

## FLOORING AND OUR FEET

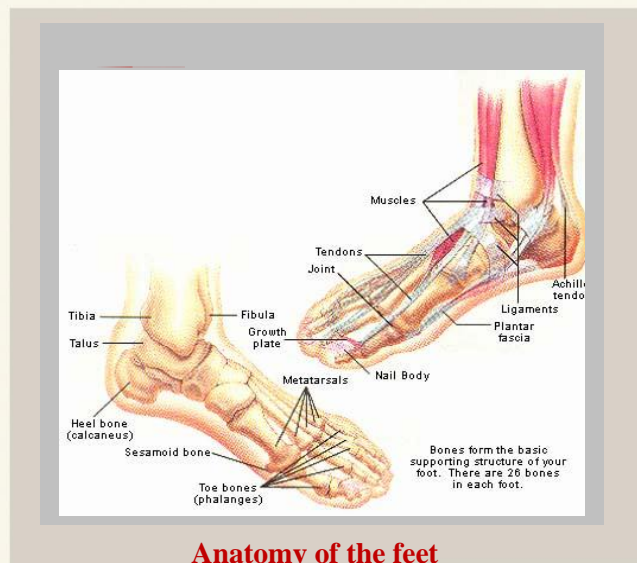
Over the last few decades flooring has changed substantially in our homes. In the 80's and 90's we had carpeting throughout the majority of the home. This carpet quite often had a thick under padding to add cushioning and softness to the floors. We now have changed the flooring significantly to much harder surfaces. For example, we now have hardwood, laminates, ceramic tiles and other hard materials. This change in flooring has caused a lot more of the population to experience foot discomfort.

The reason the harder flooring in the homes may create issues for some is due to the lack of shock absorption the flooring provides. Some of us have a very high heel strike force. This higher heel strike on a ceramic tile means the structures of foot are under strain because there is no shock absorbed by the tile and this is then transferred directly to the foot. This can cause a repetitive strain in some of the structures of the feet. These structures include the Plantar fascia under the heel that inserts in the ball of the foot, the Achilles tendon at the back of the heel and even up into our lower leg/shins. Another part of the foot under strain can be the metatarsal bones under the ball of the foot. Often as we age we lose the fat pad under the ball of the foot because the arch (transverse) that runs across the ball of the foot drops.

The feet/flooring issues may arise with lifestyle change, such as when the person has retired or is home on a maternity leave, and this can mean they are now spending a lot more time in the home on those harder surfaces and thus can experience more discomfort. Often when the person is on maternity leave they are also carrying around the weight of a baby putting even more pressure on the feet.

### SOLUTIONS:

1. **Wear footwear indoors.** This can be indoor use running shoes or slippers/Crocs that have a lot of shock absorption. This also will put padding between the foot and the floor.
2. **Choose "softer flooring".** For example, choose laminate flooring for the kitchen that looks like ceramic tile. Cork flooring, although more expensive, is softer than the hardwood flooring.
3. **Place soft mats on ceramic or hardwood.** If you tend to stand at the sink to do dishes place the mat under yourself. Move the mat around to in front of the stove when needed. Very good quality foam mats are now available for this purpose.



Anatomy of the feet

### WHY DO MY FEET GO NUMB ON THE ELLIPTICAL MACHINE OR WITH CYCLING?

There are 2 arches in our feet. There is the one most of us think of that runs the length of our foot and there is another less known one that runs across the width of the foot at the "ball". This is called your metatarsal or transverse arch. Most of us don't realize this arch can fall or drop. Often the only symptom we may notice is our shoe size increases by 1/2 a size. This sometime occurs during or after a pregnancy, with higher impact activities, or even just with age. Our feet have receptors on the bottom that bypass our conscious control and we will alter the way we walk to avoid any foot pain. When the transverse arch drops we may push off involving the big toe to avoid the dropped bones in the ball of the feet. A callus may develop on the big toes but you experience no discomfort. However, if that arch has dropped and you have to load the ball of the foot, like on the elliptical or while cycling, the toes may go numb. The reason that occurs is the nerves that run between the metatarsals in the foot get compressed and numbness results. The solution to this may be to add metatarsal pads to the footwear to splay the metatarsals thus take the pressure off the nerves.



**Adhesive metatarsal pads are available here!**

## FOOT INJURIES

### Plantar fasciitis

The plantar fascia (*fash-ab*) is a thick band of tissue that connects your heel to the base of your toes. When it is torn, inflamed or over-stretched, this is called plantar fasciitis (*fash-e-it-is*). This condition can be a result of:

- An acute injury (strain) that places an excessive load on the foot
- Prolonged or excessive pronation (flat foot) of the foot
- A high-arch or a change in footwear

You will often feel the pain at the base of your heel when you step out of bed in the morning. This injury can be very pesky; it is important to seek treatment quickly. Treatment may include chiropractic adjustments to the restricted joints of the foot, active release technique (ART) and/or massage to release the tight plantar fascia. Custom or off shelf orthotics to support the arches and increase shock absorption at heel strike can also be warranted.

### Achilles tendinitis

The Achilles tendon forms from the muscles in your calf and attaches to your calcaneus bone or the heel of your foot. It is characterized by pain when the foot is plantar flexed i.e. walking on your toes gives this motion, and is a condition that develops as a result of repeated micro-trauma. Scarring or the presence of adhesions usually occurs within the tendon also contributing to discomfort while running or playing other sports. Rest and ice are important in healing this injury as well as professional treatment and assessment. Treatment may include ART, adjustments to the feet, and even acupuncture if necessary.

### Self-Management Techniques

- ◆ Buy quarter-inch heel lifts or Dr. Scholl's gel heel cushions for your shoes. Wear a heated ankle wrap throughout the day to improve circulation.
- ◆ Massage your Achilles with ice to prevent poor-quality blood vessels from forming.

Do the push-against-the-wall stretch regularly, with your rear knee straight and then with it slightly bent.



**There are many different kinds of Custom Orthotics. Ask Keri-Lyn which one is right for you?**

“The human foot is a masterpiece of engineering and a work of art.”

- Leonardo da Vinci