

# When Your Feet Hurt

Certainly, foot pain is enough to make you irritable. But, did you know that foot symptoms could mean that you are suffering from some kind of postural problem. If you are like 80% of the population, you suffer on occasion from hip, back and neck complaints. Many of which can be traced to a malfunction in the feet.

By Dr. Lee Cohen



**A** recent medical study shows that 80% of the people in the United States have a foot problem that is significant enough to cause symptoms at some time in their lives. Factors such as occupation, recreational activities, and environmental stresses cause your body to compensate for deficiencies and abnormalities in the functioning of your foot.

Your foot is made up of 26 bones that function first as a mobile adapter, then as a shock absorber for the rest of your body. During the mobile adapter phase of walking or running which is when your foot hits the ground, the foot is a “loose bag of bones” that can be placed on any surface and still help maintain the equilibrium of your leg and body above. As adaptable as your foot’s structure must be, it must also be capable of locking itself into a rigid structure so that it can act as a lever, first to stabilize and lift your body’s weight and then propel it forward.

The timing of your gait or the way you walk is as important as the foot structure. When timing is off, the

body’s weight and stress enter the foot at a time when it is not prepared to receive it. This results in an unstable foot that has bones moving in an abnormal direction through abnormal ranges of motion.

Over the years, if your foot function is poor your feet will functionally adapt. Therefore, when the foot care specialist examines you, knowledge of biomechanics and anatomy must be applied to mentally reconstruct the feet as to how they appear and work before the alterations caused by use of activity and environmental stresses occur.

Unaware of these slow adaptations that occur over the years, most people tend to ignore their feet until there is pain. Only then will people seek advice of a medical specialist to relieve symptoms and correct their condition.

Foot orthotics are prescribed and used today almost as commonly as eyeglasses and contact lenses. Foot orthotics correct the positioning of the foot and restore it to a neutral or natural state. Just as eyeglasses restore your vision or

contact lenses restore your vision to allow you to see better, foot orthotics allow you to function better.

Orthotics are intended to capture and realign and retain the correct anatomical relationships between the various bones and segments of your feet. Orthotics are made after impressions or casts are taken by your doctor and sent to a laboratory to make adequate models of your feet. It is the same way that a dentist works with a dental laboratory. The casting is followed by extensive examination combined with an examination of the way you walk or run. When we combine all this information, it is sent to the laboratory, which fabricates the device which is custom made to fit appropriately to your foot and give the foot and the rest of your body the correction it needs. With improved foot function your doctor’s goal is to decrease or eliminate foot, leg, ankle and other postural symptoms that may be causing you discomfort. Many people with back pain simply have the pain because of

improper alignment of their feet and once the foot alignment is corrected the back pain can disappear.

Biomechanical orthotics can be constructed for more specific reasons. They can be constructed from materials that include precise design features depending on your personal condition, physical status, sports activity, occupation and types of shoes worn. Since each orthotic device is made separately for the individual foot they may not appear to be identical. However, each orthotic should conform well to each respective foot. They will generally appear narrower than your feet, and they should fit comfortably in your shoes without binding or spreading heel counters. If they do not, then the orthotics may require some reshaping or reduction or other dimensions. Most of the time, however, you may need to increase your new shoe size by half to one full size depending on style of that shoe. If you do get new orthotic devices, take them to the shoe store with you and make sure they fit appropriately in either

your sport or dress shoes.

You will be amazed how much better your whole body will feel once your foot and legs are realigned in a neutral position. Remember you cannot build a stable and sturdy building on an unstable foundation.



Dr. Cohen is a Board Certified Foot and Ankle Surgeon and a Fellow of the American College of Foot and Ankle Surgeons. He received his Doctor of Podiatric Medicine degree from Temple University School of Podiatric Medicine. He served his residency at Presbyterian University Hospital and The Podiatry Hospital of Pittsburgh. Dr. Cohen is presently the Podiatric Consultant to NFL Philadelphia Eagles Football Team, the Philadelphia 76ers and the Philadelphia Wings. He is also a consultant to athletic training staff at Penn State University, the University of Pennsylvania, Villanova University, Princeton University, and West Chester University. His practice is located in Ridley Park, PA.