

involved in another person's fitness efforts must be aware of their responsibility to temper newfound enthusiasm for fitness and health with common sense.

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#### REFERENCE

1. Warburton DER, Nicol CW, Bredin SSD. Health benefits of physical activity: the evidence. *CMAJ* 2006;174(6):801-9.

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Darren Warburton and colleagues<sup>1</sup> conclude that "there appears to be a linear relation between physical activity and health status, such that a further increase in physical activity and fitness will lead to additional improvements in health status." Although Health Canada's guidelines on physical activity appear sufficient to elicit health benefits, especially in previously sedentary people, debate continues regarding the intensity and type of physical activity needed to achieve the most favourable health changes without eliciting osteoarthritis and cardiovascular abnormalities not present at rest.<sup>2</sup> The results of our own recent investigations of top-level endurance athletes<sup>3-5</sup> support the conclusion that substantial intensification of leisure-time physical activity does not increase the risk of adverse cardiovascular events and is likely to be effective in eliciting supplemental health gains. We further suggest that higher intensities and amounts of aerobic training may be safely implemented by sedentary individuals living in the community as a measure to gain further health advantages, especially for those most at risk of cardiovascular problems, osteoporosis and cancer.<sup>1</sup>

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#### REFERENCES

1. Warburton DER, Nicol CW, Bredin SSD. Health benefits of physical activity: the evidence. *CMAJ* 2006;174(6):801-9.
2. Lee IM, Sesso HD, Oguma Y, et al. Relative intensity of physical activity and risk of coronary heart disease. *Circulation* 2003;107:1110-6.
3. Lippi G, Salvagno GL, Montagnana M, et al. Chronic influence of vigorous aerobic training on hemostasis. *Blood Coagul Fibrinolysis* 2005;16:533-4.
4. Lippi G, Salvagno GL, Guidi GC. Other advantages to aerobic exercise [letter]. *CMAJ* 2005;173:1066.
5. Lippi G, Salvagno GL, Montagnana M, et al. Influence of physical exercise and relationship with biochemical variables of NT-pro-brain natriuretic peptide and ischemia modified albumin. *Clin Chim Acta* 2005;367(1-2):175-80.

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As described by Darren Warburton and colleagues,<sup>1</sup> regular physical activity provides a variety of health and fitness benefits. However, barriers to exercise are frequently reported, including lack of time, lack of access and lack of safe environments in which to work out.<sup>2</sup> Increased availability of affordable, secure environments for physical activities combined with acceptable exercise choices, such as walking, swimming, biking or fitness classes, may increase activity levels.

However, education alone does not motivate changes in behaviour, nor will such changes be made before a person is ready to do so.<sup>3</sup> Researchers and health care providers have implemented health-promoting interventions for diverse groups of people for many years with mixed success.<sup>4</sup> They have also reported that disease and disability disproportionately affect racial and ethnic minorities and impoverished people.<sup>5</sup> Therefore, we need to develop and deliver inclusive, culturally appropriate interventions to increase and encourage active lifestyles and healthy diets in our communities.

Highlighting the public health benefits of physical activities and active lifestyles, as Warburton and colleagues<sup>1</sup> have done, is important. Discussing barriers to physical activities and suggesting solutions, as well as making recommendations about best practices to increase physical activities, are just as important. To slow and reverse current trends in obesity-related health problems, highly effective health promotion interventions

and removal of barriers to active lifestyles and healthy diets are greatly needed.<sup>6</sup>

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#### REFERENCES

1. Warburton DER, Nicol CW, Bredin SSD. Health benefits of physical activity: the evidence. *CMAJ* 2006;174(6):801-9.
2. French SA, Story M, Jeffery RW. Environmental influences on eating and physical activity. *Annu Rev Public Health* 2001;22:309-35.
3. Sneed NV, Paul SC. Readiness for behavioral changes in patients with heart failure. *Am J Crit Care* 2003;12(5):444-53.
4. Wanko NS, Brazier CW, Young-Rogers D, et al. Exercise preferences and barriers in urban African Americans with type 2 diabetes. *Diabetes Educ* 2004;30(3):502-13.
5. Brownson RC, Eyster AA, King AC. Reliability of information on physical activity and other chronic disease risk factors among US women aged 40 years or older. *Am J Epidemiol* 1999;149:379-91.
6. Desapriya E. Obesity epidemic [letter]. *Lancet* 2004;364:1488.

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For a substantial proportion of the population in impoverished nations, physical activity is more or less essential to earning a livelihood, rather than being just another activity aimed toward better health. To make ends meet, a subsistence farmer or manual labourer must start early in the morning and work until late in the evening. For example, the tricycle rickshaw is still a means of transport in some places, and the pedaller burns an immense number of calories throughout the day. But at the end of the day, his health may not have improved, despite his supposedly deriving health benefits from aerobic physical activity.<sup>1-3</sup> Therefore, it seems that more than physical activity alone is needed.

Instead, various factors probably interact with physical activity to generate the health benefits observed. Although the study by Darren Warburton and associates<sup>1</sup> is meticulous, detailed and interesting, the interplay of an adequate balanced diet, timely replenishment of essential minerals and nutrients, the environment, adequate rest, psycho-