

## Barefoot Walking Inspires Healthy Shoe Choices

By Karin Edwards, Certified Rolfer, [www.portlandrolfer.com](http://www.portlandrolfer.com)

Based in part on the work of Dr. Ray McClanahan, DPM

Our feet were designed to be barefoot. The modern world isn't always safe for bare feet, plus our feet are vulnerable from years of wearing shoes. Shoes can protect you from sharp objects, debris, rain and cold temperatures. We can have some of the advantages of barefoot walking by choosing footwear that makes sense with how our feet were designed. I call this "barefoot-inspired footwear," or "minimalistic footwear".

These ideas may be very different from what you've heard from the shoe industry and from some podiatrists. Please consider these concepts, and experiment with gradually shifting your shoe wardrobe to include more shoes that fit this ideal. You don't need to throw away any of your shoes, just put some of them in the back of your closet. Also, new shoe purchases need not be expensive. Just keep these principles in mind as you shop.

The foot has 26 bones. Each of these bones should move separately when you walk. Twist your foot to see how much motion is possible. Now turn your shoe upside down and twist it. Shoes need to be **flexible** to allow your foot and ankle to adapt to the ground. Most shoes that are flexible will also be **lightweight**, which allows natural hip and leg motion.

Can you **feel the ground through your shoes**? Your brain expects *proprioceptive* (sensing your body) information from your foot as it hits the ground. If your footwear is too cushioned or supportive, those sensations will be dulled and you will subconsciously strike harder to provide the necessary sensory feedback. The load goes up into your knee and increases the risk for osteoarthritis. Studies show increased shock into the knee when wearing "motion-controlling" sneakers or stiff clogs, but less when barefoot or in flip-flops. When you are barefoot, heavy steps are punished, so you automatically adjust your gait.

In addition to being stiff, many of the shoes that failed the above test also have **too much medial arch support**. The structure of an arch supports itself – that's the point of an arch. Think of the graceful arch of a bridge. The ends are supported by the ground, and the arch holds itself up. When the arch of the foot does its own work, it will be strong and capable. If it is supported by orthotics or the insole of your shoe, your arch will weaken and you will be less capable of walking barefoot. Meanwhile, the arch support interferes with the natural *pronation* stage of walking, where the medial arch of the foot spreads and flattens. Your foot may fight the arch support, causing tension in the outer calf and even the outer thigh.

Look for a shoe with a completely **neutral heel**. Most athletic shoes, sports sandals, and even "flat" dress shoes have a half-inch heel. Even a small heel contributes to tight calves and hamstrings, and increased heel strike. A "negative" heel is also not ideal. Your foot was designed with just the right amount of heel, so why argue with nature on this point?

A neutral sole will also be flat through the toes. **Toespring** is when the toe of your shoe lifts up like an elf boot. Athletic shoes commonly have a 15 degree toespring (only in the past decade). You may be able to undo the toe spring by bending the shoe in the other direction for a half hour – just tuck it between the lip of a cabinet and the floor. Toespring may contribute to deformed toes, because it holds the toes in a lifted position.

Your toes will enjoy having a **foot-shaped toebox**, which means the toebox needs to be wide at the end of the toes. A narrow toebox contributes to bunions and plantar fascia pain. Remove the insole and stand on it to see if your toes go over the edge of the insole. Watch for a toe box that narrows too quickly and pulls in the tips of the toes, as in most athletic shoes. Avoid sandal straps that cross the toes and pull the toes inward.

Poor-fitting sandals or flip-flops can also contribute to deformed toes. Footwear needs to **stay on your feet** without having to use your toes. Common culprits can include flip-flops, clogs, Crocs, and Birkenstocks. Over the years, gripping or lifting your toes will contribute to hammertoes, claw toes, and squished-together toes. Choose a version with a heel strap, or with a design that stays on easily as you walk.

### **“Now that I have ‘barefoot-inspired’ shoes, how should I walk?”**

Indigenous peoples who have been barefoot since childhood show us how to walk and run correctly. Allow your foot to stay on the ground longer, rolling through the toes, then swing your leg forward only to the point where it is just a little in front of your body. Contrast this to reaching the foot far in front of the body, striking the heel, and pulling the rest of the body forward. This new stride will be shorter but with a faster cadence. Each step will feel lighter, since it minimizes both the impact and the effort.

### **Optimizing the toebox**

You’ve found shoes that are wide at the end of the toes, but when you take out the insole and stand on it, your big toe or little toe still goes over the edge. Your toebox needs a little more room. You can re-lace the shoe, skipping the first pair of eyelets, to allow more room at the toes. You can try to stretch the leather in specific places, using a tool such as a pen.

If the toebox is spacious but your toes are still inactive, you can wake them up by wearing toe socks, which have a separate pocket for each toe, like a glove. Injini is a brand that has longer toes (at REI), while Sock Dreams ([www.sockdreams.com](http://www.sockdreams.com)) has styles for women, with shorter toes. Toe shoes by the name of Vibram Five Fingers are available online and at REI.

Please contact me at 503-230-0087, or see my website [www.portlandrolfer.com](http://www.portlandrolfer.com) for more information, including a link to a 13-page list of recommended shoe brands and styles with photos.