

## Benefits of Health and Physical Activity for Canada and its Citizens

**"If we improve the health of Canadians, we improve the wealth of Canadians"**

**~Dr. David Lau – President Obesity Canada**

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### Physical Activity and Health

The largest killers of Canadians are directly related to physical inactivity.

- 64% of the population is not active enough to achieve optimal health benefits
- Physically inactive Canadians are 90% more likely to acquire coronary heart disease, 60% more likely to suffer from osteoporosis, 40% more likely to experience a stroke, hypertension, colon cancer, or Type 2 diabetes ([www.centre4activeliving.ca](http://www.centre4activeliving.ca))<sup>1</sup>
- Cardiovascular Disease is the #1 killer of Canadians, responsible for 37% of deaths
- Those at risk of type 2 diabetes cut that risk by 58% by exercising moderately for 30 minutes a day and losing 5-7% of their body weight
- Physical activity reduces the incidence of breast cancer up to 70% (Friedenreich, 2001)
- The incidence of prostate cancer may be reduced by 10-30% by physical activity (Friedenreich, 2001)
- 11% to 35.8% of various diseases may be eliminated if sedentary individuals were to begin an exercise program

These diseases are on a large part preventable, and an investment in prevention would pay off in regards to escalating health care costs.

- \$2.1 billion of health care expenditures are directly attributable to physical inactivity
- A 10% decrease in inactivity would save \$150 million/year in direct costs and \$5 billion of indirect costs
- Each active day/week would decrease short-term health care costs by 4.7%
- Elimination of physical inactivity would avoid 10.3% of total adult deaths, equalling 21 340 premature deaths/year in Canada ([www.centre4activeliving.ca](http://www.centre4activeliving.ca))<sup>1</sup>
- Physical activity has been shown to increase life expectancy by 2 years
- Based upon medical care, sick leave, and lost revenues, increasing physical activity could "save" an average of \$2,570/person ([www.cd.gov.ab.ca](http://www.cd.gov.ab.ca))<sup>2</sup>
- The possible lifetime savings amount to \$24.3 billion for inactive Canadians who became active ([www.cd.gov.ab.ca](http://www.cd.gov.ab.ca))<sup>2</sup>

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## Psychological Benefits

- Physical activity leads to decreases in anxiety and depression and increases in self esteem
- 6% of Canadians are a possible or probable risk for depression
- Anxiety disorders appear in 12% of the population ([www.hc-sc.gc.ca](http://www.hc-sc.gc.ca))<sup>3</sup>
- In 1996 – 1997, 113 000 Canadian youth were diagnosed with depression, which can be linked to issues with self esteem and body image
- Five of the leading 10 causes of disability are related to mental disorders
- Health Canada estimates that mental disorders with the third highest source of direct health care costs at \$4.7 billion in 1998

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## Older Adults

### Moderate physical activity is both beneficial and safe for older Canadians

- Physical activity leads to disease prevention and risk reduction of coronary heart disease, diabetes, stroke, colon cancer, and hip fractures
- In Canadians over 60, the risk of diabetes is cut by almost 71% through exercising moderately for 30 minutes a day and losing 5-7% of their body weight
- Falling occurs 20% to 40% less often among those who report high activity levels ([www.centre4activeliving.ca](http://www.centre4activeliving.ca))<sup>4</sup>
- Effects of exercise range from reduction in blood sugar, to longer term improvements in muscle mass, strength, balance, and cardiovascular fitness
- Psychological and general well being improvements are seen in immediate anxiety reduction, long term satisfaction and growth in self esteem through mastery of tasks and the prevention of depression ([www.centre4activeliving.ca](http://www.centre4activeliving.ca))<sup>4</sup>

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## First Nations

- The number of First Nations people who are estimated to have diabetes is between 160 000 and 360 000
- In the arctic areas, an estimated 31% of First Nations people are overweight
- When controlled for age, 3 to 5 times more First Nations people have diabetes and 1 in 4 adults over 45 have diabetes

- The problem is escalating as 65% of cases occur in individuals 45 years of age or younger
- Claims for diabetic drugs have increased 78% over 3 years, and total \$13 million/year
- The annual health care cost of an individual with diabetes is 68% higher than one without ([www.hc-sc.gc.ca](http://www.hc-sc.gc.ca))<sup>5</sup>
- Risk of heart problems and hypertension are 3 times higher among First Nations
- Obesity is 3.5% - 5.6% higher than the general population ([www.naho.ca](http://www.naho.ca))<sup>6</sup>
- Physical activity has been shown to increase insulin sensitivity and therefore decrease risk factors associated with diabetes, and reduce the amount of medication required ([www.findarticles.com](http://www.findarticles.com))<sup>7</sup>

The reductions in depression through physical activity need to be considered in remedying the mounting problem of mental illness, especially in youth.

