

### TOWARDS 10,000 STEPS: A MOTIVATOR FOR PHYSICAL ACTIVITY

Picture this: You've just finished a long, stressful day at work. As you reach for your coat, you catch a glimpse of your gym bag you had so eagerly packed that morning with intentions to exercise right after work. You look at the bag, envision your tired feet pounding the treadmill, and head for home instead to rest those feet on the couch. The thought of expending all that energy at the gym is too overwhelming. Well, **what if I told you that you would never have to go to the gym again but could still gain the health benefits associated with regular physical activity! You can. All it takes is 10,000 steps.**

The benefits of physical activity are well known. Physical activity has been known to reduce stress, enhance self-esteem, improve mood, and increase energy. In the past, there has been a focus on the cardiovascular (heart health) benefits of activity, but physical activity also has a role to play in prevention of another chronic disease, type 2 diabetes mellitus. Obesity and physical inactivity were found to be the major factors associated with the disease in a study of people with type 2 diabetes conducted in England.<sup>1</sup> In Nova Scotia, obesity rates are among the highest in Canada at 21% (the national average is 15%).<sup>2</sup> Also, as many as 57% of Nova Scotians are not active enough to reap the health benefits of physical activity.<sup>3</sup> Why is that?

There are many reasons why people do not engage in regular physical activity. The top three barriers to being active recently identified by Nova Scotians were tight deadlines, lack of time due to work, and roads that are too busy for walking or cycling.<sup>3</sup> Often, people believe that in order to be physically active, they need to join a gym or go running for an hour every day. This is not the case. The objective of a physical activity program is to increase activity relative to baseline. The focus can be on small, steady, lifestyle changes.

That is where the 10,000 steps program comes in. The idea for this program originated in Japan as a way of promoting walking. It is a lifestyle approach to fitness that involves the use of a pedometer,<sup>4</sup> an electronic device that counts the number of steps a person takes. The pedometer is worn during waking hours and counts the total number of steps taken during the day, with 10,000 being the ultimate goal. Ten thousand is not an arbitrary number; it is based on the premise that active people, on average, take at least 10,000 steps throughout the day whereas inactive people take between 2,000 and 4,000.<sup>5</sup> Along

with the use of a pedometer, the 10,000 steps program involves setting and recording goals, writing daily steps taken in a log book, and social support to help with motivation.

The great thing about the 10,000 steps program is that it fits easily into people's lives. Walking is currently the most popular physical activity for adults in Canada.<sup>3</sup> Walking is safe and can be done anytime, anywhere. In fact, able-bodied people walk everyday, but some need to walk a little more to get the health benefit, which is where a pedometer can help. It is useful both as an environmental cue ("Oh yeah, I should be walking whenever I can today") and as a feedback tool ("Now I know how much I typically walk in a day and what my goal should be for increasing that"). People who have used pedometers have commented that pedometers gave meaning to walking, helped them become more health conscious, and helped prevent staying home and watching TV.<sup>4</sup> In a pilot program of 10,000 steps, 56% of participants claimed that the pedometer alone was most effective in helping them increase their physical activity.<sup>5</sup> It could do the same for you.

Getting started could not be easier. The first step is to find a pedometer (see "Pedometers: what you need to know" on page 18). Pedometers should be worn at the waist in line with the middle of the thigh, and should be completely vertical (i.e., not slanted to one side) in order to accurately gauge the steps. Wear the pedometer for a week, doing the same amount of activity as you normally do, and record the total steps taken each day. At the end of 7 days, calculate the average steps per day. From this, increase by 3,500 steps a week (500 steps a day) until the 10,000 mark is reached. For example, if your average daily steps is 5,000 in the baseline week, aim for 5,500 per day in the second week, 6,000 per day in week three, and so on. Of course, if you are already quite active, feel free to exceed the 10,000 mark, but don't overdo it. Likewise, if you are quite inactive, take it slow; an increase of 250 steps per day might be more realistic. Let how you're feeling guide you.

