Foot and Ankle Strengthening Exercises

The following exercises will help you to strengthen your ankles and arches. Strengthening of the foot and arch should also include the surrounding body parts. The entire lower chain, including hip, knee and ankle, can play a role in foot and arch pain. With weakness, the position of the foot is not maintained properly, and improper bio-mechanics, or movement, put excessive stress on the arches. Maintaining muscular balance and adequate strength to support these structures is key.

The Toe Spreading Exercise
Start in a sitting position on a chair with the legs extended in front and the heels resting on the floor. The feet are bare. In this position, the toes are spread as far apart as possible, then curled under as strongly as possible. Relax and repeat the movement. Breathe comfortably. Begin with 7 counts with each foot and gradually increase the counts until 30 can be performed without undue fatigue. This may be done two or three times during the exercise period. Work up to at least 30 counts in this motion, and those whose need is great will do well to work up to two or three sets of 30 counts each exercise period. This movement will develop and strengthen the muscles in the transverse arch of the foot and aid in eliminating foot fatigue in standing and walking.

Toe exercises
This exercise will help to strengthen and tighten the metatarsal arch in your feet thereby stretching the tendons on top of the toes. Try picking up marbles with your toes or put a towel on the floor and use your toes to grip the towel and scrunch it up or pick it up.

Ankle exercise
In order to strengthen your ankles, stand straight. Now, place one foot straight on the ground and with the other leg bend the knee as if you are ready to take a step. Stay in this position for at least 30 seconds trying to hold your balance without tipping off. Try to increase it up to few minutes. As you master it, close your eyes and try to do they same exercise without any vision. It is harder to maintain balance with eyes closed but you can keep practicing.

A few more to try…

- Writing the alphabet in the air with your foot
- Leading with your big toe and moving your ankle through range of motion against resistance using a resistance band.
- Foot drills (See next page)
FOOT DRILLS
(Developed by Russ Ebbets, DC)

The six drills, illustrated below are to simply walk on the outside of the foot (invert the foot), walk on the inside of the foot (evert the foot), walk with a toe-in or pigeon-toed gait (adduct the foot), walk backwards on the toes, walk with the toes pointing out (a la Charlie Chaplin) and with the shoes back on, walk on the heels - this protects against bruising the heel.

- Each drill is done once for 25 meters
- Drills are done in the stocking feet or bare-footed except for walking on heels, which should be performed in shoes.
- Surface is preferably grass but any flat, clean surface will do. Results will be subtle but should be noted in about 2-3 weeks, which include for athletes: decrease in injuries, improved cornering, improved jumping ability
- Consistent use of the foot drill will decrease or eliminate shin splints, plantar fasciitis, Achilles tendonitis and knee problems
- The walking is done at one's own pace. Total time for the drill with shoes off to shoes on is about four minutes, pretty simple.
- There are three problems with the foot drills: they are simple, they are easy and they are free. It doesn't involve more than taking off one's shoes and putting one foot in front of the other.
Foot and Ankle Stretches

**Toe-sits**
Sit on knees and curl your toes under as long as this position does not cause discomfort. Hold 10-30 seconds. A pillow may be used between backs of thighs and calves if toes are inflexible.

**Calf Stretches**
1. To help stretch your Achilles tendons and calf muscles as well as your plantar fascia, put your toes as high up a baseboard as possible and then lean in towards the wall to enhance the stretch. Hold 10-30 seconds.

![Calf stretch 1](http://media.photobucket.com/image/achilles%20stretches/smelly/IMG_3819compressed.jpg)

2. Another way to stretch your calf muscles and plantar fascia is to stand on a step and let one foot (or both feet) hang off the edge of the step and stretch below the step to tolerance as shown below. Hold 10-30 seconds. It is best to hold onto a railing so you maintain your balance.

![Calf stretch 2](http://livelifeandbewell.com/wp-content/uploads/2011/04/imagesCA2PH6MR.jpg)