

Plantar Fasciitis Information and Exercises

Plantar fasciitis is one of the most common problems in the foot and ankle. It is an inflammation of the thick tissue on the bottom of the foot, called the plantar fascia. The plantar fascia connects the heel bone to the toes and creates the arch of the foot.

Plantar fasciitis occurs when the thick band of tissue on the bottom of the foot is overstretched or overused. This can be painful and make walking more difficult.

Plantar fasciitis was once commonly thought of as being caused by a heel spur, but research has found that this is not the case. Heel spurs are found in people with and without plantar fasciitis.



Plantar fasciitis is generally caused by a tight Achilles tendon (the tendon connecting the calf muscles to the heel) and a tight hamstring (the muscles on the back of the thigh and knee.)

Evidence Based Medicine shows that treatments focused on correcting the muscle tightness of the calf and hamstring muscles decrease pain and symptoms in patients with plantar fasciitis.

The stretching exercises below are some examples of stretches that focus on the calf and hamstring muscles. It's important to remember to keep your knee straight, and start each exercise slowly. Ease off the exercise if you start to feel pain. Proper stretching should create a pulling feeling, but should not cause pain.

Seated Calf and Hamstring Stretch – Towel/Belt Stretch



1. Sit with your legs extended and knees straight.
2. Place a towel, belt, or elastic stretching band around your foot just under the toes.
3. Hold each end of the band in each hand, with your hands above your knees.
4. Pull back with the towel or band so that your foot stretches toward you.
5. Hold the position for at least 15 to 30 seconds.
6. Repeat 2 to 4 times a session, up to 5 sessions a day.

Wall Assisted Calf and Hamstring Stretch

1. Stand facing a wall with your hands on the wall at about eye level. Put the leg you want to stretch about a step behind your other leg.
2. Keeping your back heel on the floor, bend your front knee until you feel a stretch in the back leg.
3. Hold the stretch for 15 to 30 seconds. Repeat 2 to 4 times.
4. Do this exercise 3 or 4 times a day, 5 days a week.



Gravity Assisted Calf Stretch



1. Stand on a bottom-most step as shown above. Be sure to hold on to the banister.
2. Slowly let your heels down over the edge of the step as you relax your calf muscles. You should feel a gentle stretch across the bottom of your foot and up the back of your leg to your knee. Be sure to keep your knee straight.
3. Hold the stretch about 15 to 30 seconds, and then tighten your calf muscle a little to bring your heel back up to the level of the step. Repeat 2 to 4 times.