"Injury Prevention" By Dave Ochsendorf, MPT and Kristy Ochsendorf, DPT Tips to Avoid Lower Leg Pain

This article offers helpful stretching tips for treatment and prevention of foot, ankle and lower leg pain. Specifically, runners should be stretching both of the major muscles in the calf, the gastrocnemius and the soleus. The gastrocnemius is the large, 2-part, visible muscle below the knee, and the soleus is the large flat muscle which lies beneath the "gastroc". They both are connected to your heel by the Achilles tendon. Tightness in these muscles is common and can lead to Achilles injury or increased pressures on the sole of the foot or forefoot resulting in plantar fasciitis, foot/heel pain, or nerve irritation known as a "neuroma". Tightness in the calf also contributes to pain in the front or the inside of the shin, commonly referred to as "shin splints".

Most of the foot and ankle injuries we see in the clinic are quickly improved with proper calf stretching and appropriate footwear prescription for the individual's foot type. The following illustrations demonstrate the correct technique for 2 basic calf stretches.





The gastrocnemius crosses the back of the knee; therefore the knee must be straight for an effective stretch. Bending the knee will take tension off the gastroc and allow stretching of the soleus as shown above. It is imperative that stretching is performed while wearing footwear which adequately supports your arch. If your arch is allowed to collapse during the stretch, or if your foot turns out, you may be simply reinforcing the very compensation which is causing the pain. If you keep your foot pointing straight ahead with your arch supported, you will effectively stretch the targeted muscles. Slowly lunge forward until you feel a mild to moderate stretch in the muscle and then hold that position for 30 seconds. Repeat 3 times for each stretch, and practice 2-3 times each day, especially before and after running. If you have an injury or painful area, you should NOT be reproducing this pain when you stretch.

Look for us at the races and feel free to contact us directly with specific questions or for recommendations on exercise progressions. Muscle tightness in the calf is more common than weakness, but watch for another article in the coming months when we will provide specific foot and ankle strengthening exercises.

General Injury management: 1) If you are limping while you run, you should temporarily discontinue running until the problem is addressed and improves. Never run with an injury that interferes with your gait pattern. 2) Sometimes it can be beneficial to take an OTC anti-inflammatory at a therapeutic dose for 7-10 days to decrease pain and inflammation after an injury (if recommended by your doctor). However, if you are still experiencing symptoms after this period, you should consult with your physician or physical therapist.

Dave and Kristy are avid runners, MTC members, and owners of Siesta Key Physical Therapy. The orthopedic section of their physical therapy education included extensive instruction in foot and ankle biomechanics and they have worked with many runners in their 10 years of practice.