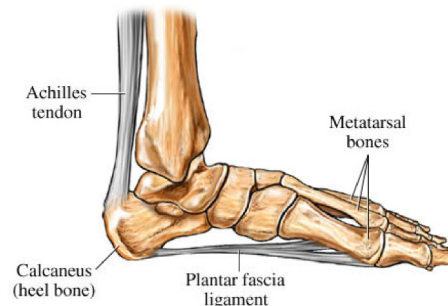


# Plantar Fasciitis

## What is plantar fasciitis?

Plantar fasciitis (say “PLAN-ter fash-ee-EYE-tus”) is the most common cause of heel pain. The plantar fascia (See figure 1 in appendix) is the flat band of tissue (ligament) that connects your heel bone to your toes. It supports the arch of your foot. If you strain your plantar fascia, it gets weak, swollen, and irritated (inflamed). Then your heel or the bottom of your foot hurts when you stand or walk.

Plantar fasciitis is common in middle-aged people. It also occurs in younger people who are on their feet a lot, like athletes or soldiers. It can happen in one foot or both feet.



## What causes plantar fasciitis?

Plantar fasciitis is caused by straining the ligament that supports your arch. Repeated strain can cause tiny tears in the ligament. These can lead to pain and swelling. This is more likely to happen if:

- Your feet roll inward too much when you walk (excessive pronation).
- You have high arches or flat feet.
- You walk, stand, or run for long periods of time, especially on hard surfaces.
- You are overweight.
- You wear shoes that don't fit well or are worn out.
- You have tight Achilles tendons or calf muscles.

## What are the symptoms?

Most people with plantar fasciitis have pain when they take their first steps after they get out of bed or sit for a long time. You may have less stiffness and pain after you take a few steps, but your foot may hurt more as the day goes on. It may hurt the most when you climb stairs or after you stand for a long period. If you have foot pain at night, you may have a different problem, such as tarsal tunnel syndrome.

## How is it treated?

No single treatment works best for everyone with plantar fasciitis. But there are many things you can try to help your foot get better:

- Give your feet a rest. Cut back on activities that make your foot hurt. Try not to walk or run on hard surfaces.
- To reduce pain and swelling, try putting ice on your heel. Or take an over-the-counter pain reliever like ibuprofen (such as Advil or Motrin), naproxen (such as Aleve), or aspirin.
- Do calf stretches and towel stretches several times a day, especially when you first get up in the morning.
- Get a new pair of shoes. Pick shoes with good arch support and a cushioned sole. Or try heel cups or shoe inserts (orthotics). Use them in both shoes, even if only one foot hurts.

If these treatments do not help, your doctor may give you splints that you wear at night, shots of steroid medicine in your heel, or other treatments. You probably will not need surgery. Doctors only suggest it for people who still have pain after trying other treatments for 6 to 12 months.

## Exercises to do each day

Stretching and strengthening exercises will help reduce plantar fasciitis.

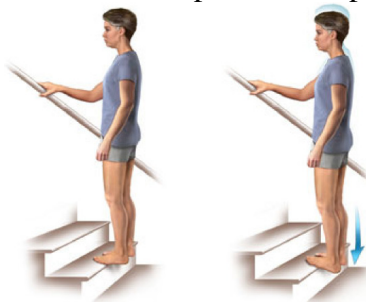
- Use a rolling pin or tennis ball. While seated, roll the rolling pin or ball with the arch of your foot. Progress to doing this exercise while standing as you can tolerate it.
- Use a towel. Place the rolled towel under the center of your foot, holding the towel at both ends, and gently pull the towel toward you, keeping your knee straight, until you feel a stretch either in your calf or the bottom of your foot. Hold this position for at least 20 seconds.



- Calf stretches. To stretch the Achilles tendon, lean forward against a wall, keep one leg with the knee straight and heel on the ground while bending the knee in the other leg. Hold this position for 20 seconds, then switch legs. Try to do this stretch 3 to 6 times a day.



- Combination plantar fascia/calf stretch. Stand on a step with the front part of your feet, keeping your heels free. While holding onto the rail, slowly lower your heels. Hold this stretch for 20 seconds, then bring your heels back to a level position. Repeat this stretch 10 times.



- Marble pickups. Put marbles on the floor next to a cup. Using your toes, try to lift the marbles up from the floor and put them in the cup.

