

Tips, Strategies and News You Can Use To Achieve Optimum Health...For Life!

Sep 2006 Issue

Foot Pain: How To Prevent And Treat It

Foot pain is a major source of pain and discomfort for millions of people. And while statistics are hard to pinpoint, foot pain affects all of us at some point in our lives.

The reason for this is simple: **no other part of the body absorbs as much shock and force as our feet!**

Also, the foot is a very complex anatomic structure. On the one hand, your feet need a certain amount of shock absorption built-in to cushion your body when walking or running. On the other hand, your feet must also be rigid in order to provide support. But - if your feet have *too much* cushioning, you won't be able to generate force for walking. In contrast, if your feet are too **rigid**, that can also create problems. Imagine walking on a 'peg leg': forces shoot right up the body, creating stress on the entire body.

So, your feet have to maintain a delicate balance: cushioned yet rigid.

Here is why the foot is so complex. Your foot is made up of 19 muscles, 26 bones, 33 joints and 107 ligaments. Amazing, isn't it? Your feet can be afflicted with over 300 different ailments and a 135 pound person absorbs more than **2.5 million pounds of pressure while stepping throughout a typical day!** No wonder there are foot and ankle specialists among doctors!

The foot's extraordinary complexity is a function of the many joints and ligaments involved. Every joint requires at least two to three ligaments -- and sometimes more -- depending on the orientation of the joint. Ligaments (which connect bone to bone) **form the supportive structure of the joint**. They create what is considered your primary source of stability...along with the orientation (or direction) of the joints themselves. Unlike tendons (which connect muscle to bone), *ligaments need to be tight*. Without rigidity, there is no support. And since ligaments and tendons are made of different types of connective tissue, once a ligament is stretched out, it's



Robert Inglis, MPT, CSCS

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very difficult (if not impossible) for it to regain its rigidity.

Tendons and muscles form the **secondary supportive structure for your feet**. Tendons are more elastic than ligaments and once stretched, slowly regain their rigidity (when you stretch before exercising, you're mostly stretching tendons and muscles).

Foot Pain: What Actually Causes It?

Pain in the foot is typically **due to an abnormality of any of the structures of the foot**.

Although some occur as a result of traumatic injuries (such as accidents, broken bones, stress fractures, sports injuries and crushing injuries) most foot pain is **attributed to degenerative changes that occur over a long period of time**. The most common causes of foot pain include...

- **Calcaneal spurs** - These are pointed bony outgrowths on the heel. Calcaneal spurs are most often attributed to local inflammation at the insertion of the soft tissue tendons. Spurs can also be located on the sole of the foot or at the back of the heel. If located at the back of the



heel, spurs are frequently associated with Achilles tendonitis.

- **Plantar Fasciitis** - This is a condition where the flat band of connective tissue underneath your foot becomes weak, swollen and irritated. This, in turn, causes the bottom of your foot to hurt when you stand or walk. Although Plantar Fasciitis is seen most in middle-aged people, it also occurs in younger age groups. People who spend a great deal of time on their feet - such as athletes and soldiers - frequently develop this condition. Untreated, it can eventually cause problems with your ankles, your knees and your hips. It usually develops as a result of extremely tight Achilles tendons or calf muscles. Staying **flexible** is important in avoiding this painful condition.

- **Arthritis** - This is a very common cause of foot pain. If you have rheumatoid arthritis, it can cause a deformity of the toes and breakdown of the joints. With the loss of rigidity, ligaments tend to break down and the entire foot starts to collapse; it's a vicious cycle of degenerative changes. Rheumatoid arthritis is most often seen in the hands and feet.

- **Improper or Poor Footwear** - Believe it or not, improper footwear is the root cause of nearly 80% of all foot problems. Bunions are a common malady. This is where your first toe turns inwards and creates pain in the foot. It usually occurs in both feet with one foot worse than the other, and gets progressively worse. **Women are stricken with bunions at a far greater rate than men**. Can you guess why? Right: because of the types of shoes women wear. Also, people who tend to walk flat-footed tend to suffer from bunion deformity at an increased rate.

- **Neuroma** - This is an inflammation of one of the nerves that run between the bones of the toes of the foot. Basically, it's **nerve "entrapment" where a nerve (or nerves) become compressed between the bones of the foot and become enlarged and inflamed**. The primary cause is from twisting the foot when walking.

Neuroma is also associated with flattening of the foot and can result in a “burning” type of pain and intermittent numbness in the legs and feet.