Skeptics may say that this 'take the stairs' approach to fitness is not as beneficial as the traditional 'sweat your heart out' approach. However, it was found in a physical activity intervention study that this lifestyle approach was as effective as the traditional approach in producing increases in physical activity leading to health benefits.<sup>6</sup> So, if you can't make it to the gym after work, don't worry. Instead, take the stairs rather than the elevator throughout the day, park a little farther away from your destination or get off the bus a few stops early, go for a 10 minute walk before lunch, and

walk to the video store on a Sunday. You'll be surprised at how quickly the steps add up. For more information on walking, see "Want to walk more?" on page 16.

Health professionals should be promoting physical activity in the general population, but particularly in people who are at risk of developing type 2 diabetes. A study of people with impaired glucose tolerance in Finland showed that lifestyle changes can decrease the risk of progression to diabetes by 58% over four years.<sup>7</sup> Populations at increased risk for the development of type 2 diabetes (such as family members of those with the disease) should be identified and encouraged to adopt healthy lifestyles which can decrease their risk. Ten thousand steps is one way to do just that!\*

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#### References:

1. Pinkney J. Prevention and cure of type 2 diabetes. *BMJ*. 2002;325:232-3
2. Statistics Canada. BMI: International Standard. *Health Indicators*. 2002;1. Available at: <http://www.statcan.ca/english/freepub/82-221-XIE/00502/high/region/hbmii.htm>. Accessed September 23, 2002.
3. Canadian Fitness and Lifestyle Research Institute (CFLRI). 2001 Physical Activity Monitor. Available at: [http://www.cflri.ca/cflri/pa/surveys/2001survey/2001\\_ns.html](http://www.cflri.ca/cflri/pa/surveys/2001survey/2001_ns.html). Accessed September 16, 2002.
4. Hatano Y. Use of the pedometer for promoting daily walking exercise. *International Council for Health, Physical Education, and Recreation (ICHPER) Journal*. 1993;29:4-8
5. Lindberg R. Active living: On the road with the 10,000 steps<sup>SM</sup> program. *J Amer. Diet Assoc*. 2000;100:878-9
6. Dunn AL, Marcus BH, Kampert JB, Garcia ME, Kohl HW, Blair SN. Comparison of lifestyle and structured interventions to increase physical activity and cardiorespiratory fitness: A randomized trial. *JAMA*. 1999;281:327-34
7. Tuomilehto J, Lindstorm J, Eriksson JG, et al. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med*. 2001;333:1343-50



#### Want to Walk More?

- ✓ Contact your *local recreation department* to find out about walking clubs and trails in your area.
- ✓ Start a *walking group* –just you and a buddy or the whole neighborhood.
- ✓ If you can't find a buddy to walk with, wear a walkman and *move to the music*.
- ✓ Don't like that rainy or snowy weather? See if your town has indoor "*mall walking*."
- ✓ Tips for walking:
  - Wear proper footwear.
  - Wear comfortable clothing.
  - Start out slowly, warm up, and stretch.
- ✓ Examples of walking programs in Nova Scotia:
  - **Hearts in Motion™ Walking Clubs** (Heart and Stroke Foundation) – Involves the marking of designated trails in kilometer or half-kilometer intervals. The signs allow walkers to set goals and monitor how far they walk. Designated trails in HRM, Pictou County, Central Kings, and Yarmouth. Call 1-800-423-4432 for details.
  - **Walk-A-Block Program** (Annapolis County) – This is based on the Walk-a-Block Program of America which encourages walking for health benefits. This workplace program encourages employees of participating companies to walk fifteen minutes a day during work breaks. This program could be started in your community. For more info go to: [www.annapoliscounty.ns.ca/rec/info.html](http://www.annapoliscounty.ns.ca/rec/info.html).
- ✓ Check out these websites:
  - **[www.walking.about.com](http://www.walking.about.com)** (Walking tips, programs)
  - **[www.trails.gov.ns.ca](http://www.trails.gov.ns.ca)** (Trail information project)
  - **[www.trailtc.ns.ca](http://www.trailtc.ns.ca)** (Trans Canada Trail in Nova Scotia)
  - **[www.walkilink.com](http://www.walkilink.com)** (The Interactive Website for Walkers)
  - **[www.10000steps.cqu.edu.au](http://www.10000steps.cqu.edu.au)** (10,000 steps on-line program based in Australia)
  - **[www.thewalkingsite.com/steps](http://www.thewalkingsite.com/steps)** (Tips on walking, 10,000 steps program)