## PEDOMETER HANDBOOK

## **MAKING EVERY STEP COUNT!**

Congratulations on taking a step with pedometers to a healthier you! We hope this handbook will help you make walking part of your everyday life.

This handbook includes information on: what a pedometer is, how it works, do's and don'ts, tips on how to use and wear a pedometer, what to look for in a pedometer, advantages and limitations of pedometers, and information on different types of pedometers (costs, models). This handbook includes a log to help you keep track of steps, and includes information about where to access walking programs, groups, routes, walking partners, events or information in your community.







## What is a Pedometer and How Does it Work?

A pedometer is a pager (or matchbook) sized device worn on your belt that records the number of steps you take based on your body's movement. A pedometer is a great way to measure your current activity level and to motivate you towards a higher level of activity. Some pedometers are analog devices that simply measure steps. Some are fancier digital models that track the distance you walk and the calories you burn. Keep in mind that the calorie counters are less accurate and more expensive.<sup>1</sup>

When worn properly, the pedometer records each step you take by measuring each time your hip moves up and down. Pedometers are nearly always more accurate recording fast walking than slow walking.<sup>2</sup> There are a few different mechanisms which enable

<sup>&</sup>lt;sup>1</sup> Martin Collis (2005). Speakwell.WELL: Newsletter for Wellness, 7(3). Retrieved from: www.speakwell.com/well/2005autumn/pedometer.php

<sup>&</sup>lt;sup>2</sup> Alberta Centre for Active Living (2003). Wellspring, 14(2).

pedometers to count your steps. The most common is the hairspring pedometer, which is generally considered to be somewhat less reliable and long lasting than the more expensive coil spring pedometer. Another type of mechanism is the magnetic reed proximity switch (MRPS) which seems to be quite dependent on its design and the quality of its manufacturing. Finally, there is the accelerometer type of mechanism, which tends to be the most sensitive and expensive.<sup>3</sup>

## How Many Steps Do You Need Per Day?4

For long term health and reduced chronic disease risk:	10,000 steps a day
For successful, sustained weight loss:	12,000 to 15,000 steps a day
To build aerobic fitness:	3,000 or more of your daily steps should be done briskly (i.e. fast paced)

Your pedometer works whether you are running, walking or climbing the stairs, but remember, it counts the number of steps you take and not the intensity of those steps.

## Where is the Best Place to Wear a Pedometer?

To get the most accurate reading, place the unit on your waistband as close as possible to the top point of the hipbone and ensure that it is vertical. The pedometer must remain upright to record correctly, not tilted forward, backward or side-to-side. It will not record properly when open, so keep the pedometer closed – unless you are checking your steps. Also, make sure that it is secure, because if it shifts at all during your walk, it won't give an accurate reading. The pedometer should come with a clip, a security strap to ensure that it stays on, and a protective cover to prevent damage and accidentally resetting the buttons.

<sup>3</sup> ibid

<sup>&</sup>lt;sup>4</sup> Government of Ontario, Active 2010 (2005). Using Your Pedometer.

The best way to find out if your pedometer is well positioned is to put your pedometer on, press reset and then take a quick 20 steps while you count your steps. If the pedometer is not reading between 19 and 21 steps, try placing it in a different position along your waist (between your navel and your hip) until you find the place that is best for you, again keeping in mind that it should be worn as close as possible to the top point of the hipbone.

The rattling sound you hear in the pedometer does not mean it is broken. It is the suspended lever arm which moves when you do and counts your steps. The up and down motion opens and closes an electrical circuit. When your foot strikes the ground, the lever arm makes an electrical contact and this is recorded as a step.

## Which Pedometer is Right for You?

The type of pedometer you buy is totally up to you. Most large sports or electronic stores carry pedometers. The simplest and least expensive pedometers display the steps and/or distance you cover and this is all you really need to keep track of. This number helps you to set goals to monitor and increase your physical activity level.<sup>5</sup> Be sure to wear your pedometer all day in order to make sure all of your steps count.

Pedometers are relatively simple to operate and inexpensive, ranging from about \$15 to \$75, with an average cost of \$25. Pedometer price is not always a good indicator of quality. A pedometer that is accurate, reliable and easy to use makes the whole experience more enjoyable. Shop around, as the same brand of pedometer can be marketed under different names and sold though various distributors. See the table in this handbook for cost and model comparisons.

The pedometer uses a small watch type battery. These batteries are designed to last a long time, at least an average of one to two

<sup>&</sup>lt;sup>5</sup> Steps Count Inc. (2005). Retrieved from www.stepscount.com

years. Make sure when you buy your pedometer that it is easy to replace the battery.

