

Are Your Feet Fit for Running?

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Achilles tendon issues, heel pain, plantar fasciitis, arch pain, shin splints, and calf pain are some of the most common running injuries seen in a PT clinic. When it comes to evaluating and treating these conditions there are several key risk factors to address. Calf or ankle tightness, which can limit the amount of bend (dorsiflexion) at the ankle, is a major problem. A lack of ankle mobility leads to a variety of compensations that can put undue stress on your plantar fascia, Achilles tendon, calf muscles and other ankle and foot tendons. Try this test to see if you have adequate ankle dorsiflexion: while kneeling on one knee, lunge forward with your opposite foot and see if your knee can contact a dowel rod placed vertically 4 inches (in front of your lead/front foot). If this is difficult or not achievable, you are lacking a key component of an efficient running stride (and you may have difficulty running in a shoe with a lower heel to toe drop). Many chronic issues can be improved with regular stretching or mobilization (rolling or massaging) of the calf muscles. Work on your calf muscles daily with a massage stick or foam roller for 2-3 minutes per leg, especially after running, to improve your flexibility. Make additional gains by consistently stretching your calf with your knee straight AND bent (as shown below) after your runs.

Ankle and foot strength is also important, especially for individuals with lower/flat arches, who “overpronate” or have less stable feet. Normal strength for a runner is the ability to stand on one foot and rise on your toes through a full range of motion 30 times (also with your knee bent). You should also be able to balance on one foot with your eyes closed for 20 seconds. There are a variety of effective ways to strengthen your ankles and feet including dynamic balance exercises and plyometrics, but performing regular heel rising while barefoot is great practice for injury prevention and rehab. Perform 2 sets of 15-20 reps with your knee straight and bent (as shown below) to target several key muscles in your ankles and feet.

If you are diligent with regular “maintenance” and still can’t shake one of these chronic conditions, it’s time to look at your running form and training habits. As with many running injuries, an easy way to reduce stress on inflamed ankle and foot tissues is to shorten your stride, increase your cadence, and land softly on your midfoot. Reducing mileage while you are making these changes is sometimes necessary. With stronger, more flexible ankles and feet you can run more naturally and efficiently. This increases performance and reduces the risk for injury. So get busy making your feet more fit for running!

Dave and Kristy are avid runners, MTC members, and owners of Siesta Key Sports & Physical Therapy. The orthopedic section of their physical therapy education included extensive instruction in foot and ankle biomechanics. They have worked with many runners in their 15 years of practice.