- Suicide is the #1 cause of death up to the age of 44, and for females between the ages of 15-24 and 25-39 the risk is 8 and 5 times higher than the general population (respectively) ([www.hc-sc.gc.ca](http://www.hc-sc.gc.ca))<sup>8</sup>
- Communities surveyed identified problems as a lack of recreational activities and no youth recreation programming that was owned by the youth
- The communities agreed that youth were seen to derive direct benefits from recreation activities (e.g., for fun and recreation) and also to receive broader, social development oriented gains from recreation participation ([www.lin.ca](http://www.lin.ca))<sup>9</sup>
- Beardy's First Nation Reserve increased funding for their hockey program 15 years ago, and have seen the program steer kids away from substance abuse, and build pride in their community ([www.cbc.ca](http://www.cbc.ca))

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## Physical Activity and Child Development

**"For me the most important thing about sport right now is the potential impact it can have on youth in Canada. They need something and they need some source of inspiration."**

**~Clara Hughes, Olympic Cycling and Speed Skating Bronze Medalist**

- Only 1/3 Canadian children are active enough to meet optimal standards for healthy development ([www.hc-sc.gc.ca/](http://www.hc-sc.gc.ca/))<sup>10</sup>
- Between 1981 and 1996, the prevalence of obesity in children tripled, from 5% to 16.6% for boys and from 5% to 14.6% for girls ([www.activeliving.ca](http://www.activeliving.ca))<sup>11</sup>
- 40% of obese 7 year-olds and 70% of obese adolescents become obese adults and face increased disease risk

- Genetic factors only account for 25% - 40% of juvenile obesity, meaning environmental factors such as physical activity are a major factor ([www.cps.ca](http://www.cps.ca))<sup>12</sup>

### Physical education classes establish habits of physical activity at a young age, but daily physical activity is not being achieved

- Half of Canada's children aged 6–17 years take physical education classes three or more days a week and only 17% have daily physical education.
- Nearly 41% of physical education programs are reported as inadequate

### Problems with physical education are showing their effects in Canadian youth

- In 2002, 44% of Canadian youth reported participating in organized sport at least once a week, but this number decreased to 38% in 2003 ([www.pch.gc.ca](http://www.pch.gc.ca))<sup>13</sup>
- 25% of Canadian children spend more time each week watching TV and playing computer/video games than they spend in school ([www.calgaryhealthregion.ca](http://www.calgaryhealthregion.ca))<sup>14</sup>

### Benefits of sport and physical activity extend beyond physical conditioning

- A survey of youth who participate in sport indicates that 99% believe that sport participation improves their health, 87% believe it helps them make new friends, and 85% report it makes them feel better about themselves
- Physical activity is particularly good for the self-esteem of children with a disability
- Students who drop out of school report a lack of enjoyment as a primary reason, which could be improved through physical education and extracurricular programs ([www.cps.ca](http://www.cps.ca))<sup>15</sup>
- More than 80% of Canadians between 10 and 24 years of age who are physically active have never smoked, and are less likely to drink and experiment with drugs ([www.cd.gov.ab.ca](http://www.cd.gov.ab.ca))<sup>16</sup>
- Youth at risk are positively impacted by physical activity through:
  - Positive role models
  - Team work and social skills
  - Positive morals and values
  - Sense of belonging

- Offering racial integration
- A means of releasing stress ([www.cd.gov.ab.ca](http://www.cd.gov.ab.ca))<sup>17</sup>

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## Physical Activity and the Community

- Canadian parents rate the physical environment, such as safe streets, services and programs, and green spaces as very important in helping their children to be active ([www.centre4activeliving.ca](http://www.centre4activeliving.ca))<sup>18</sup>

### Demographics dictate participation in physical activity

- Physical activity is inversely correlated with education and income
- 51% of women in the highest income bracket are not active, compared to 60% of women in the lowest
- Those without a high school education report inactivity levels of 62% while it decreases to 51% in those with a secondary education
- 62% of households with an income below \$20,000 are active, while those with incomes above \$80,000 are inactive in 44% of homes ([www.gris.umontreal.ca](http://www.gris.umontreal.ca))<sup>19</sup>
- Evidence suggests those showing the highest levels of inactivity are those with the most limited access to facilities

