

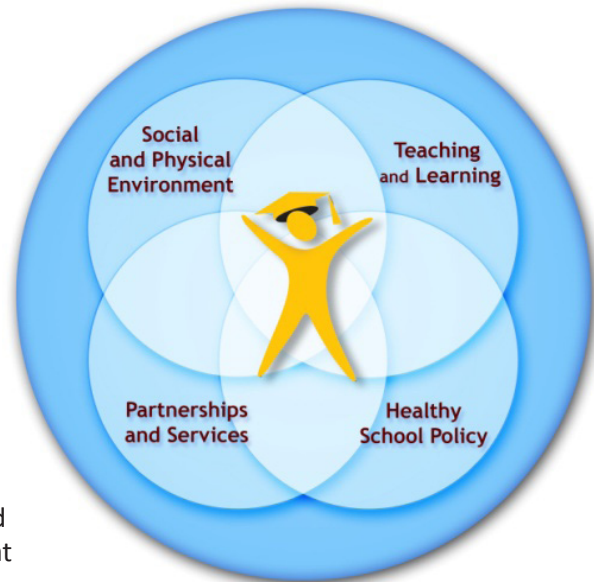
## Physical Activity within a Comprehensive School Health Model

### THE BENEFITS OF PHYSICAL ACTIVITY

Comprehensive School Health is an internationally recognized framework for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated and holistic way. It is not just about what happens in the classroom. Rather, it encompasses the whole school environment with actions addressing four distinct but inter-related pillars that provide a strong foundation for Comprehensive School Health:

- social and physical environment
- teaching and learning
- healthy school policy
- partnerships and services

In Comprehensive School Health's holistic approach, physical activity is broadly defined and includes not only physical education classes but also daily physical activity programs, intramural programs/clubs, interscholastic sports, walk-to-school programs, ride-your-bike-to-school programs, classroom walking programs and other programs or activities organized by schools or community partnerships that get students and staff moving.



Physical activity: *any body movement of skeletal muscles (i.e., muscles that attach to bones) that uses energy.*

Public Health Agency of Canada

There are many benefits of the student population being physically active:

#### ACADEMIC ACHIEVEMENT

Many studies demonstrate positive associations between physical education and physical activity with academic performance<sup>1,2,3</sup>. Learning increases more rapidly in schools where larger proportions of classroom time are allocated to physical activity<sup>4</sup>. In addition, academic performance does not decline with increased time allotted to physical activity in the classroom<sup>5</sup>. These findings have significant implications. If increasing physical activity leads to increased academic performance and overall health and well being, and

increasing physical activity within school hours does not lead to a decrease in academic performance, there is strong evidence to support the importance and multiple benefits of increasing physical activity time (e.g., academic and health benefits).

## SELF-ESTEEM AND MENTAL HEALTH

Physical activity programming is among the most common interventions for increasing overall self-esteem<sup>6</sup>. According to Statistics Canada, children who participate in organized activities such as sports have higher self-esteem. Youth who reported participating in sport were four times less likely to report low levels of self-esteem when compared to youth who reported that they do not participate in sport. In addition, research has shown that youth who engage in physical activity demonstrate lower rates of anxiety and depression and that as levels of depression in youth decrease physical activity levels increase<sup>7,8</sup>.

High levels of self-esteem and low levels of anxiety and depression are related to a positive attitude, valuing and believing in oneself, viewing oneself as competent and being in control of one's life. These characteristics are considered to be important in overall health and wellbeing. Therefore, by increasing levels of physical activity among our youth we provide an effective avenue for enhancing overall health and wellbeing.

## HEALTH BENEFITS

A number of health risks have been associated with physical inactivity including increased risk for heart disease, high blood pressure, type II diabetes, osteoporosis, stroke, colon cancer, depression and premature death. Research has shown that 40 percent of Canadian youth already have at least one risk factor for heart disease as a result of a physically inactive lifestyle<sup>9</sup>.

The dramatic increase in rates of overweight and obesity in children and youth is a major public health concern. In Canada, rates of overweight doubled and rates of obesity tripled between 1980 and 2000<sup>10,11</sup>. These increases have crossed all socio-demographic and geographical boundaries. Physical inactivity and poor nutrition are acknowledged as the primary risk factors for the increasing rates of childhood overweight and obesity.

## PERCEIVED HEALTH

Physical activity participation has been positively related to youths' perceptions of health and self-perceived health is a reliable and valid indicator of both physical and mental functioning<sup>12,13</sup>. A recent survey of Canadian youth<sup>14</sup> found that:

- youth who report high levels of physical activity (40 percent) are more likely to report their health as excellent compared to youth (19 percent) who report low levels of physical activity;
- youth who spend less than three hours per day in sedentary behaviour are more likely to perceive their health as excellent (40 percent) compared to youth who report spending at least six hours a day in sedentary behaviour (27 percent); and

- youth (35 percent) who reported five or more hours of in-class physical activity per week rated their health as excellent compared to youth receiving two to four hours per week.

## LONG TERM HEALTH CARE COSTS / PREVENTION

Physical activity is one of the most cost effective means of achieving the goal of a healthy population<sup>15</sup>. It is estimated that the health care costs related to physical inactivity in Canada in 1999 were approximately 2.1 billion dollars.<sup>16</sup> The economic impact of physical inactivity has been on the rise and the recent estimated cost of physical inactivity within Canada is 5.3 billion (1.6 billion being direct costs and 3.7 billion being indirect costs)<sup>16</sup>.

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