

Your Footbone's Connected to Your...

by Rob Mutch

Have you ever wondered how far you'll walk in your life? The average person walks 176,640 km in a lifetime, and more than 75 per cent of the population will suffer from foot-related ailments.

For some, foot problems will be minor annoyances. For others, foot problems will mean weeks, months or years of pain and discomfort. For professional and amateur athletes, foot problems can severely affect performance. And because of the foot's critical role in how the body functions, problems with foot mechanics can lead to many of the most common foot, ankle, knee, hip and lower back ailments.

At the basis of most foot-related problems is a simple fact. The foot is under constant stress from the body's weight. As you walk or run, your entire body weight lands on your feet at a pressure equivalent to as much as 5 times your body weight, and to the tune of 15,000 times a day. With your feet under such high demands while already working hard just to support your body, even minor variances in normal foot mechanics can impact numerous joints and tissues within the kinetic chain.

Those with diabetes and arthritis need to take extra precautions when it comes to foot care, as there are several complications associated with these diseases. People with arthritis often comment that their feet will burn as though they are "dancing on coals." This is due to the inflammation of the joints associated with arthritis and is compounded by poor foot mechanics. Joint swelling combined with poor biomechanics can lead to severe repercussions to the health of arthritic feet including pain, bunions, hammer toes and the potential need for surgery. People with diabetes need to be particularly concerned with poor circulation in the feet, which often results in ulcers, infection, and sometimes, surgery.

Good biomechanics, alignment and function are essential to healthy feet. The foot must move correctly when standing, walking or running. Altered biomechanics will cause poor weight distribution along the bottom of the foot, resulting in one or more areas of the foot bearing

abnormally high pressure. The result can be pain, skin irritation, postural fatigue or even a lack of balance. Similar to the use of eyeglasses for correcting vision, researchers have developed foot orthotics for the correction of foot mechanics. In fact, orthotics is the second most prescribed correctional device next to eyeglasses.

One of the most common reasons for the prescription and use of an



orthotic insert is the desire to correct a developing injury or to avoid a typical movement that is related to injury. Several studies have reported successful interventions with orthotics in sport activities. The literature reports that between 70 and 80 per cent of foot and leg conditions respond positively to treatment. In a study conducted on runners with knee injuries, 78 per cent were able to return to their previous running program with the use of orthotic therapy.

In another study of 347 runners and walkers, orthotics was used to correct foot dysfunction. Of the total subjects, 31.1 per cent were diagnosed with pronation, or flat foot, 20.7 per cent with plantar fasciitis, 18.5 per cent with Achilles tendonitis, 13.5 per cent with leg length discrepancy, 12.6 per cent with patello-femoral conditions or knee pain and 7.2 per cent with shin splints. Of all the respondents, 76 per cent reported complete or substantial improvement in symptoms due to the orthotics. Orthotics accomplish this in part by controlling excessive motion in the arch of the foot to maintain a stable base of support and reduce stresses placed on the lower body.

If you suffer from any of the above-mentioned conditions or have been battling with a pain that has eluded your practitioner's diagnosis, consider Orthotic Therapy. It may be exactly what you need to help you continue

enjoying the wonderful array of activities available here in the Okanagan Valley.

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