



## Are you wearing the right shoes?

Spring has arrived and that means warmer temperatures and increased outdoor activities. Use this time to take an inventory of the type and style (s) of shoes you plan to wear before heading outside.

With every step, gravity, body-weight and ground reaction forces are transmitted through our feet. Proper shoes can help control and distribute these forces so foot problems can be prevented or even alleviated. First, determine your foot-type. Shoes are designed for three different foot-types: Supinators (high-arches), Pronators (flat-footed), and Neutral arches.

### Our Location

Commitment Physical Therapy is located at 11741 Southwest Highway in Palos Heights.

### Our Hours

We are open Monday thru Friday from 9:00am until 5:00pm.

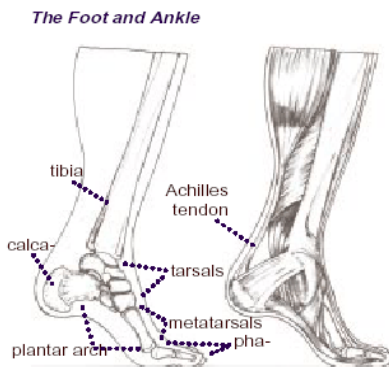
For your convenience, we also offer extended and weekend hours by appointments only.

## Taking Care of Your Foot and Ankle Part 1

### Foot and Ankle Anatomy

The foot contains three main sections or functional units: the **rear foot, mid foot, and fore foot**. These three units work together to allow the foot to be flexible (such as accommodating an uneven surface) or to be fairly rigid (such as keeping the body upright as we go through the normal walking cycle). Each foot contains 26 bones: 7 **tarsals** (ankle bones), 5 **metatarsals** (instep bones), and 14 **phalanges** (toe bones). The main arch of the foot is called the **plantar arch**. It runs lengthwise and touches the ground only at the heel bone and at the ball of the foot. The plantar arch is thickly padded at both ends. There is also a thick pad of fat under the heel of the foot to absorb shock. In addition to the plantar arch, the foot has two other arches: the *metatarsal arch*, which runs crosswise under the instep, and the *lateral arch*, which runs lengthwise along the outside of the foot. The bones and joints of the foot and ankle are held together by a strong network of muscles and ligaments. The foot is connected to the ankle where one of the tarsal bones, called the **talus**, meets the lower leg bones, called the **tibia** and the **fibula**. The ankle joint is called upon to provide both great stability (keeping us standing up) and great mobility (walking, running, and jumping). These two functions need to be kept

in balance if we're to keep our feet healthy and functioning.



### What Causes Foot and Ankle Problems?

Because we are two-footed creatures, our feet and ankles are called upon to perform a remarkable achievement of biomechanics -they keep our bodies upright and stable while permitting us to run and walk. This unique capability puts great pressure on our feet and ankles. It can also turn what were initially minor problems into major ones.

### Foot and Ankle Injuries

The most commonly reported injuries in the foot/ankle region are ankle sprains. A **sprained ankle** simply means that the *ligaments* (the strong bands of tissue that connect the bones of the foot) are stretched beyond their normal limits, resulting in inflammation, tearing, or rupture of the tissue. Sprained ankles run the gamut from minor to serious. If you're in pain for more than a day or two, or if the pain is intense, you should see a physical therapist or physician. If physical

therapy is required, the sprained ankle will be immobilized for a short period to prevent further damage and to give the tissue a chance to heal. After that, therapy progresses quickly with exercises designed to restore stability and strength to the muscles. It is also crucial that the patient's sense of balance be restored or enhanced through exercise. "**Shin splints**" is a catch-all phrase for a number of foot and ankle problems, including overuse of the muscles and tendons of the foot and ankle. *Tendons* are the strong fibrous cords that attach muscles to bones. The *Achilles tendon*, which takes its name from ancient mythology, is easily felt at the back of the ankle. **Achilles tendonitis** is an inflammation of this tendon, often resulting from sports (such as basketball or aerobic dancing) that require a great deal of jumping. **Plantar fasciitis** is an irritation of the plantar fascia- the tough tissue on the very bottom of the foot that begins at the heel and is attached to the toes. It can result in pain and lead to a heel spur, a bony growth on the underside, forepart of the heel bone. This kind of pain is usually at its worst in the morning, then gradually diminishes during the day.

