



## HEART HEALTHY CHILDREN & YOUTH Healthy Community Design

The Heart and Stroke Foundation 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 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.

### ISSUE

- Canada and British Columbia are experiencing twin epidemics of physical inactivity and unhealthy eating that threaten the health and well-being of our children.<sup>1</sup>
- Unhealthy weight among children is a complex issue underpinned by deep-rooted and multi-faceted causes that require a range of approaches and cooperative action by government, non-government organizations, parents, children and youth to address.
- HSF-funded research shows that societal changes have put healthy lifestyles beyond the reach of many families while unhealthy environments have worsened eating patterns and inactivity.
- While growth of child overweight and obesity is a relatively recent phenomenon, HSF believes it is **one that can be reversed**. With this in mind, addressing childhood obesity and its associated health impacts has become a key strategic priority for the Foundation.
- Community design can foster healthy weights and lifestyles and contribute towards reducing the risk of chronic disease and premature death.
- This POSITION STATEMENT sets out the facts respecting the twin epidemics and offers recommendations respecting the design of BC communities.

### KEY FACTS

#### THE EPIDEMIC OF UNHEALTHY WEIGHTS AMONG CHILDREN AND YOUTH

- More than 31% of Canadian children are overweight or obese (with 19.8% being overweight and 11.7% obese).<sup>2</sup> In 25 years, the number of overweight and obese children increased by 11%.<sup>3</sup>
- 27% of BC children and youth are obese or overweight and growth rates are alarming; e.g., between 1978/79 and 2004 the number of obese adolescents tripled.<sup>4</sup>
- BC parents consider obesity to be the leading health issue faced by children today.<sup>5</sup>
- The direct and indirect costs of obesity to BC's health system are estimated at \$1 billion.<sup>6</sup>



# Position Statement

## HEALTHY COMMUNITY DESIGN

### A MAJOR THREAT TO THE HEALTH OF BRITISH COLUMBIANS

- Cardiovascular disease (including heart disease and stroke) is the #1 cause of death and disability in BC. Excess body weight or obesity as well as physical inactivity are common risk factors for cardiovascular disease and most other chronic diseases.<sup>7</sup>
- Recent research has found that half of overweight teens and 61% of obese teens have at least one major health risk factor such as high blood pressure (hypertension), high cholesterol levels, and prediabetes / diabetes.<sup>8</sup>
- According to Action Canada 20/20, a change agenda strategy developed by a broad cross-section of the physical activity communities across Canada, physical inactivity is the fourth leading cause of chronic disease mortality such as heart disease, stroke, type 2 diabetes and some cancers.<sup>9</sup>
- Rates of disease in adulthood are greater for men and women who were overweight as adolescents. In adulthood, they suffer from higher rates of coronary disease, diabetes, atherosclerosis, arthritis, and colorectal cancer *independently of their weight in adulthood*.<sup>10</sup>
- Obesity-related diseases may negate the past 100 years' progress in public health care. Our children may not enjoy the life expectancy or quality of life of past generations.<sup>11</sup>
- Excess weight may soon rival tobacco as the world's leading cause of preventable premature deaths.<sup>12</sup>

### PHYSICAL INACTIVITY - A KEY RISK FACTOR FOR OBESITY,<sup>13</sup> HEART DISEASE AND STROKE,<sup>14</sup> AND NON-COMMUNICABLE DISEASE MORTALITY<sup>15</sup>

- For the seventh year in a row, the 2013 Active Healthy Kids Report Card gave 5 - 17 years old a failing grade – only 5% of Canada's children and youth meet its guideline of 60 minutes of physical activity a day. In 2012, Grades 6 -12 students spent 7 hours and 48 minutes a day in front of screens such as televisions and computers.<sup>16</sup>
- In BC, parents report that:
  - ◆ During school, 11% of children have less than 30 minutes of daily physical activity and 3% have none – after school, 18% have less than 30 minutes of physical activity, 7% have none;
  - ◆ 45% of children are driven to school, 35% walk and 3% bike, rollerblade, or skateboard;<sup>17</sup> and
  - ◆ The risk of obesity has been shown to **decline** by 4.8% for each additional kilometre walked per day and **increase** by 6% for each hour spent in a car per day.<sup>18</sup>

### EATING BEHAVIOURS OF BC CHILDREN FOSTER UNHEALTHY WEIGHTS

- Overweight and obesity are directly linked to over-consumption of energy-dense foods and beverages. Up to 80% of heart disease and stroke can be prevented through lifestyle changes including healthy eating.<sup>19</sup>
- A BC health assessment of school-aged children found:
  - ◆ Only 33% of girls and 34% of boys reported consuming vegetables and fruit at least six times the day before the survey; but
  - ◆ 77% of students reported eating candy, baked sweets or frozen desserts; 53% reported eating salty snacks at least once the previous day; and 71% reported drinking at least one serving of a sweetened beverage the day prior to the survey.<sup>20</sup>