- **Diabetes** - This disease has potentially **disastrous** consequences for your feet. With diabetes, your blood vessels’ ability to deliver oxygenated blood is impaired. As a result, many who suffer from diabetes experience **loss of sensation** in the legs and feet. People who suffer from diabetes can have very tight shoes or a *rock or pebble in their shoe, and not even feel it!* This compression alone can damage the soft tissues of the feet. Also, since blood flow is impaired, tissue in the feet cannot heal and ulcers start to form. This only compounds the problem. *This is why I recommend that diabetics check their feet on a daily basis and look for irritation and/or red spots.*

- **Tendonitis** - Tendonitis is inflammation of tendons. In feet, tendonitis most often manifests itself as tightness of the heel cord. If you have a history of ankle sprains or sports injuries to the foot, the ligaments in your feet will be *looser* and susceptible to further injury.

Those are the most common *causes* of foot pain. Now let’s talk about how to *prevent* foot pain from happening in the first place.

How To Stop Foot Pain Before It Begins

Tip No. 1: Don’t ignore your pain. Foot pain is NOT normal. As with any type of pain, foot pain is a signal something is wrong with the body. See your physical therapist or your doctor and get it checked out. This is always the first step.

Tip No. 2: Wear the right shoes for your particular foot type. See my “Questions and Answers” section this month (p. 4) for in-depth tips on selecting the right shoes for your feet!

Tip No. 3: Check your shoe size every three years. Your feet continue to grow longer and wider as your age. Some conditions (such as pregnancy) can also increase the size of the feet.

With age, fatty layers of padding on the bottom of the feet also start to diminish. As this cushioning slowly disappears, it can lead to greater injury and stress over time. People with less padding can be more susceptible to bone spurs and other types of ailments as discussed earlier.

Tip No. 4: Lose a little weight. Since your feet and ankles are your body’s primary shock absorbers, the less weight (and therefore force) placed on your feet, the better. Even losing 5 or 10 pounds can make a difference. Remember: people’s feet sustain an incredible amount of pressure each and every day. Losing weight is one of the best ways to relieve pressure on your feet.

Tip No. 5: Ditch the high heels. Wearing high heels changes all the forces in the foot. So instead of distributing these forces across your entire foot, they’re focused exclusively on the “ball” of the foot. This added stress can lead to many different foot ailments. Excessively high heels are an open invitation for foot problems.

What are some treatment options for foot pain? Easy. Physical therapy can be a great relief to many. See your physical therapist to help attack the **root problems** behind your foot pain. In the meantime, you can alleviate the symptoms with ice. Some of my patients find if they freeze a bottle of water, they can roll the bottle over the bottom of their foot and relieve much of the pain associated with certain ailments. You can also try calf stretches (see me for examples), arch stretches and self-massage.

You need to maintain the health of your feet because they’re **the only ones you have**. Losing weight, getting the correct shoe support, doing the right exercises (such as flexibility and strengthening exercises) are crucial. Physical therapy is also a great answer for the most common foot ailments and abnormalities.

-- Robert Inglis, MPT, CSCS

If you have any questions about this article, please email me at: mycorept@yahoo.com

“Ask-An-Expert”

Your Questions And Answers

This month's question is related to my main article. Follow my tips and your feet will love you for it!

Question: How Do I Purchase Shoes That Are Best For My Feet? What Do I Look For?

Answer: As you read in my main article this month, almost 80% of foot ailments can be traced back to improper footwear. So finding the right shoes for your feet is critical for good foot health. Here are my inside secrets of what to look for in a good pair of shoes!

Tip #1: Good Arch Support - If you look at many of the female shoes on the market these days, you'll notice most don't have proper arch support. Lack of arch support allows a flattening of the arches over time and can contribute to a common foot ailment called *Plantar Fasciitis*. Choose shoes with good arch support to avoid this painful disorder!

Tip #2: Snug Fitting Shoes Are Best - Look for snug-fitting shoe that provide a good heel cup. This ensures your heel doesn't slip around inside the shoe. Plus, snug shoes generally provide greater support than shoes that fit more loosely.

Tip #3: Choose The Right Shoe For Your Lifestyle - You need to choose footwear *appropriate for your activities*. For example, if you play basketball, don't choose running shoes. And if you're a runner, don't purchase basketball shoes (Don't laugh: I see this all the time). Go to any tennis court in the country and you'll see at least one person wearing running shoes. While



running shoes provide excellent cushioning, they don't brace or support the ankle for the side-to-side motions inherent in tennis). Bottom line: *never wear a shoe for an activity for which it was not intended.*

Tip #4: Choose A Durable Shoe - Make sure the footwear you purchase will maintain their support over an extended period of time. Inferior-quality shoes can feel great initially, but lose their support very quickly. Purchase durable shoes for consistent support over the long haul.

Tip #5: Choose A Shoe That Compensates For Your Foot - Feet come in three categories: high arch, normal arch and low arch foot. If you have a high arch, it means you have a **fairly rigid foot**. A high arch is akin to a "keystone" in architecture: the high arch creates strength in the structure. However, people with high arch feet often do not have enough cushioning. If you do have high arch feet, be sure to **choose a shoe with greater cushioning** to provide what your feet lack.

