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## **Plantar Fascia Stretching Exercise**

You may begin exercising the muscles of your foot right away by gently stretching them as follows:

**Towel stretch:** Sit on a hard surface with your injured leg stretched out in front of you. Loop a towel around the ball of your foot and pull the towel toward your body keeping your knee straight. Hold this position for 15 to 30 seconds then relax. Repeat 3 times. When the towel stretch becomes too easy, you may begin doing the standing calf stretch.

**Standing calf stretch:** Facing a wall, put your hands against the wall at about eye level. Keep the injured leg back, the uninjured leg forward, and the heel of your injured leg on the floor. Turn your injured foot slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 15 to 30 seconds. Repeat 3 times. Do this exercise several times each day. When you can stand comfortably on your injured foot, you can begin stretching the bottom of your foot using the plantar fascia stretch.

**Plantar fascia stretch:** Sit in a chair and cross your injured foot over your other knee. Grab the base of your toes and pull them back toward your leg until your feel a comfortable stretch. Hold 15 seconds and repeat 3 times.

After you have stretched the bottom muscles of your foot, you can begin strengthening the top muscles of your foot.

Frozen can roll: Roll your bare injured foot back and forth from your heel to your mid-arch over a frozen juice can. Repeat for 3 to 5 minutes. This exercise is particularly helpful if done first thing in the morning. Towel pickup: With your heel on the ground, pick up a towel with your toes. Release. Repeat 10 to 20 times. When this gets easy, add more resistance by placing a book or small weight on the towel.

## Static and dynamic balance exercises

Place a chair next to your non-injured leg and stand upright. (This will provide you with balance if needed.) Stand on your injured foot. Try to raise the arch of your foot while keeping your toes on the floor. Try to maintain this position and balance on your injured side for 30 seconds. This exercise can be made more difficult by doing it on a piece of foam or a pillow, or with your eyes closed.

1.

Stand in the same position as above. Keep your foot in this position and reach forward in front of you with your injured side's hand, allowing your knee to bend. Repeat this 10 times while maintaining the arch height. This exercise can be made more difficult by reaching farther in front of you. Do 2 sets.

2.

Stand in the same position as above. While maintaining your arch height, reach the injured side's hand across your body toward the chair. The farther you reach, the more challenging the exercise. Do 2 sets of 10.

3.

**Heel raises:** Balance yourself while standing behind a chair or counter. Raise your body up onto your toes and hold for 5 seconds. Then slowly lower yourself down. When this exercise becomes less painful, try lowering on the injured leg only. Repeat 10 times. Do 3 sets of 10.

**Side-lying leg lift:** Lying on your uninjured side, tighten the front thigh muscles on your injured leg and lift that leg 8 to 10 inches away from the other leg. Keep the leg straight. Do 3 sets of 10.



Fig.1 Cross the affected leg over the contralateral leg.

Fig.2 Place the fingers over the base of the toes and pull back firmly until you feel a stretch in the arch of the foot or plantar fascia.

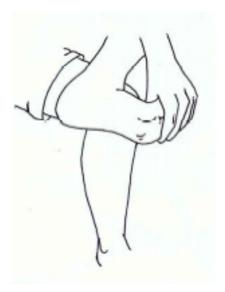


Fig.3 Confirm the stretch is correct by feeling for tension in the plantar fascia with your thumb



Hold each stretch for a count of ten and repeat ten times. Perform the exercise three times per day, the first stretch to be done before taking the first step in the morning. The exercise programme must continue for at least eight weeks.

It is recommended to wear full-length soft insoles and take a three-week course of a non-steroidal anti-inflammatory medication at the same time, only after consulting your doctor.

## Plantar Fascia-Specific Stretching Program For Plantar Fasciitis

- 1. Cross your affected leg over your other leg.
- 2. Using the hand on your affected side, take hold of your affected foot and pull your toes back towards shin. This creates tension/stretch in the arch of the foot/plantar fascia.
- 3. Check for the appropriate stretch position by gently rubbing the thumb of your unaffected side left to right over the arch of the affected foot. The plantar fascia should feel firm, like a guitar string.
- 4. Hold the stretch for a count of 10. A set is 10 repetitions.
- 5. Perform at least 3 sets of stretches per day. You cannot perform the stretch too often.

The **most important** times to stretch are **before** taking the first step in the morning and **before** standing after a period of prolonged sitting.

