

# EXERCISES

Exercises for recovery from or prevention of plantar fasciitis are generally divided into two types: 1) Stretching Exercises, 2) Strengthening Exercises.

## STRETCHING EXERCISES

Stretching exercises are used to increase the flexibility of the muscles of the thigh and calf and of the plantar fascia itself. Tightness in the muscles of the leg can result in disproportionate stress being applied to the plantar fascia during walking and running, increasing the risk of injury. Stretching exercises for the plantar fascia itself can increase the flexibility of the fascia and thus reduce the potential for damage. Five examples of stretching exercises with illustrations follow:

### A. WALL GASTROCNEMIUS STRETCH

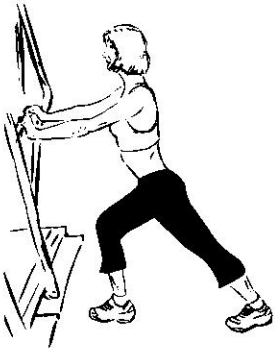


Fig 2: Wall Gastrocnemius stretch

arching the back, placing your weight on the forward leg while bending it at the knee. You should feel stretching in the mid-calf of the straight leg. Hold the stretch for 10-15 seconds, release, and then repeat 6-8 times. Reverse the position of the legs and then stretch the other leg.

### B. STAIR GASTROCNEMIUS STRETCH



The gastrocnemius can also be stretched using a simple exercise that can be performed while standing on a stair (Figure 3). Stand with the ball of the foot on the edge of a stair and heels off the step. While holding the

banister for balance, rise as high as possible on the toes and then lower yourself slowly as far as you can without rolling the foot inward or outward until you feel a stretch in the calf. Hold this position for 1-2 seconds and then repeat 10-20 times.

### C. SOLEUS STRETCH

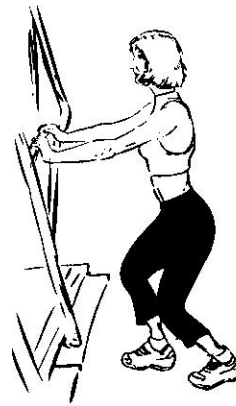


Fig. 4. Soleus stretch

The soleus is the other major muscle in the calf. To stretch this muscle, assume a position similar to that for the Wall Gastrocnemius Stretch but with both of the legs bent and the buttocks dropped (Figure 4). Make sure your feet are facing straight ahead and not turned out. Gently lean into the wall and keep your heels on the floor while bending both knees, putting a little more

weight on the back leg. Continue until you feel stretching in your lower calf. Hold the stretch for 30 seconds and repeat 2-3 times on each side.

### D. HAMSTRING STRETCH



Fig. 5. Hamstring stretch

The hamstring is a major muscle of the thigh that runs from just below the knee to the buttocks and lifts the lower leg and bends the knee. If the hamstring is too tight, the bend in the knee during walking and running is exaggerated, which, in turn, results in increased pull on the heel bone and too much tension in the plantar fascia.

To stretch the hamstring, lie with your back flat to the floor with your eyes focused upward. Grasp the back of the thigh with both hands and, with the leg bent, pull the thigh until it is perpendicular to the floor and then slowly straighten the knee (Figure 5). Repeat the exercise with the other leg.