

## How is plantar fasciitis treated?

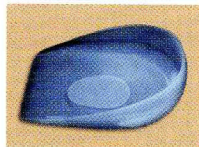
When treated early, most plantar fasciitis symptoms can be resolved with simple methods.

**Exercise.** Plantar fasciitis is aggravated by tight muscles in your feet and calves. Stretching the arch of your foot and your heel cord (Achilles tendon) is the most effective way to relieve the pain that comes with the condition.

### Non-steroidal anti-inflammatory medications.

Over-the-counter pain medicines like ibuprofen and naproxen may provide the relief you need. Your doctor may also prescribe a pain medication, such as prescription-strength ibuprofen.

**Supportive shoes.** Good shoes with extra cushioning in the heel can be very helpful. Soft rubber heel lifts, heel cups, or heel wedges for your shoes provide even more support. These can be purchased at your local drug store, or sometimes at your doctor's office.



Heel pads provide extra support

Avoid shoes that have little padding, or thin and hard leather soles.

**Night splints.** Because your fascia tightens up overnight, your doctor may prescribe a night splint to help ease morning heel pain. This splint stretches the Achilles tendon, the plantar fascia, or both while you sleep.

## What stretches can relieve heel pain?

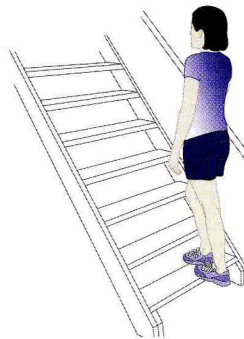
A session with a physical therapist can help you learn specific exercises.

Stretches like the ones shown here should be done 3 times a day – in the morning, at midday, and before you go to bed. Be sure to stretch both sides, even if only one heel is involved.



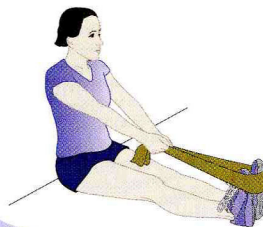
Lean forward against a wall with one leg in front of the other. Straighten your back leg and press your heel into the floor. Your front knee is bent. Hold for 15 to 30 seconds.

**Do:** Keep both heels flat on the floor. Point the toes of your back foot toward the heel of your front foot.



Stand on a bottom step and place the ball of your foot on the edge of the step. Slowly drop your weight into the heel of your foot, pushing your heel lower than edge of the step. Hold for 15 to 30 seconds.

**Do:** Hold onto the banister for balance.



Sit on the floor with both legs out in front of you. Wrap a towel around the ball of one foot and pull the towel toward your body. Hold for 15 to 30 seconds.

**Do:** Sit up tall and keep your legs straight.

## What else may help?

About 90 percent of people greatly improve within 2 to 3 months of initial treatment.

If your plantar fasciitis continues after initial treatment, your doctor may suggest new approaches.

**Custom orthotics.** Inserts for your shoes can be custom-made for you to correct your foot position or remove pressure from various places on your foot. People with very high arches, flat feet, or foot deformity are more likely to need orthotics.

**Casting and walking boots.** If your symptoms are not resolving, your doctor may recommend wearing a removable boot walker or cast for a short time.

**Injection.** If conservative treatments do not relieve your symptoms, your doctor may suggest a corticosteroid injection. This delivers a high dose of anti-inflammatory medicine to the site of your pain.

**Surgery.** When other options fail to relieve symptoms, a surgical procedure to release the ligament may be considered.

More than 98 percent of people get better without surgery. Your doctor may consider surgery after 6 to 12 months of initial treatment without improvement.



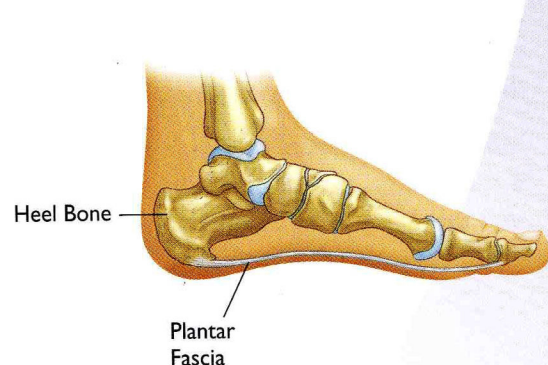
## How does a doctor know if I have it?

Your doctor will examine your foot and talk to you about what causes plantar fasciitis.

Are you a runner or do you play sports where your feet pound on hard surfaces? Are you overweight? Do you wear high heels every day?

**Physical examination.** After discussing your symptoms and medical history, your doctor will examine your foot and ankle. Because plantar fasciitis is a common condition, the information gained during the examination is usually enough for your doctor to make a diagnosis.

**Tests.** During the examination, your doctor will rule out other causes of heel pain, like tendonitis, arthritis, or a stress fracture. To help do this, your doctor may suggest some tests, such as X-rays, magnetic resonance imaging (MRI) scans, and bone scans.



## What causes plantar fasciitis?

Your plantar fascia is designed to absorb high stresses and strains.

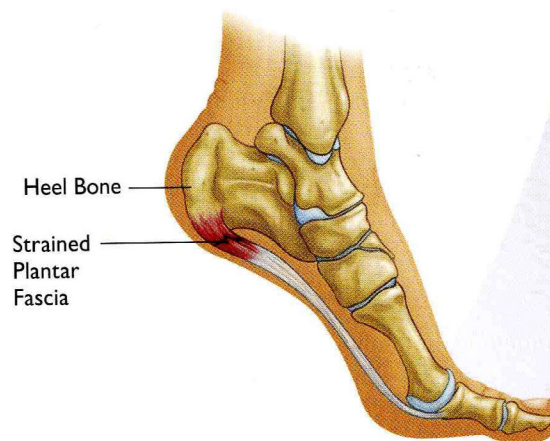
But sometimes too much pressure damages the tissue and causes heel pain.

Sources of extra stress include:

**Overuse.** Plantar fasciitis is common in runners and walkers. Spending a lot of time walking or standing on hard surfaces can also strain the arch of your foot.

**Anatomy.** Having flat feet, high arches, and tight muscles in your calves and heels can result in extra stress on your fascia.

**Shoes.** Heel pain is often caused by shoes that do not fit properly or provide enough cushion and support.



## For more information

For more information about heel pain and plantar fasciitis, visit *Your Orthopaedic Connection* online at [www.orthoinfo.org](http://www.orthoinfo.org).

*Your Orthopaedic Connection* online is a trusted source of information about musculoskeletal conditions and injuries. Our articles are developed by orthopaedic surgeons. They provide detailed information – from symptoms to treatment options – about a range of diseases and injuries.

Your orthopaedist is a medical doctor with extensive training in the diagnosis and nonsurgical and surgical treatment of the musculoskeletal system, including bones, joints, ligaments, tendons, muscles and nerves.

This brochure has been prepared by the American Academy of Orthopaedic Surgeons and is intended to contain current information on the subject from recognized authorities. However, it does not represent official policy of the Academy and its text should not be construed as excluding other acceptable viewpoints.

© 2009 American Academy of Orthopaedic Surgeons

**AAOS**  
AMERICAN ACADEMY OF  
ORTHOPAEDIC SURGEONS

[www.orthoinfo.org](http://www.orthoinfo.org)

