

# RUNNING ORTHOTICS



BY RUNNERS WORLD MAGAZINE

In 1997, just two months after moving from the grass and dirt of Kenya to the paved roads of the United States, Stephen Ondieki, 28, started experiencing severe pain in both feet. He thought he just needed to adjust to running on hard surfaces, but an exam revealed the real culprit. His feet excessively pronated (collapsed inward) when he ran, and as a result his knees rotated inward. This double whammy put too much stress on his lower limbs, resulting in five stress fractures in both feet. The remedy? It wasn't surgery, rehab, or an introduction to the swim coach. All Ondieki needed was an orthotic, a shoe insert that corrects biomechanic inefficiencies. "It corrected the problem once and for all," says Ondieki, who finished second in the 2000 Division I-AA Cross-Country Championships and won the 2003 Hispaniola Half-Marathon in the Dominican Republic wearing custom-made orthotics.

Available over the counter or prescribed by podiatrists, orthotics properly align your feet to avoid and treat injuries. About 25 percent of people have a normal running pattern--their foot pronates just enough to absorb shock. The rest of the running population overpronates or underpronates, meaning their foot turns too much or not enough at heel-strike. Orthotics can correct these imbalances by adjusting the angles at which the foot strikes the ground. And that's just the beginning. Orthotics are often considered the cure-all for just about any kind of lower-body, running-related injury, says sports podiatrist Richard Braver, D.P.M. They are used to treat plantar fasciitis (heel pain), chronic blisters, shin splints, and leg-length discrepancies. "Orthotics can prevent and cure a problem by reducing and eliminating the stress that caused it," Braver says.

You'd think with all the technology that goes into making today's running shoes, runners wouldn't need additional support. But Ray Fredericksen, president of Sports Biomechanics Inc. and Runner's World technical editor, says companies skimp on the sock liner (the thin insole that comes with the shoe). "Sock liners are designed to break down and conform to the foot to enhance the fit," he says. "They're not designed to add extra cushion or act as an orthotic or a stabilizer." That's why so many runners are replacing them with over-the-counter or prescription alternatives. In fact, about \$375 million was spent on over-the-counter orthotics in 2003, up 14 percent from the previous year.

But orthotics, especially prescription ones, should be one of your top options, Braver says. Think of them like any other prescription. If you have a sore throat, you'd try cough drops before penicillin. Same goes here. Custom orthotics cost between \$375 and \$600, and most insurance companies cover the cost. A podiatrist makes a plaster cast or digital scan of your foot, and then a lab creates the insole from the cast. It can be about a month

before you get them, and then when you do, they're still not race-ready. You need to break them in for one to two weeks, and you could feel some discomfort until you get accustomed to them. If you're experiencing some kind of lower-body or foot pain, Braver recommends this course of action:

### **Get Fitted**

Problems can occur when you're in the wrong shoes. People with low arches as well as heavier runners need more stable, motion-control shoes, and those with high arches need more cushioning. Visit a specialty running store to make sure you're wearing what's right for you. The runnersworld.com Shoe-Finder can also help you find a pair.

### **Alternate Shoes**

"Most runners get injured because they run the same pace on the same surface on the same shoe, day in and day out," says Fredericksen. By alternating the shoes you're running in, the slight modification will give you relief from a high-stress area. If you like one particular brand and style, you can just rotate a slightly worn shoe with a new pair, Fredericksen says.

### **See a Pro**

Orthotics are often the solution for structural deficiencies. But if your pain is caused by tight or weak muscles, Braver says, a physical therapist or massage therapist could solve the problem--and make orthotics unnecessary. See a sports podiatrist for a proper diagnosis.

### **Step it up**

If all else fails, custom orthotics are probably the way to go. Not only are they molded specifically for your foot, but the materials chosen to make the orthotics reflect your particular running needs. Custom-made orthotics should last at least five years, and podiatrists can also refurbish them every couple of years to prolong their lives

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