



**Neil J. Feldman, DPM**

**Donald E. Pelto, DPM**

Central Massachusetts Podiatry – 299 Lincoln Street, Suite 202, Worcester, Massachusetts 01605

T: (508) 757-4003 Fax: (508) 755-7592 [www.centralmasspodiatry.com](http://www.centralmasspodiatry.com)

## **WHY YOU NEED ORTHOTICS**

You have just been scanned for orthotics and we want you to get as much out of them as possible. They are not designed to give you new feet or make every ache and pain in your body disappear. Rather, they are intended to help the foot to function more efficiently and in turn, help whatever symptoms they have been prescribed to help treat.

### **Understanding Orthotics**

Orthotics are NOT arch supports! In fact, support of the arch is a misnomer. All feet pronate (leg rotating inward and arch flattens, destabilizing the foot) and all feet supinate (leg rotates outward, arch raises and foot stabilizes). Some feet do it more than others, and some are at extremes. Essentially, a flat foot is an over-pronated foot whereas a high arched foot is an over-supinated foot. Not to belabor the point, but over-supinated and under-pronated are the same thing, and thus this foot type will be more rigid, and less adaptable. Pronation is the necessary function of unlocking the foot to allow it to adapt to the ground and ground reactive forces. Usually, due to poor mechanics or proximal instability (think pelvis), the body is unable to reverse the pronation (i.e. supinate) and the foot remains unstable throughout the stance phase of gait (foot on ground). This is NOT necessarily a foot problem! It has as much to do with the body moving over the foot as it does with the foot itself. The key is the heel. If the heel is turned outward relative to the lower leg (valgus), then the foot is unlocked or pronated. At an extreme (over-pronation), the body will always be “fighting” for stability atop the unstable foot. This will force many of the larger muscle groups above the feet to overwork and fatigue. I like to use the analogy of walking barefoot on a soft, sandy beach. It takes much more effort as the ground provides no stability. Over pronators are essentially always on this proverbial soft, sandy beach. A good orthotic will stabilize the heel and prevent the foot from unlocking past the point of normal. This will create a consistent point of reference for the body to then work on gaining stability and hopefully regaining proper movement and form.

In other words, orthotics maintain heel position which maintains the foot in a stable position and the keeps the body in better posture from the ground up, regardless of other postural problems. Ultimately, posture is the key. The better our posture, the less our feet have to do to help us stand and walk. The worse our posture, the more the feet have to do to help us stand and walk. When the feet are asked to do a job they can no longer do, they may begin to break down and ultimately hurt. Orthotics will help the feet do their job better by allowing them to not work as hard, and position them to avoid being forced to work as hard.