

More than 71 per cent of adult Canadians walk for fitness purposes.<sup>1</sup> Walking is also the top-ranked fitness activity for approximately 66 per cent of young Canadians under the age of 20-years-old. With so many Canadians walking for fitness, the Pedorthic Association of Canada is urging consumers to wear the right type of shoes to prevent serious injury to their feet, legs and lower back.

“Too many Canadians do not wear the right type of activity specific footwear when starting a walking program. Many consumers believe that any type of comfortable shoe is suitable for walking regimes. Often consumers spend the entire spring and summer months in sandals rather than appropriate shoes selected for their individual walking program, causing discomfort, pain and even serious injury to their feet and lower limbs. Sandals are not designed for long distance walking, as they do not provide the required support and cushioning,” says Paul Lucas, 2008 President of the Pedorthic Association of Canada and a Canadian Certified Pedorthist.



Canadian Certified Pedorthists are orthotic and footwear experts. Pedorthists (C. Ped (C)) are one of the few healthcare professionals trained in the assessment of lower limb anatomy and biomechanics. With specialized education and training in the design, manufacture, fit and modification of foot orthotics and footwear, Pedorthists help to alleviate pain, abnormalities and debilitating conditions of the lower limbs and feet that if left untreated could result in limited mobility.

Lucas adds, “Approximately 20-30 per cent of consumers experiencing pain or discomfort during an activity, such as a walking program, are unaware that this is caused by improper footwear and can be easily rectified by finding the right type of shoe. Buying the wrong type of footwear can cause problems ranging from minor discomfort such as blisters, corns and calluses to more serious conditions including repetitive stress injuries to the joints and muscles.”

By interchanging activity specific shoes for sandals in the warmer months, consumers may find themselves not being able to go that extra distance due to discomfort and muscle fatigue.

Walking shoes are designed to meet the requirements of the foot and lower limbs during this activity. Sandals are not, as they do not provide the support, motion control and cushioning required by the foot during walking.

Walking shoes are designed to help the foot to ‘lift off’ during each step and provide appropriate cushioning to the foot and the joints when walking long distances on a range of different surfaces. A walking shoe provides more flexibility through the front of the foot to help match the natural motion of the ball of the foot. This function and fit combination prevents the foot from sliding top-to-bottom or side-to-side, which can cause blisters, calluses or other painful conditions. In addition, walking shoes feature laces and leather or nylon uppers (everything located above the insole of the shoe including laces, tongue, etc.) that support the foot and control the range of motion.

Sandals are typically constructed with leather or plastic straps across the top of the shoe and do not provide the required motion control for walking. Without the needed motion control the foot will slide top-to-bottom and side-to-side, causing friction and ultimately discomfort. Plus sandals usually have a hard, flat insole that does not cushion the foot or provide the necessary 'lift off' momentum with each step.

But with so many types of activity specific shoes available on the market today, many consumers are not aware of what they should be looking for when purchasing shoes for their own individual walking program. Lucas recommends that Canadians check the following criteria when purchasing walking shoes:

– **Find proper fitting footwear** - Proper fitting footwear should feel comfortable the moment they are tried on by the consumer. The old adage that a snug-fitting shoe will stretch over time is a dangerous myth, as it can cut off circulation to the foot, cause blisters or other painful wounds. There should be a minimum of 1/4" of space in the shoe beyond the longest toe of your largest foot to allow feet to function within the shoe. The shoes should fit snugly around the heels, but should not dig in.

– **Laces** - Find shoes that lace up and allow for variable lacing patterns or use specific techniques to improve heel fit to ensure that the shoe fits snugly and supports the movement of the foot.

– **Measure both feet** - The size of one's feet change throughout their entire life and most consumers have one foot larger than the other. Plus all shoes are not manufactured the same - so, size may vary. It is imperative to be fit by a knowledgeable shoe fitter that will measure both feet using a device such as the Brannock device.

– **Match foot and shoe shape** - For a shoe to fit properly, the shape of the shoe must match the shape of the foot. If the foot looks wide and square than the shoe should mirror it and feature a wide toe box (top part of shoe). Consumers should avoid any shoe with a pointed toe. Shoes should bend where the foot bends and the fitter should ensure that this matches with the widest point of the foot. Ignoring this fit criteria may cause discomfort, pain and accelerated shoe wear.

– **Removable insoles** - When fitting shoes remove the insole and place it on the ground putting the foot on top of it to ensure that it matches with the foot shape. If it does not, then the shoe will not fit the foot properly and will cause discomfort, pain and premature wear. Those who wear custom foot orthoses or specific over-the-counter insoles usually require a removable insole.

– **Heel Counter** - To determine the qualities of any shoe, consumers should first make sure that it features a firm heel counter (the hard piece of material located at the back of the shoe that controls side-to-side foot motion). A strong heel counter increases stability providing better support for the foot. To quickly test the effectiveness of the shoe's heel counter, place the shoe in the palm of your hand and put your thumb in the mid-portion of the heel counter and try to push the back of the shoe. If the heel counter does not bend very much it is strong.

– **Cushioning** - While it is widely accepted that cushioning is important, too much cushioning is not ideal, as it forces the foot and leg muscles to work overtime to provide the stability that too much cushioning cannot provide. The design, fit and functionality of the shoe must match the wearer's foot type, weight and other factors.

By following the above-mentioned criteria, consumers will be able to maximize the health benefits of walking and enjoy a more active lifestyle this spring and summer.

<sup>1</sup>2005 Physical Activity and Sport Monitor study performed by the Canadian Fitness and Lifestyle Research Institute.