sup> For instance, in British Columbia, physicians are prescribing exercise on specially-designed pads, distributing free pedometers, and hosting free walking events for their patients and the public. In the Edmonton area, Primary Care Networks are prescribing free access passes or a free month of access at local municipal recreation facilities. And in Nova Scotia, physicians have been running a free provincial running program for over 10 years that benefits thousands of kids in elementary school.

Nonetheless these clinical interventions alone cannot shape healthier food consumption patterns and lifestyle choices. An obvious starting point to develop a comprehensive policy is to understand the interplay between individual and environmental determinants that influence our behaviours. In this regard, CMA has developed policies on [Active Transportation](#) and the [Built Environment and Health](#) which recognize the role of neighborhood design and alternative modes for transportation for an active lifestyle. This approach is also at the heart

of the Integrated Pan-Canadian Healthy Living Strategy (PCHLS)<sup>27</sup>, approved in 2005 by all levels of government. CMA commends the efforts put in the PCHLS to prioritize healthy eating and physical activity.

## What we recommend

CMA looks forward to working with others in making options for physical activity and healthy eating more available and accessible to all Canadians. The following recommendations highlight the potential contributions of the following sectors: health professionals, all levels of government, communities, workplaces, schools, the food industry and individuals and families.

### *Health Professionals*

CMA encourages physicians to promote healthy eating and physical activity inside and outside their office.

Physicians are lifestyle change agents and remain the preferred source of information about health for many people. Physicians, who are committed to physical activity, are role models whose advice on healthy living is more likely to be adopted.<sup>28</sup> CMA encourages physicians to address any work-imposed limitations – such as the lack of time, motivation, or tiredness – that could also influence their own exercise and eating habits.

In clinical practice, physicians can help patients start or maintain a healthy lifestyle by:

- assessing nutrition and physical activity as part of routine assessments;
- determining the factors that influence individual patient's nutrition and physical activity levels;
- assessing patient's readiness to change and tailoring interventions and support to their current situation;
- providing an *exercise prescription* to encourage physical activity to maintain or improve health status, and
- working in inter-professional teams to provide patient education with other health care providers such as dietitians.

Medical students and residents, while reporting a high level of importance for exercise prescription concede a low level of expertise in this area upon graduation.<sup>29,30,31</sup> As knowledge develops, physicians and other health professionals should be kept updated and encouraged to incorporate the most effective interventions into their practices. The CMA encourages the development of continuing medical education courses on issues related to physical activity and healthy eating.

Within the healthy living approach, there are multiple opportunities to extend the role of physicians into the community as observed in Nova Scotia, British Columbia and Edmonton

area. Physicians can establish strong community norms for a healthy lifestyle by:

- establishing and reinforcing healthy food policies in hospital cafeterias or at health-related meetings and conferences
- using, facilitating and advocating for the use of active transportation in their communities
- working within the community to ensure that recreation centres and other facilities are available and patients can be referred to the services most appropriate to their needs

### ***Federal, Provincial, and Territorial Governments***

CMA calls on federal, provincial, territorial and municipal governments to commit to a long-term, well-funded Canada-wide strategy for healthy living beyond 2015.

In 2005, Canada's federal, provincial, and territorial governments endorsed a 10-year Healthy Living Strategy Framework, whose initial priorities included the promotion of healthy eating and physical activity. The national strategy addressed information and support for Canadians to help them make healthy choices; support for physicians and other health professionals in counselling patients on healthy weight and in treating existing obesity; community infrastructures that make healthy living easier; and public policies that encourage healthy eating and physical activity. The federal and provincial / territorial governments have undertaken a number of activities in the intervening years to promote physical activity and healthy eating but much remains to be done.

CMA believes that all levels of governments have a continuous obligation to provide public guidance on healthy eating and to promulgate policies, standards, regulations and legislations that support the availability and accessibility of healthy and affordable food and beverage choices.

CMA calls on governments to improve access to nutritious food at affordable prices for all Canadians.

The price of milk, fresh produce and other healthy foods can vary greatly across Canada. In many remote areas, they are often more expensive than processed, nutrition-poor foods because of high transportation costs. Governments should implement effective programs to offset the impact of transportation costs on food prices in northern and remote communities. Even in urban areas, nutritious food may be unaffordable for people on low incomes. School meal programs, social assistance rates that take into account the cost of purchasing healthy food, access to urban farmers' markets can help to ensure that all Canadians have access to healthy foods at a reasonable price.

CMA calls on governments to ban marketing of foods and beverages high in salt, sugars and trans fats to those 13 years of age and younger.