## Happy 4th of July!!!

It's that time again to say Happy Birthday to our Country, and celebrate the freedom that we have, be thankful that we live in a Country where we can do whatever we want, watch what we want, and listen to what we want. We should take advantage of what this great place has to offer. And also keep in our minds that little things we take for granted, are not so attainable in other parts of the world. We are all so lucky.



## Continue: Taking Care of Your Foot and Ankle

Heel spurs are caused by straining the foot muscles, stretching the long band of tissue connecting the heel and the ball of the foot, and by repeated tearing of the lining of the membrane that covers the heel bone.

**Metatarsalgia** is pain in the forefoot, usually caused by the over-prominence of one of the metatarsal heads, i.e., the heads of the bones in the ball of the foot. All of these overuse conditions can be aggravated by excessive pronation. Most people associate **repetitive motion injuries** with the hand and wrist- but did you know that your feet and ankles are also vulnerable? People who are on their feet all day- sales-people, trial lawyers, teachers, nurses, athletes are at risk for a variety of foot and ankle disorders, including **tarsal tunnel syndrome**. While not as well-known as its "cousin" carpal tunnel syndrome (in the wrist), tarsal tunnel syndrome can be just as painful. As with many foot problems, tarsal tunnel syndrome can often be blamed on shoes that do not provide enough arch support and heel stability. Ill-fitting shoes cause the foot to pronate excessively; when

this happens, one of the thick ligaments running from the ankle to the bottom of the foot can become stretched and inflamed. This in turn can irritate a major nerve running just behind the ligament, resulting in tingling and numbness. If the standard treatments for heel pain are ineffective, a physician should be consulted about the possibility of other treatment options. **Flat feet**, also called "pancake feet," is a condition in which the arch is judged to be lower than normal. There are many degrees of "flat feet," and some physical therapists will point out that curve of a "normal" arch is a subjective judgment. Nevertheless, flat feet can cause discomfort, and sometimes can lead to plantar fasciitis or other problems.

**High arches**, as opposed to flat feet, is a condition in which the arches are higher than normal. The main concern here is to make sure that the shoes have enough surface contact and support for the arches; otherwise, the stresses put on the foot and ankle can move "up the chain" through the legs and spinal column. In some cases, high arches may require custom orthopedic shoe inserts to prevent more serious problems.

### Disease-Related Foot Problems

Physical therapists commonly treat foot problems associated with diseases such as diabetes or arthritis. **Diabetes** can lead to peripheral neuropathy, a condition in which feeling is reduced in the foot. This numbness is a serious condition that can lead to injuries and ulcers on the foot- and, in the most extreme cases, amputation. Because the patient can't feel pain or pressure, a simple blister can turn into an ulcer, infection can set in, and, in severe cases, this can be followed by gangrene and amputation of the foot or leg. **Arthritis** is the inflammation and swelling of the cartilage and the lining of the joints. The foot and ankle region is especially susceptible to arthritis because of the large numbers of joints at risk (33 in each foot) coupled with the tremendous weight-bearing load on the feet.

It's difficult to generalize about the causes of arthritis. Heredity plays a role in some cases, traumatic injury or infections in others. People over 50 are most at risk. It's important that you seek professional care if you suspect that you have arthritis; left untreated, arthritis can be a debilitating or even crippling disorder. **In August Newsletter we'll discuss the physical therapy intervention.**

### Patients' Comments



**"The staff is always happy & helpful. I'm glad my Doctor recommended me here."**

**F.Z - Oak Lawn, IL**

**"The quality of care & service that I received was great!" P. S - Orland Prk, IL**

**"This was a return visit for me, and every time I have a problem, I will be coming back" R.O - Oak Lawn, IL**

**"It worked!! My arm & Shoulder are in good Condition, Dr did a great job." R.M - Chicago, IL**