

Plantar Fasciitis Rehabilitation Exercises

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: Stand with the ball of your injured foot on a stair. Reach for the bottom step with your heel until you feel a stretch in the arch of your foot. Hold this position for 15 to 30 seconds and then relax. Repeat 3 times. After you have stretched the bottom muscles of your foot, you can begin strengthening the top muscles of your foot.

Frozen water bottle roll: Roll your bare injured foot back and forth from your heel to your mid-arch over a frozen plastic water bottle. 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

- I. 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.
- II. 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.
- III. 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.

Next, you can begin strengthening the muscles of your foot and lower leg by using elastic tubing.

Resisted dorsiflexion: Sit with your injured leg out straight and your foot facing a doorway. Tie a loop in one end of the tubing. Put your foot through the loop so that the tubing goes around the arch of your foot. Tie a knot in the other end of the tubing and shut the knot in the door. Move backward until there is tension in the tubing. Keeping your knee straight, pull your foot toward your body, stretching the tubing. Slowly return to the starting position. Do 3 sets of 10.

Resisted plantar flexion: Sit with your leg outstretched and loop the middle section of the tubing around the ball of your foot. Hold the ends of the tubing in both hands. Gently press the ball of your foot down and point your toes, stretching the tubing. Return to the starting position. Do 3 sets of 10.

Resisted inversion: Sit with your legs out straight and cross your uninjured leg over your injured ankle. Wrap the tubing around the ball of your injured foot and then loop it around your uninjured foot so that the tubing is anchored there at one end. Hold the other end of the tubing in your hand. Turn your injured foot inward and upward. This will stretch the tubing. Return to the starting position. Do 3 sets of 10.

Resisted eversion: Sit with both legs stretched out in front of you, with your feet about a shoulder's width apart. Tie a loop in one end of the tubing. Put your injured foot through the loop so that the tubing goes around the arch of that foot and wraps around the outside of the uninjured foot. Hold onto the other end of the tubing with your hand to provide tension. Turn your injured foot up and out. Make sure you keep your uninjured foot still so that it will allow the tubing to stretch as you move your injured foot. Return to the starting position. Do 3 sets of 10.

It is important to do these exercises 4 times per day for 10 minutes.

1) HEEL CORD STRETCHING – STANDING

- * Face the wall about 2 paces away and place your hands against it.
- * Step forward with one foot.
- * With both heels on the floor, lean your hips toward the wall while keeping the back leg straight to stretch the calf muscle.
- * Hold for 10 seconds and relax.
- * Repeat exercise with back leg slightly bent.
- * Repeat 10 times.

2) HEEL CORD STRETCHING - SITTING

- * Sit on bed or floor with leg supported.
- * Loop a towel around the ball of your foot.
- * Without bending knee, steadily pull the towel toward you until you feel a stretch in calf muscle.
- * Hold for 10 seconds and relax.
- * Repeat 10 times.

3) PLANTAR FASCIA STRETCH

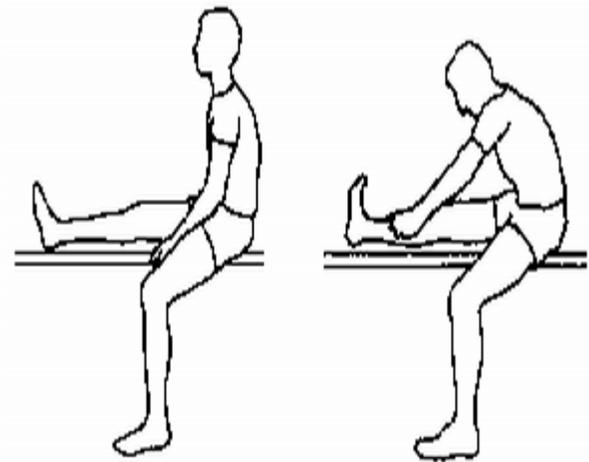
- * Grasp the heel of your foot in one hand.
- * With the other hand, pull up on your big toe until you feel a stretch in the arch of your foot.
- * Hold for 10 seconds and relax.
- * Repeat 10 times.

4) HEEL CORD STRETCHING – STAIRS

- * Standing on a stair with both feet, let your heels fall downward until you feel a stretch.
- * It is best to wear a flat shoe otherwise it may hurt the bottom of your foot.
- * Hold for 10 seconds and relax.
- * Repeat 10 times.
- * Work up to a minute for 5 repetitions.

5) HAMSTRING STRETCHING

- * Sit on edge of bed or floor with leg to be stretched out in front of you.
- * Place uninvolved leg on floor or bent so that the bottom of foot is resting against thigh of straight leg.
- * Keep your toes pointed up toward you knee and your back straight.
- * Slowly bend forward at the hips, keeping your back straight until a stretch is felt behind the knee and thigh.
- * Hold for 10 seconds and relax.
- * Repeat 10 times.



6) FROZEN WATER BOTTLE ROLLING

- * Freeze a small water bottle after removing a small amount of the water.
- * Sit in a chair and roll over the water bottle like a rolling pin – back and forth – along the entire length of your foot.
- * Roll a bit harder over sore areas – massaging the areas – and then roll along the entire foot again.
- * Repeat several times.
- * Repeat for about 10-15 minutes.