The typical Canadian child may be exposed to as many as 40,000 advertisements for food a

year.<sup>32</sup> This does not include point-of-sale promotions, such as displays of candy bars at convenience-store counters. CMA's [policy on marketing of unhealthy foods and beverages to children and youth](#) calls for a ban on marketing of foods and beverages high in salt, sugars and trans fats to those 13 years of age and younger.

CMA calls on governments to set rigorous standards for front of package food labeling and for the advertising of health claims for food.

Brand-specific advertising is a less than optimal way to provide health information to consumers, who should be encouraged to seek out objective information sources for answers to their questions about physical activity and healthy eating. To improve the quality of information received through commercial channels, the CMA recommends that health claims made for foods be strictly regulated to ensure that they are based on the best available scientific evidence and that they are accurately communicated to consumers. Food advertisements should be pre-cleared before airing in the media, and the provisions against deceptive advertising in the Food and Drug Act should be strengthened.

CMA recommends that governments at all levels invest in evidence-based research on healthy eating and physical activity and share the results of this research with all Canadians.

CMA encourages all levels of governments to continue to fund and support research for healthy lifestyles. There is a clear need to invest in research to strengthen the evidence base about physical activity and healthy eating, particularly on:

- best measures for assessing overweight and obesity;
- the effectiveness of weight management and treatment programs; and
- the effect of policy interventions on healthy eating and physical activity on rates of obesity and obesity-related disease.

## Food Industry

CMA encourages governments to continue to work with the food industry to improve the food environment in Canada.

The partnership and collaboration of food manufacturers is needed to help Canadians make healthier food choices. The food industry can work with governments to:

- reduce the salt, sugar, saturated fat, trans fat and calorie content of processed foods and pre-prepared meals;
- provide information about the calorie and nutrition content on restaurant menus;
- restrict advertising and in-store promotion of high-sugar, high-salt, high-fat foods, particularly those aimed at children;
- provide user-friendly consumer information about their products, including and accurate health and advertising claims;

- improve the nutrition fact table to make it more user friendly and increase the amount of information for example, by identifying the amount of free sugars.

## **Communities**

CMA calls on municipal governments to create environments that encourage healthy and active living and on federal, provincial and territorial governments to support them in this endeavour.

Communities have an important role to play to promote healthy behaviours for children, youth, and adults. They shape how many Canadians decide to live, work and play in their daily life. Through mixed-use land planning and building design, communities can create walking-friendly environments, and reduce the time people spend in cars. To achieve this, communities should consider:

- developing and maintaining a community-wide network of walking and cycling paths;
- zoning communities in such a way that amenities are within walking distance of homes; and
- revising building codes to make stairs accessible, pleasant and safe, so that people have an alternative to taking the elevator.

Canadians are considerably more physically active in the summer than in the winter and this could have an impact on obesity trends.<sup>33</sup> Communities could improve pathways to healthy lifestyles year-round by improving access to indoor sport and recreation facilities, especially during winter. Where possible, communities should consider partnering with schools to share the use of gymnasiums, playgrounds, fields, courts, and tracks with the public after school hours and on weekends. In doing so, communities are ensuring the best use of time and resources, but also sharing liability for the development, operation, and maintenance of the facilities.

Community food security can happen if local residents have equal access to safe, affordable and nutritious food. Communities have a role to play in advocating for healthier food options in schools and workplaces, encouraging community kitchens to teach cooking skills, and supporting local agriculture and farmers markets. This, in turn, would encourage individuals to eat more healthy foods.

## **Workplaces**

CMA encourages employers to actively promote the health of their employees by providing opportunities for physical activity, and healthy food choices in cafeterias.

Prolonged, unbroken time spent sitting in front of a screen is very common in the workplace. In addition, four out of five commuters sit daily in their private vehicles to go to work.<sup>34</sup> As Canadians spend most of their adult life at work, it is important to reduce workplace sitting.

CMA encourages employers, especially in sedentary occupational groups, to increase opportunities for physical activity. For example, employers can promote healthy behaviours by:

- Building on-site fitness facilities or entering into agreements with off-site fitness centres to provide programs for their employees
- Providing showers, bike racks and other amenities for employees for those who want to commute to work on foot or by bike.

Healthier food options in cafeteria and vending machines can promote and encourage healthy eating by employees.

### **Schools**

Schools, where children spend most of their time outside of home, present an excellent opportunity to instil healthy behaviours at an early age. They could, for example, provide comprehensive nutrition education, serve nutritious food in their cafeterias and promote physical activity by providing formal instruction and informal recreation time. Schools can provide the most effective and efficient way to reach not only the children themselves, but their parents, teachers, and other community members.<sup>35</sup>

CMA encourages school boards to provide at least 60 minutes of active daily physical education for all primary and secondary grades.

