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Plantar Fasciitis

WHAT IT IS

Plantar fasciitis is the painful inflammation of the plantar fascia, and is one of the most common causes of heel pain. The plantar fascia is a thin, but tough, layer of tissue that supports the arch of the foot. This tissue may become overused, irritated, or have small micro-tears that create the inflammation.

HOW IT HAPPENS

The exact cause of plantar fasciitis is not always known, but there are some factors that may increase the likelihood of developing this condition:

- Having high arches or flat feet
- Standing, walking, or running on hard surfaces for extended periods of time
- Shoes that do not fit properly, that do not provide adequate arch support or heel cushion, or that are worn out
- Tight calves or Achilles tendons (often caused by wearing high heels)
- Being overweight
- Increasing your training too quickly

WHERE IT HURTS

Pain may span across the entire underside of the foot, although most of the pain is generally localized near the bottom of the heel. Pain may be more intense with the first few steps of the day or after prolonged periods of sitting, standing, or physical activity.

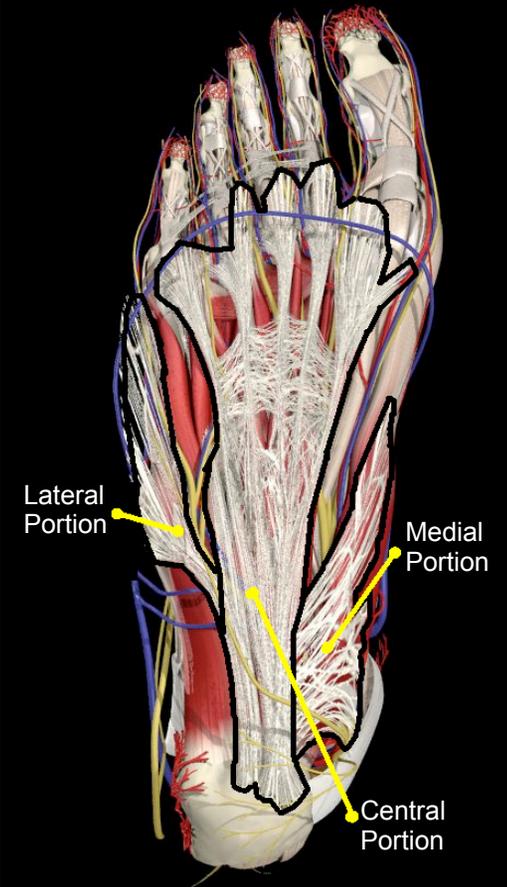


TREATMENT

- **REST** the foot from activities that cause pain.
- **STRETCH** the muscles of the foot and lower leg.
- **STRENGTHEN** the foot to prevent future injuries.
- **ICE** the area by using an ice bag or by performing an ice massage by rolling a frozen bottle of water under the bottom of the foot for 10-15 minutes to decrease pain and swelling. Ice may be applied up to once per hour.
- **IBUPROFEN** can help decrease both pain and swelling. Take **NO MORE** than 1200 mg per day, following the label's recommended amounts.



PLANTAR FASCIA



STRETCHING EXERCISES

STRENGTHENING EXERCISES

Great Toe Stretch



Loop towel around the big toe and pull back for 20 seconds. Repeat 3 times.

Towel Stretch



Loop towel around foot and pull back for 20 seconds. Repeat 3 times.

Bent-Knee Towel Stretch



Loop towel around foot with knee bent. Pull back for 20 seconds. Repeat 3 times.

Toe Curls



Lay a towel on the floor and try to curl or bend the toes to pull the towel towards your heel. Curl toes 10-30 times.

Toe Pick-Ups



Pick up small objects, such as cotton balls or marbles, with the toes and place in a container. Pick up approximately 10-20 items.

THE IMPORTANCE OF FOOTWEAR

WEAR A SHOE DESIGNED FOR THE ACTIVITY YOU ARE DOING. Running shoes, for example, are designed with significant heel cushion for the pounding associated with running, but are designed for primarily straight-ahead activity. They do not offer the support needed for side-to-side movements associated with sports like basketball or tennis. Ideally, a person would have a pair of shoes designed for each activity they routinely do, but cross-trainers are a good choice for people who do a variety of activities but don't want to buy several pairs of shoes.

WEAR SHOES THAT PROVIDE ADEQUATE HEEL CUSHION AND ARCH SUPPORT. Older shoes break down and do not provide adequate cushion or support. You cannot judge whether or not a shoe is worn out just by looking at the sole. Running shoes should be replaced every 300-500 miles, even if the tread looks "fine". Footwear with sufficient arch support and adequate heel cushion may allow pain to subside while continuing activities.

SOME FEET REQUIRE MORE SUPPORT. If you have high arches or flat feet, arch inserts or custom-made orthotics may be required to provide your feet with the support they need.

ADDITIONAL TREATMENT OPTIONS

In addition to the treatments already listed, some people with plantar fasciitis also benefit from the following:

- Wearing a **NIGHT SPLINT** to keep the plantar fascia, calf muscles, and Achilles tendon on a gentle stretch throughout the night
- Wearing a **HEEL CUSHION** with a hole cutout under the most tender spot of the heel for relief while standing or walking
- **ARCH TAPING** to prevent over-pronation (excessive dropping of the arch during weight-bearing)

Injury Prevention & Care - A Campus Recreation Program
<http://crec.unl.edu/ipcare>

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