On the other hand, if you have a low arch (or "flat" arch), you should choose footwear that is **more stable and provides greater support and pronation control** (prevents your heel sliding around in the cup of the shoe). Finally, if you have a normal arch, get **balanced footwear**, with both proper arch support as well as adequate cushioning.

Thanks to Chris W. for this month's question! Please send your questions to me! I always enjoy reading them and if your question appears in this newsletter, I'll send you a gift certificate worth \$25! Keep the questions coming! -- Robert

“Don’t Get Benched!”

How To Help Your Child Athlete Avoid Sports Injuries

Now that students are back in the classrooms, our favorite football teams will be marching out on the fields-*hopefully to victory!*

Football can be an exciting sport both for the athlete and the spectator. Unfortunately for the athletes, there is a risk of suffering an injury. With proper education about injury prevention and training, football athletes will not have to be a bench warmer for the rest of the season!

Believe it or not, football does **not** lead the sports injury list. Gymnastics and aerobics do. However since football is a contact sport, all injuries other than bumps and bruises should be evaluated by an athletic trainer, physical therapist, and physician.

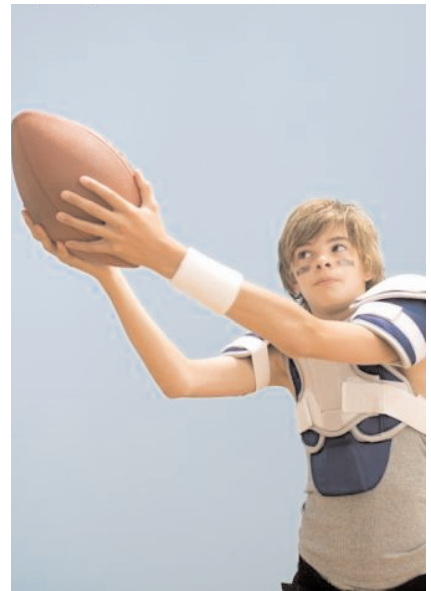
All athletes, football or not, need to **listen** to their coaches. They may be harder on you than your parents and may push you over the edge of exhaustion but they know the game and know what it takes to win. **Injuries are not part of a winning strategy.**

Head and neck injuries are the most devastating football

injuries. However, head injury rates have decreased with the changes in protective padding and helmets. But these types of injuries can usually be avoided by following your coach’s training and using proper tackling and blocking techniques.

One of the most common shoulder injuries is a **shoulder separation**. This is a form of ligament sprain in the shoulder. Most require just protective padding, ice, and measures for pain control. More severe ligament tears may require surgery. Another less common shoulder injury is a **dislocation which may be a partial or complete dislocation**. A complete dislocation must be manipulated back into the shoulder socket by a doctor.

Since football is a lifting and pushing sport, back injuries do occur, but most are **muscle strains**. More serious is a fracture to the vertebrae (bone) of the back. Another type of fracture injury that can occur is **spondylolysis** which is where the vertebrae can slip over another in the spine. If this is not allowed to heal properly, in most cases football will need to be discontinued.



Hip pointers are a bruise to the outer pelvis bone. Bruised ribs and kidneys also occur in addition to quad muscle bruises and leg muscle pulls. Hamstring sprains “pulls” are very common and also very frustrating to deal with: some heal within a few days, some take several weeks. Proper stretching techniques can help avoid these injuries.

Knee injuries can vary in degrees of severity. Some ligament sprains just require rest, others (like a tear of the anterior cruciate ligament) require reconstructive surgery and rehabilitation. Most athletes can return to activity in 5-6 months. **All knee injuries should be evaluated by a specialist.**

Ankle injuries usually take

the form of **ligament tears**. Fractures are not uncommon. Any ankle injury that results in swelling should have an X-ray and evaluation by a doctor or ankle specialist. **Ankle injuries are very often under-treated and should be treated by a physical therapist.**

Preventing all football injuries is next to impossible. Appropriate equipment is a must. Following coaches' instruction, especially with tackling and blocking tech-

niques, will help avoid many injuries. Stretching is also critical.

A good off season and in-season strengthening program is important. Because the game of football is so physically challenging, it is extremely important to integrate several training methods in order to increase power, speed, agility, strength, flexibility, anaerobic conditioning, and anaerobic endurance. The stronger, faster, and more powerful athlete will have a performance advantage.

Pre-season medical screenings are also critical. In addition, **musculoskeletal screenings and performance testing by a physical therapist** can be useful tools to create a specific strength and conditioning protocol for the athlete.

Without a proper and thorough athletic screening, many injuries can be aggravated and additional more severe injuries may occur which may end your season. If you want to stay of the bench, do the right thing and take action now!

Health Trivia - Test Your Health And Fitness Knowledge!