Only 26% of Canadian schools reported that they had implemented daily physical education classes for their students.<sup>36</sup> There is some evidence that school-based physical activity can increase physical activity levels and reduce time spent watching television at home.<sup>37</sup> For instance, schools can promote physical activity through unstructured out-of-home play, structured sports, or active transportation (e.g. walking to school). Children who are physically active and spend less time watching television after school are less likely to become overweight before age 12.<sup>38</sup>

CMA recommends that schools provide access to attractive, affordable, healthy food choices, provide nutrition education, and initiate programs aimed at encouraging healthy food consumption and skills to prepare meals from scratch.

CMA calls for restrictions on the sale of high-calorie, high fats, sugars or salts foods/drinks in recreational facilities frequented by young people.

Fast food restaurants and convenience stores can be an important influence on children's eating habits and food choices.<sup>39</sup> Children attending schools within a short distance of fast food restaurants eat fewer fruits and vegetable servings, and drink more soft drinks than others who did not have similar establishments within proximity.<sup>40</sup> To encourage effective school-based nutrition interventions, it is therefore important to educate students about the

nutrition value of foods, healthy food choices, and provide healthy canteens or cafeterias.

### *Individuals and families*

CMA recommends that all Canadians work toward achieving and maintaining health by:

- educating themselves about their dietary needs and about the caloric and nutrition content of foods; and
- engaging in physical activity, with the goal of at least 60 minutes of moderate activity per day for children and youth, and 150 minutes per week for adults.

Ultimately, healthy eating and physical activity require that individuals take action to make healthy choices in their lives. To inform these choices, Canadians should be supported with appropriate resource materials with consistent information about healthy eating and physical activity. For instance, many young children do not choose what they consume; their parents buy and prepare the food for them. Research suggests that mothers and children appear to have divergent attitudes towards food and mealtimes.<sup>41</sup> In this regard, it is important for parents to be well-informed and able to explain the tangible benefits of foods and their nutritional components to their children before they reach adulthood.

### **What we conclude**

Healthy behaviours are easier to maintain through life if acquired in childhood and encouraged by the family. Therefore Canadian families should be supported in efforts to ensure that both children and adults eat nutritiously and exercise daily. We believe there is a role for everyone in promoting healthy behaviours – including health professionals, individuals, families, schools, workplaces, communities, the food industry and all levels of governments.

Popular approaches seek to provide individuals with information and options about healthy lifestyles choices. However, individual choice is not sufficient to ensure healthy behaviours. Many barriers to the adoption of healthy behaviours and lifestyle choices can be met through a targeted population health approach, and evidence-based policy and regulatory controls. A comprehensive change in culture and mindset, political endorsement and multifaceted strategies are needed to promote and facilitate change to improve the dietary practices and physical activity levels of Canadians.

## Summary of Recommendations

1. The Canadian Medical Association encourages physicians to promote healthy eating and physical activity inside and outside their office.
2. The Canadian Medical Association calls on federal, provincial, territorial and municipal governments to commit to a long-term, well-funded Canada-wide strategy for healthy living beyond 2015.
3. The Canadian Medical Association calls on governments to improve access to nutritious food at affordable prices for all Canadians.
4. The Canadian Medical Association calls on governments to ban marketing of foods and beverages high in salt, sugars and trans fats to those 13 years of age and younger.
5. The Canadian Medical Association calls on governments to set rigorous standards for front of package food labeling and for the advertising of health claims for food.
6. The Canadian Medical Association recommends that governments at all levels invest in evidence-based research on healthy eating and physical activity and share the results of this research with all Canadians.
7. The Canadian Medical Association encourages governments to continue to work with the food industry to improve the food environment in Canada.
8. The Canadian Medical Association calls on municipal governments to create environments that encourage healthy and active living and on federal, provincial and territorial governments to support them in this endeavour.
9. The Canadian Medical Association encourages employers to actively promote the health of their employees by providing opportunities for physical activity, and healthy food choices in cafeterias.
10. The Canadian Medical Association encourages school boards to provide at least 60 minutes of active daily physical education for all primary and secondary grades.
11. The Canadian Medical Association recommends that schools provide access to attractive, affordable, healthy food choices, provide nutrition education, and initiate programs aimed at encouraging healthy food consumption and skills to prepare meals from scratch.
12. The Canadian Medical Association calls for restrictions on the sale of high-calorie, high fats, sugars or salts foods/drinks in recreational facilities frequented by young people.
13. The Canadian Medical Association recommends that all Canadians work toward achieving and maintaining health by:
  - educating themselves about their dietary needs and about the caloric and nutrition content of foods; and
  - engaging in physical activity, with the goal of at least 60 minutes of moderate activity per day for children and youth, and 150 minutes per week for adults.

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