## Advantages of a Pedometer

Pedometers are simple to operate. They give people immediate feedback about how many steps they have taken during the day, making it possible to track them and set goals to monitor and increase physical activity. The pedometer is small and lightweight, and virtually everyone (children, adults, people with disabilities, etc.) can wear them.<sup>6</sup>

## Limitations of a Pedometer

Despite the obvious benefits of pedometers, they also have some limitations. The main concern is that they do not measure the intensity of physical activity (how hard), or the duration (how long). Pedometers may also underestimate the number of steps taken during high intensity activities and may not be as accurate for people who do a fair amount of bending and/or who have excessive abdominal fat, as the pedometer may move away from the person's body.<sup>7</sup>

## Using the Pedometer for Motivation

This Handbook includes a Pedometer Log to help you keep track of your steps. Use it for the first week with your pedometer to establish a baseline for future comparison. That is, go about your normal daily routine while wearing your pedometer but don't change your activity pattern. After you see how many steps you accumulate in a day, you can determine if you need to be more active. Set a goal that you can reach, for example, an additional 200 steps per day, or add 20% more steps per day. When you have achieved this new level of activity, you can set a new goal for yourself, eventually working up to 10,000 steps per day.

<sup>6,7</sup> Alberta Centre for Active Living (2003). Wellspring, 14(2), pp.2.

## Do's and Don'ts8

#### Do:

- Remember to wear it daily
- Purchase a pedometer that is comfortable and easy to use
- Purchase a pedometer with a protective cover to avoid resetting the device mid walk
- Change the battery as soon as you notice the digital display fading
- Keep the pedometer vertical to get the most accurate readings

### Don't:

- Get the pedometer wet no swimming with it on!
- Drop or crush your pedometer this could break the crystal inside
- Shake the pedometer as it will alter the step count
- Put a pedometer in your pocket, as it cannot stay vertical, therefore, will not accurately count your steps

#### Where to Find Information

If you are interested in finding out about walking programs, groups, routes, walking partners, events or other information in your area, contact your local recreation centre, town/city hall, YM/YWCA, or private fitness facility.

<sup>8</sup> Government of Ontario, Active 2010 (2005). Using Your Pedometer.

# Pedometer Walking Log

Walking is one of the easiest and safest ways to become more physically active!

You can use this log to help keep you on track and set goals Simply record your steps in each box after using a pedometer.

,	Monday Steps/Minutes	<b>Tuesday</b> Steps/Minutes	<b>Wednesday</b> Steps/Minutes
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			

Week 1 – Wear your pedometer for a week and don't change your normal routine. Log your steps daily. At the end of the week you will be able to see how many steps you have taken in your day to day living.

Weeks 2-3 – Take the highest step count from week one and make that your daily goal for the next two weeks, or make it your daily goal three times per week for week two, then each day for week three. For example, if your steps varied from 800 to 2,000 steps per day in the first week, make your new daily goal 2,000 steps. You can increase gradually to build up your steps to the new goal.

Weeks 4-5 – It is now time to increase your daily steps. Start with a 500 step increase per day in week four and increase that by another 500 by week five. If you walked 2,000 steps in weeks two and three, you should be walking approximately 3,000 steps per day in week five.

## Here's a checklist to get your walking program off on the right foot:

- A good pair of shoes
- Comfortable, loose-fitting clothing (remember to dress for the weather)
- A safe place to walk (check it out first)
- A watch to time yourself or a pedometer that has a clock feature
- A walking program/schedule that suits your lifestyle

Thursday Steps/Minutes	<b>Friday</b> Steps/Minutes	<b>Saturday</b> Steps/Minutes	<b>Sunday</b> Steps/Minutes

Week 6 onwards – Continue to increase your daily steps on a weekly basis. Try to add 2,000 steps per day (about 20 minutes) but ultimately, increase as much as you feel comfortable, until you reach the ultimate goal of 10,000 steps per day.

Working into a 10,000 step program slowly will help you to avoid injury. Once you've reached your 10,000 step goal, maintaining this will be your biggest challenge. Celebrate your success and reward yourself for doing 10,000 steps a day! Consider walking with others to socially reinforce and support your hard work. Aim to maintain for six months and this should help establish the behaviour as part of your lifestyle!

#### Pedometer makes and models

Pedometers are often sold at sports stores, electronic stores, online, and at a number of not-for profit organizations and range in price from \$8.50 to \$75.99.

Functions vary between models and may include step counting only, or multi-function models such as counting calories burned and distance walked. Group health promotion rates are available through several manufacturers.







For more information, please contact: BC Recreation and Parks Association Tel 604.629.0965 Email bcrpa@bcrpa.bc.ca www.bcrpa.bc.ca.

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