### COMMUNITY DESIGN CAN FOSTER OR INHIBIT HEALTHY WEIGHTS

Causes of the obesity epidemic are complex, but one thing is clear – obesity is not the result of simple individual choices of whether to eat well or not; to be physically active or sedentary. Individual choices are made in the context of societal, cultural, and environmental factors that affect and can determine or even preclude individual choices. **Community design is one key environmental factor.** Action is required at the social and political level to help children and families make healthy decisions affecting their obesity and overweight.<sup>21</sup>

By properly designing or redesigning communities, we can enable / promote physical activity and healthy eating and reduce weights. For example, we can increase road and pathway connectivity to promote walking and cycling, increase public transit, increase the availability and affordability of recreational facilities and parks, and improve access to healthy food while discouraging junk foods.<sup>22</sup>

#### *Community Design and Physical Activity:*

The risk of obesity declines 4.8% for each additional kilometre walked per day.<sup>23</sup> But many Canadian neighbourhoods are not conducive to safe walking. For example, 42% of schools are located on high-volume / high-speed roads and 14% have no sidewalks nearby.<sup>24</sup>

- Since 1985, the proportion of Canadian children regularly walking to school has fallen by 50% to just 1 in 3.<sup>25</sup> 45% of BC children are driven to school because their parents feel the school is too far away, walking or biking is unsafe, or there is too much traffic.<sup>26</sup>
- Almost 68% of BC's indoor recreational facilities are over 25 years old, rapidly aging and in need of renewal or replacement.<sup>27</sup>

## COMMUNITY DESIGN CAN FOSTER OR INHIBIT HEALTHY WEIGHTS (CONT'D)

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### *Community Design and Healthy Eating:*

- Students who attend schools with three or more fast food outlets within one kilometre have less healthy nutritional intakes than students who attend schools with no fast food outlets nearby.<sup>28</sup>
- Children who live in neighbourhoods where there are easily accessible stores that have modestly priced fresh produce have healthier diets and reduced risks of being overweight.<sup>29</sup>

## RECOMMENDATIONS

### PROVINCIAL GOVERNMENT

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The Government of BC must play a lead role in addressing the range of factors that affect unhealthy weights and physical inactivity in children and in coordinating actions across government and by all levels of government, key stakeholders, parents and children themselves. HSF recommends that the provincial government:

- Continue to provide direction to health authorities to work with local governments to assess how the design of their communities can better promote physical activity and healthy eating.<sup>30</sup>
- Provide access to user-friendly health information to help inform local planning.
- Provide opportunities for local governments and community-based organizations to share and exchange knowledge of promising community design practices and lessons learned.
- Provide grants or increased funding to local governments to:
  - ◆ Develop and implement local plans to increase participation in physical activity;<sup>31</sup>
  - ◆ Foster healthy eating, for example, by supporting the development of community gardens, and providing access to fresh fruits and vegetables;<sup>32</sup> and
  - ◆ Develop health-promoting community infrastructure including public transit, sidewalks, foot and bike paths, adequate lighting, traffic calming, bike lanes, parks, playgrounds and green spaces.<sup>33</sup>
- Adopt and implement the BC Recreation and Parks Association recommendations for renewing BC's deteriorating recreation facilities and re-institute funding for the association's Active Communities Program to support physical activity in communities across BC.<sup>34</sup>
- Provide funding for schools to serve as community hubs and for affordable, accessible community recreation programs during after-school hours.<sup>35</sup>

- Apply a Health Impact Assessment lens to Cabinet and ministry decisions and other key policy and budget decisions that may affect children's health.

### LOCAL GOVERNMENTS

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- Work with health authorities and local organizations to ensure that community plans, zoning, land use and development decisions support healthy living and active transportation, discourage sedentary behaviours, and eliminate barriers to active lifestyles.
- Pursue opportunities to introduce public policy and support programs, services and other activities that promote healthy living in local public facilities.
- Adopt urban zoning policies for areas surrounding schools that limit the proliferation of fast food outlets and increase access to stores selling healthy and affordable food.<sup>36</sup> This could include local governments using their bylaw authority to specify signage, accessibility, business licensing and landscaping to support the goal of promoting healthy eating, physical activity and smoking cessation near schools.
- Use community policing and other policing strategies to ensure that parks and recreational facilities are safe and perceived to be safe for children and families.

### LOCAL AGENCIES AND NON-GOVERNMENT ORGANIZATIONS

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Non-government organizations and local agencies play leadership roles in their communities in identifying and advocating for community design changes and initiatives to support healthy weights for children and youth.

- Non-government organizations such as the BC Healthy Living Alliance, BC Healthy Communities, BC Recreation and Parks Association, the Heart and Stroke Foundation, and the Childhood Obesity Foundation should work together to provide support and advice to local organizations to achieve healthy community design.
- Educate the public about the importance of land use planning, zoning and transportation decisions for the health of children and youth.
- Establish a web-based resource that provides information, tools and steps to take to improve the food and physical activity environments in communities.<sup>37</sup>
- Consider including urban planners and engineers on volunteer boards and committees.

