Heel pain – Plantar fasciitis

What is Plantar fasciitis?

The plantar fascia is a thick ligament on the bottom of your foot. It is a strong ligament that runs the length of your foot from the heel bone to the toes. Although it is strong, it is not very elastic. If it is repeatedly overstretched, it can become inflamed and painful, a condition we call plantar fasciitis.

What causes or contributes to Plantar fasciitis?

- Excess weight.
- Tight calf muscle and Achilles tendon. The Achilles tendon links the calf muscle to the back of the heel. A tight calf muscle and Achilles tendon can cause your foot to flatten further.
- Abnormal foot mechanics. Flat feet or high arches can affect the way that pressure is distributed across your foot.
- Inadequate footwear. Excessively flat shoes that do not support your arch leave the plantar fascia unprotected. A shoe with a medium heel can heighten the arch and decrease stress on the plantar fascia.
- Specific sports activities. Activities that put more pressure on your foot and require it to stretch repeatedly increase your risk. These activities include running, walking long distances, jumping, tennis, basketball, and aerobics.
- Standing all day. Standing or walking on hard floors for a long time increases the load on your foot.
- Sudden change in activity. Beginning an exercise program, such as high-impact aerobics, after a period of inactivity or changing your running surface from grass to road.

What will I feel with Plantar fasciitis:

- Sharp, stabbing pain on the bottom or side of the heel or in the arch of the foot.
- Pain that is worse in the morning or after any period of inactivity. As you begin to move around, the pain level usually improves.
- Pain that gets worse after a prolonged period of standing, walking, or running.
- Pain can last for several weeks or months and can range from mild to severe. Plantar fasciitis will likely go away on its own, with rest, but it may take several months or longer to resolve completely.

Consult with your physical therapist or doctor if you experience an increase in your symptoms with recommended exercises, or if you develop new symptoms of numbness, tingling, or a spread of the pain. This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. If you have questions or need more information about your medication, please speak to your pharmacist.

Kaiser Permanente Physical Therapy
How long will it take to get better?
The problem can last from a few weeks to several months. You can lessen the time for recovery by following these suggestions.

How do I help my symptoms?
There are a number of things you can do to protect your feet and prevent injury to your plantar fascia:

- Wear supportive shoes. We recommend running shoes or "pro" walking shoes. If you over-pronate, you will need stability shoes. If your feet are rigid with high arches, you will need shoes with more cushion (avoid shoes with air bladders in the heel).
- Wear shoes with slightly higher heels. A moderate heel can shorten the arch and reduce stress on the plantar fascia.
- Use arch supports that mold to the shape of your foot. (You can purchase these over the counter).
- REST your painful foot by avoiding activities that increase your pain. Avoid excessive amounts of walking; running or other weight bearing exercises while your foot is healing. Do less standing. Continue other forms of exercise that do not increase your symptoms. Try bike riding or swimming.
- ICE: Freeze a small water bottle. Place the frozen bottle on the floor in front of you. While sitting, roll the arch of your foot back and forth over the frozen water bottle for about 7 minutes. Repeat this 3-4 times each day.
- Night splint: If your symptoms do not improve in 3-6 months, consider use of night splints to provide constant low-grade stretch on your calf and foot. Usually these need to be worn for a period of 3 months to eliminate the symptoms.

EXERCISES:

**Stretches: calf and arch stretches.** Stretch 3-4 times each day. Hold each position for 30-60 seconds and repeat 3 times in a session.

**Stretch with your knee straight:** Stand with your hands on the wall. Place one foot behind you. Keep your heel on the ground and keep toes pointing straight ahead. Bend your front knee to feel a stretch in the calf of the back leg.

**Stretch with your knee bent:** Do as above with the back knee bent.

**Arch stretch:** Stand with your toes of one foot against a step and your knee straight. Place the arch of the other foot against the heel. Bend the knee over the foot until you feel a stretch in your arch.

**Massage:** In a sitting position, place the arch of your foot on a small ball or massage tool. Massage the tender spots of your arch by moving your foot back and forth with firm pressure for 3-5 minutes. This can be tender, but should not be painful. Repeat 1 time per day.