

## Physical Inactivity & Chronic Disease

Being physically active is important for overall health and well-being. According to Canada's Physical Activity Guide to Healthy Active Living, 60 minutes of physical activity everyday or 30 minutes of moderate activities for four days a week is needed for a person to stay healthy and to improve health. The benefits of regular activity include: better health; improved fitness; better posture and balance; better self-esteem; weight control; stronger muscles bones; feeling more energetic; feeling more relaxed and experiencing less stress (Public Health Agency of Canada, 1998).

Participating in various types of physical activities (including endurance, strength and flexibility) is important for healthy living (Public Health Agency of Canada, 1998). Endurance activities are continuous activities for your heart, lungs and circulatory system; strength activities are activities against resistance to strengthen muscles and bones and improve posture; and flexibility activities are gentle reaching, bending and stretching activities to keep your muscles relaxed and joints mobile.

### Health Related Consequences

Lack of physical activity increases the risk of developing several chronic diseases. In Canada, it is estimated that physical inactivity attributes to 35.8% of coronary artery disease; 19.9% of stroke; 19.9% of hypertension; 19.9% of colon cancer; 11.0% of breast cancer; 19.9% of type 2 diabetes; and 27.1% osteoporosis (Katzmarzyk, et al., 2000).

### Prevalence

Physical inactivity is widespread in our population. Recent estimates indicate that 53.5% of Canadian adults are physically inactive while 14.8% are obese (Statistics Canada, 2002). In Canada, 87% of children and youth are not meeting the guidelines set forth in Canada's Guide for Physical Activity (Active Healthy Kids Canada, 2009). As children reach adolescence, their activity levels begin to drop dramatically and girls are less active than boys. Moreover, low socio-economic status of the family is associated with lower physical activity levels.

In Ontario, 48% of adults (aged 20 and over) and 27% of youth (aged 12-19) were physically inactive in 2005 (Statistics Canada, 2005). In 2004, 13.4% of Ontario children (aged 6-11) accumulated less than 7 hours a week of physical activity, while 34.4% of Ontario youth (aged 12-17) accumulated 20-29 hours of sedentary activity a week, and 15.3% of Ontario youth accumulated 30-39 hours of sedentary activity a week (Statistics Canada, 2004). In 2003, 26.1% of Ontarians reported being physically active; 23.9% reported being moderately physically active; and 47.3% reported being physically inactive (Ontario Ministry of Health and Long-term Care, 2004).

### Cost

Physical inactivity costs an estimated \$5.3 billion or 2.6% of total health care costs in Canada in 2001 (Katzmarzyk & Janssen, 2004). It is estimated that 21,000 premature deaths were related to physical inactivity in Canada in 1995. A 10% reduction in the prevalence of physical inactivity can potentially reduce \$150 million annually in direct health care costs.

## Reason for Action

Studies suggest that early life experiences, including achieving adequate activity levels, have an impact on children's health later in life (Strauss, 1999). Several notable factors contribute to physical inactivity in Canadian children. For example, Canadian children and youth are engaged in too much TV viewing and screen time activities; even preschool aged children are getting high amounts of screen time (Active Healthy Kids Canada, 2009). Canadian children are not as engaged in sports as they used to - participation in sport has dropped since the early 1990's. In addition, increased time away from home (e.g., school, day care, after-school programs and organized sport), as well as concerns with safety, have taken time away from active play. Therefore, it is important to address physical inactivity early in life.

In addition, physical inactivity and poor eating habits along with many other factors contribute to the rising rate of overweight and obesity in Ontario. In general, adults who are less active are more likely to be obese while active individuals are more likely to have healthy weight (Canadian Fitness and Lifestyle Research Institute, 2007). Annually, obesity costs Ontario \$1.6 billion including \$647 million in direct costs - such as hospital care, pharmaceuticals and physician services - and \$905 million in indirect costs - such as lost earnings due to illnesses and premature deaths associated with obesity (Katzmarzyk & Janssen, 2001).