# Position Statement

## REFERENCES

- 1 See Federal/Provincial/Territorial Ministers of Health and / or Health Promotion / Healthy Living, *Curbing Childhood Obesity: A Federal, Provincial, Territorial Framework for Action to Promote Healthy Weights*, <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/index-eng.php>
- 2 See "Body mass index of Canadian children and youth, 2009-2011," Statistics Canada, <http://www.statcan.gc.ca/pub/82-625-x/2012001/article/11712-eng.htm>.
- 3 Final Report: Data and Evidence Working Group, *Recommendations for Obesity Reduction in BC*. July 13, 2010.
- 4 Obesity Reduction Strategy Task Force of BC, *Recommendations for an Obesity Reduction Strategy for British Columbia*, August 2010. For children and youth, obesity is defined as the 95<sup>th</sup> percentile of Body Mass Index (BMI) and overweight is between the 85<sup>th</sup> and 95<sup>th</sup> percentile. BMI is a measure of individuals' weight relative to their height. Op. cit. pp. 12-13.
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- 6 See Legislative Assembly of British Columbia, Select Standing Committee on Health, "A Strategy for Combating Childhood Obesity and Physical Inactivity in British Columbia Report," November 29, 2006, Appendix B, <http://www.leg.bc.ca/cmt/38thparl/session-2/health/reports/Rpt-Health-38-2-29Nov2006/index.htm>.
- 7 Heart and Stroke Foundation of British Columbia and Yukon Position Statement, *Obesity Reduction in British Columbia* citing BC Vital Statistics, *Vital Statistics Quarterly Digest*, 2009 18(4) and McLaren, L et al. *Are Integrated Approaches Working to Promote Healthy Weights and Prevent Obesity and Chronic Disease? A Review and Synthesis of the Literature with Suggestions and Recommendations for Policy and Decision Makers*, 2004. Centre for Health and Policy Studies, Dept Community Health Sciences, University of Calgary.
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- 11 Heart and Stroke Foundation, *Making Healthy Choices Easy Choices for All Our Children Submission to "Our Health Our Future – A National Dialogue on Healthy Weights,"* July 28, 2011.
- 12 McKinsey Quarterly, October 2010, *Healthcare Payor and Provider Practice: Why Governments must lead the fight against obesity*.
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- 15 See I-Min Lee et al, "Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy," *The Lancet*, 380: 219-29; and Harold W. Kohl et al, "The Pandemic of physical inactivity: global action for public health," *The Lancet*, 2012, 380: 294-305.
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- 17 Environics Research Group, Heart and Stroke Foundation Back to School 2012, British Columbia Report, May 2012. The Daily Physical Activity K-12 Program Guide (2011) requires 30 minutes/day for K-7 and 30 minutes/day or 150 minutes/week for Grades 8-12.
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- 27 BC Recreation and Parks Association, "A Time for Renewal: Assessing the State of Recreation Facilities in British Columbia," [http://www.bcrpa.bc.ca/recreation\\_parks/facilities/sports\\_recreation/documents/Full\\_Report\\_Final.pdf](http://www.bcrpa.bc.ca/recreation_parks/facilities/sports_recreation/documents/Full_Report_Final.pdf).
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- 29 Veugelaers P, Sithole F, Zhang S, Muhajarine N. Neighbourhood characteristics in relation to diet, physical activity and overweight in Canadian children.
- 30 The Ministry of Health recently directed health authorities to work with municipalities to conduct baseline scans of decisions made regarding community design, compare the decisions to best practices and prepare reports on possible directions or plans.
- 31 See Nova Scotia's Physical Activity Leadership Program, <http://www.gov.ns.ca/hpp/pasr/akhk-municipal-leadership.asp>.
- 32 An example of such an initiative was the Produce Availability Initiative (PAI). This pilot project was a joint partnership of the Heart and Stroke Foundation and the Government of British Columbia. PAI assisted rural or remote areas and aboriginal communities in gaining access to fruits and vegetables, supported development of community gardens, and provided training and information on the use and preservation of fresh produce.
- 33 The Environics Research Group online survey referenced earlier found that 60% of BC parents strongly supported more government funding to facilitate physical activity such as playgrounds and recreation centres.
- 34 See "A Time for Renewal" op. cit.
- 35 The Environics Research Group online survey found that 61% of BC parents strongly supported increasing the availability and affordability of after-school programs. In 2011, Federal / Provincial / Territorial Ministers Responsible for Sport, Physical Activity and Recreation identified the after-school period as an important area for focus to reduce children and youths' physical inactivity. See "Actions Taken and Future Directions, 2011: Curbing Childhood Obesity: A Federal, Provincial, and Territorial Framework for Action to Promote Healthy Weights," November 25, 2011.
- 36 See CHNET-WORKS! Improving Children's Food Access through School Zoning Bylaws, Fireside Chat #296 presentation, September 25, 2012.
- 37 One example is an Australian initiative called the Parents Jury: see <http://www.partnershipagainstcancer.ca/wp-content/uploads/Reducing-Food-Marketing-Directed-at-Children-an-Australian-Experience-Kathy-Chapman.pdf>.