### Sport is an excellent way to promote volunteerism

- The number of sport volunteers in Canada increased by 27% between 1995 and 1996 (Goldfarb, 1997).
- Volunteer amateur coaching increased from 4% to 7% between 1992 and 1998, and the number of women coaches increased 3 times ([www.pch.gc.ca](http://www.pch.gc.ca))<sup>20</sup>

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## Physical Activity and the Economy

- Increased tourism receipts from the 2010 Olympics are expected to be \$500 million within one year – equal to the government contribution to the Games as a whole ([www.canski.org](http://www.canski.org))<sup>21</sup>
- In 1994, there were a total of 27 million tourist visits in Canada for participation in sport and/or attendance at sport events ([Department of Canadian Heritage, 1996](#))
- In 1995-96, the direct and indirect impact of the sport sector in Canada accounted for 358,000 jobs and \$7.4 billion (1.1%) of the gross domestic product ([Statistics Canada, 1999](#))
- Volunteering in Canada contributes more to the economy than mines, forestry and communications - around \$12 billion a year ([www.cd.gov.ab.ca](http://www.cd.gov.ab.ca))<sup>22</sup>

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## The Olympic Games

- The Olympic Games unifies Canadians under a common goal and promotes discourse regarding social issues such as national prestige
- Olympic success increases patriotism, inspires participation and a healthier lifestyle, and creates role models for children
- The legacy of the Olympic games benefits all Canadians as winter sport facilities in Calgary are supported by the \$250 million Olympic endowment fund ([www.cansport.com](http://www.cansport.com))<sup>23</sup>

Funding is a major hurdle to athletes, and increased investment is imperative to remedy the current situation of Canadian athletes

**"The PDF [Pure Determination Fund] bursary I received in 2002 helped me climb up to second place in the world skeleton rankings and win the World Championships."**

**~Jeff Pain, Skeleton Olympian**

- Olympic funding in Canada vs. Australia:
  - \$62 million vs. \$280 million annually
  - \$0 bonus/gold medal vs. \$12 000 bonus/gold medal
  - \$150 000 for Triathlon Canada vs. \$1.6 million for Triathlon Australia
  - \$1.99 government funding/ Canadian resident vs. \$5.55 government funding/ Australian resident ([www.cbc.ca](http://www.cbc.ca))
- Funding is not adequate to support a complete vertical system in every sport, and as a result, National Sport Organizations are forced to compromise long-term development needs or short-term immediate performance requirements ([Sport Canada, 2004](#))
- Amateur sports organizations in Canada are victims of volatile funding so long- term planning is impossible ([Calgary Herald, 9/21/04](#))
- Funding lacks the direction to focus on sports with a chance of success ([Calgary Herald, 9/21/04](#))
- Amateur funding is often one of the first cuts to government spending, but without supporting young athletes, the bottom could fall out of the Canadian Olympic program ([www.cbc.ca](http://www.cbc.ca))
- Government funding acts as a catalyst to corporate and private involvement ([www.canoe.ca](http://www.canoe.ca))

## Funding shortages are resulting in a decline in Canadian performances

- Canada had 34 athletes or crews ranked in the top five in the world in 2003; twelve medals were won in Athens
- Athens performances reflect that Canada continues to trend downward

**“World leading sport nations like Germany have already announced their plans to revamp their systems. Canada cannot afford to sit back if we do indeed want to compete with the best.”**

**~ John Mills, President of the Calgary Olympic Development Association**

## How can previous performances at Olympic Games be improved in 2010?

- An increase investment of \$1/Canadian/year from now until the 2010 Olympics would see Canada finish first in the medal count ([www.canski.org](http://www.canski.org))<sup>24</sup>

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## Government Responsibilities

- Communications with the public are responsible for the developments of beliefs towards the urgency and immediacy of the risks of inactivity
- McGuire’s Hierarchy of effects model for media communication suggest only 1.57% of a target audience will be moved to action by a campaign, therefore, persistence is key!
- Almost two-thirds of Canadians think that government should increase tax spending to provide opportunities for physical activity
- Three-quarters of Canadians think that governments have a major role to play in ensuring that daily physical education is mandatory in schools, and 63% in ensuring that community development includes areas for physical activity, such as walking and bicycling paths.
- Half of Canadians rate the promotion of good health and well-being, the provision of services, programs and facilities to help people be active, and the provision of information on the benefits of activity as key responsibilities for governments.
- One-third of Canadians hold strong beliefs that information on physical activity, health and well-being would make it easier for them to be physically active ([www.cflri.ca](http://www.cflri.ca))<sup>25</sup>

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