

## Heel Pain

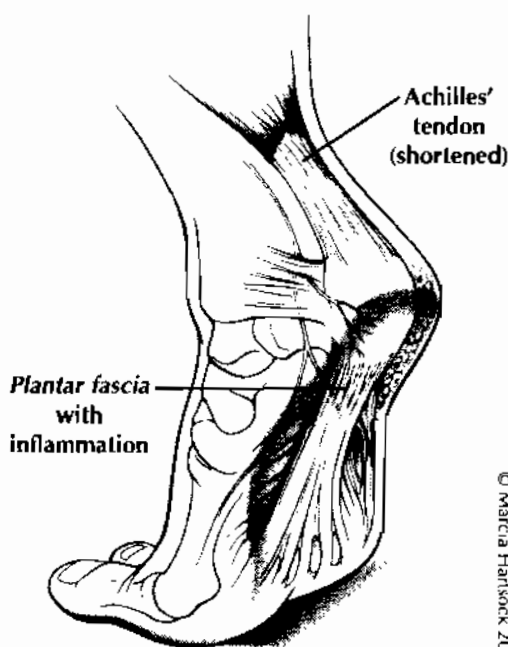
### *Plantar fasciitis*

**H**eel pain is a common condition. It is usually caused by an inflammation of the connective tissue in the sole of the foot, the *plantar fascia* (at right).

The cause of the inflammation (which is called *plantar fasciitis*) often remains unknown. Sometimes, an injury to the foot—even a minor injury (eg, from stepping on a stone or wearing ill-fitting shoes)—can trigger the inflammation. Repeatedly straining the foot tissues while exercising or performing other activities also may start the inflammation.

Heel pain is common in women. Wearing high-heeled shoes can lead to a shortening of the Achilles' tendon. When the foot is positioned flat on the floor (eg, when a woman wears flat-heeled shoes or walks barefoot), the shortened tendon puts an extra strain on the tissues where they connect to the heel bone.

The pain usually begins gradually and is felt in only one foot, at the center of the bottom of the heel.



Typically, the pain is worse in the morning or after resting or sitting for a prolonged period.

In many patients, heel pain goes away without treatment but may last for several months or even years before improving. Your doctor may prescribe some medications to help reduce the inflammation. Wearing heel cushions (ask your doctor what type of heel pad is best for you) and avoiding walking or standing for long periods of time may also help. Rarely, corticosteroid injections or surgery may be needed.

The treatment prescribed most often for heel pain is gentle stretching. This allows the connective tissues of the foot to heal in a lengthened position. The stretches should be done several

times each day. Your doctor also may ask you to wear a *night splint* to keep the foot tissues stretched while you are sleeping.

A stretching exercise is illustrated below. Be sure to check with your doctor before you do the exercise to make sure that it is right for you.

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#### **PLANTAR FASCIA STRETCH**

1. Stand facing a wall. Press both palms against the wall and bend the leg unaffected by the heel pain (the knee should be directly over the toes). The leg affected by the heel pain should remain straight.
2. Slowly move the straight leg backward until you feel a stretch in your calf. Hold the stretch for 30 seconds.
3. Repeat the exercise with the opposite leg if your doctor directs you to do so.

**Number of stretches:** \_\_\_\_\_ **Number of sets per day:** \_\_\_\_\_



# Help for Plantar Fasciitis

## What is plantar fasciitis?

Plantar fasciitis (say: plant-er fash-ee-eye-tis) is a common cause of pain in the heel of your foot. Your heel may hurt, feel hot, swell or turn red. This is called inflammation. The inflammation occurs in the plantar fascia, which is a thin layer of tough tissue that supports the arch of the foot. The pain is usually worse when you first get out of bed.

## What causes plantar fasciitis?

The cause is usually some combination of tightness of the foot and the calf, weakness of the foot, improper athletic training or stress on the arch of the foot. Also, too much use (running too far, too fast, too soon), shoes that don't fit, or certain play or work actions can hurt the plantar fascia.

## How is plantar fasciitis treated?

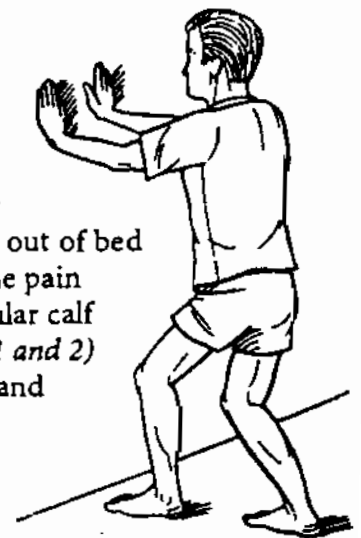
Treatment can reduce or get rid of what is causing plantar fasciitis. Treatment can also lessen inflammation.

To decrease the stress on the plantar fascia, you may need to wear shoes with more arch support. You might even need to change the size of shoe you wear. Athletes and active people may need to spend less time doing actions that cause stress, like jogging, jumping or running. Sometimes, arch supports or special shoe inserts may be used.



PICTURE 1.

Stretching and strengthening exercises are also good. Massaging your foot across the width of the plantar fascia before getting out of bed often helps lessen the pain from standing. Regular calf stretching (*Pictures 1 and 2*) will help your pain and help prevent future episodes of pain.



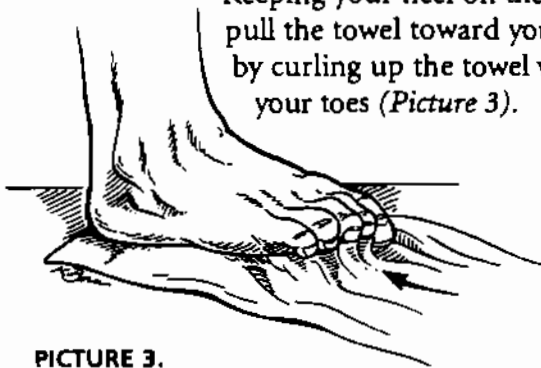
PICTURE 2.

## Help for Plantar Fasciitis *(continued)*

Strengthening exercises may include towel curls, marble or coin pick ups and toe taps.

To do a towel curl, sit with your foot flat on the end of a towel placed on a smooth surface.

Keeping your heel on the floor, pull the towel toward your body by curling up the towel with your toes (*Picture 3*).



PICTURE 3.

To do marble pick ups, put a few marbles on the floor near a cup. Keeping your heel on the floor, pick up the marbles with your toes and drop them in the cup. For a greater challenge, you may try to pick up coins instead of marbles.

To do toe taps, you will lift all your toes off the floor and, while keeping your heel on the floor and the outside four toes in the air, tap just the big toe to the floor (*Picture 4*). Next you will change the order and tap the outside four



PICTURE 4.

toes to the floor a number of times while keeping the big toe in the air. Start with 10 taps and work up to 50 taps per session.

Inflammation can be treated in several ways. An ice massage, ice bath or an ice pack may help.

For ice massage, freeze water in a small paper cup, then rub the exposed end of the ice over the painful heel using a circular motion and medium pressure for 5 to 10 minutes.

For an ice bath, fill a shallow pan with water and ice and soak your heel for 10 to 15 minutes. Wear neoprene toe covers (special covers you can buy at a medical supply store) or keep your toes out of the ice water to keep the cold from hurting your toes.

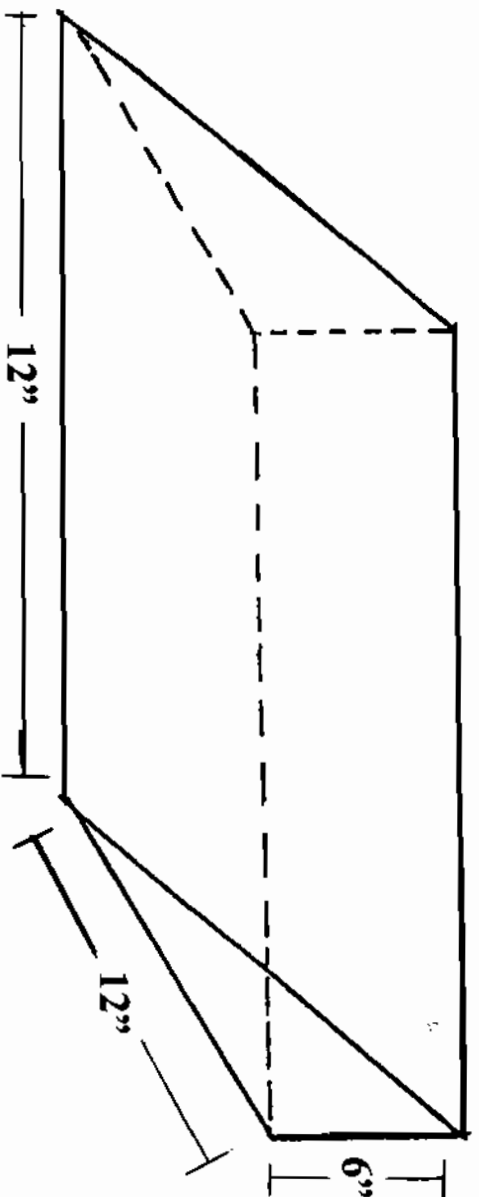
Make an ice pack by putting crushed ice in a plastic bag wrapped in a towel and molding it to the foot. Another good way is to use a bag of frozen corn wrapped in a towel. Use the package of corn for 15 to 20 minutes. Icing your heel after exercising, stretching, strengthening and working can help prevent inflammation.

Other treatments include medicines that lessen the inflammation or cortisone shots into the heel. Talk to your doctor about side effects and risks of these treatments.

## Heel Cord Stretching Box

### USES

Tight Heel Cords  
Plantar Fasciitis

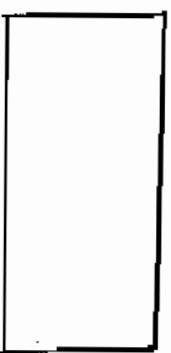


### Materials:

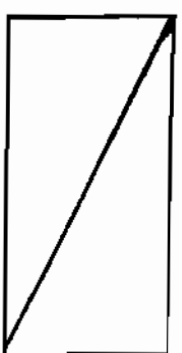
Two pieces of Pine 1" x 6" x 12"  
3/8" Plywood, One square foot

### Instructions:

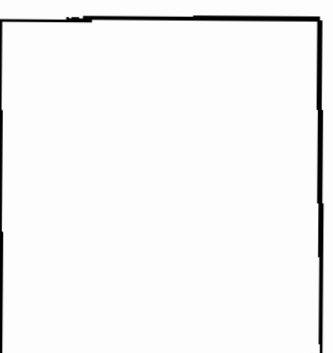
Stand on box, with surface sloping toward a wall.  
Stretch Heel Cords 3-4 times daily, for 3-5 minutes at a time.  
\*Place near the telephone for convenience...



**BACK**



**SIDES**



**TOP**