QUESTION #1:

What distance does blood travel each day through the human body?

- a.) 10 miles
- b.) 28 miles
- c.) 127 miles
- d.) 60,000 miles

QUESTION #2:

What is the third leading preventable cause of death in the United States of America?

- a.) Heart Attacks
- b.) Cancer
- c.) Second-hand cigarette smoke
- d.) Diabetes

QUESTION #3:

How long does the average tetanus shot last?

- a.) 2 years
- b.) 10 years

- c.) 30 years
- d.) For life

QUESTION #4:

How much blood does the average adult have in his body?

- a.) 10-12 pints of blood
- b.) 15-17 pints of blood
- c.) 20-22 pints of blood
- d.) 35-40 pints of blood

QUESTION #5:

When was the first successful heart transplant performed?

- a.) 1949
- b.) 1967
- c.) 1982
- d.) 1997

Answers:

1.) d 2.) c 3.) b 4.) a 5.) b

From Our Healthy Kitchen:

South American Chili Soup



This South-of-the-border chili is thinner than traditional American chili, but just as satisfying. Low on calories and fat, high in protein, complex carbohydrates and fiber, this is one chili that will please the entire family! (This recipe feeds a family of four). Best of all, the entire cooking and prep time is **less than 20 minutes**.

Ingredients

- 16 ounces chicken tenderloin, chopped
- 6 cups red and green pepper strips (diced into small pieces)
- 2 cups salsa (whatever heat level you prefer)
- 2 cups onion, chopped
- 5 cups tomatoes, chopped
- 8 teaspoons cornstarch
- 4 teaspoons olive oil
- 4 teaspoons Worcestershire sauce
- 4 tablespoons balsamic vinegar
- 1/2 teaspoon hot pepper sauce
- 4 cups chicken stock (look for the organic MSG-free type)
- 2 teaspoons garlic, chopped
- 1 teaspoon chili powder

Directions

- 1.) In a non-stick saute pan, heat the olive oil.
- 2.) Saute chicken, onion, peppers, salsa, Worcestershire sauce, vinegar, and hot pepper sauce until lightly browned.
- 3.) In large saucepan, combine chicken mixture, tomatoes, chicken stock, garlic, chili powder, and cornstarch (mix cornstarch with chicken stock before adding to saucepan).
- 4.) Bring entire mixture to a simmer, stirring constantly for 3 to 5 minutes. Spoon into bowl and serve.

Enjoy! Entire prep and cooking time is less than 20 minutes.

Monthly Announcements and Upcoming Events

New Tai Chi Classes Starting In October!

Due to the overwhelming demand and success of our first **T'ai Chi** classes, we've scheduled a new series of classes! If you haven't read about T'ai Chi in our last few issues, **here is why you should consider enrolling in these classes:**

T'ai Chi is a slow motion, moving, meditative exercise for relaxation, health and balance. Originally from China, T'ai Chi is now practiced regularly by millions of people throughout the United States and the rest of the world. Specific slow moving forms are taught by **Mark Talle**, L.Ac., a licensed acupuncturist and certified T'ai Chi instructor. It is a one-hour, 8 week course held

one day per week at 7 pm. Each week, the progression is advanced, until a series of movements are learned. The quality of movement is critical, including shifting of the weight, trunk rotation and taking steps. Benefits include enhanced circulation, development of strength and improved balance and flexibility. Daily practice is an excellent way to balance modern life with our internal awareness, and allows cleansing of daily stress from our body, mind and spirit. Call us at 714-528-9400 to enroll!

Here's what one participant recently said about these Tai Chi classes:

Dear mark,

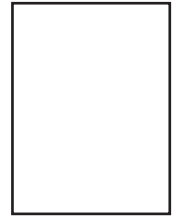
We have thoroughly enjoyed taking your class in Tai-Chi for the past eight weeks. We really like the many benefits

that Tai-Chi provides and especially so as regards to low level of intensity required. The beauty of Tai-Chi as we see it, is that it appears most everyone can do these forms and thereby obtain positive improvement in their well-being. We also appreciate the manner in which the class has been conducted. Your ability to impart instruction and directions on all the moves, in a low key yet thorough manner, has made for a very enjoyable and beneficial experience. We are sorry to see the class end and we are happy to recommend the class to all and we are interested in taking the next class! Thanks again for a truly enlightening and enjoyable experience.

Sincerely,
H. & L. T.

**New Classes Starting
Oct. 11th at 7 pm! Call for
details: 714-528-9400**

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Referral Reward Program

I'd like to thank those of you who have participated in the **Patient Referral Program!** Marketing for new clients costs us tons of time, money and energy. Like any company, we need new patients to stay in business. Over the years we have found that looking for new patients takes away from the time we would rather be spending *with you and for you* and treating other patients!

If I've already helped you with physical therapy, nutrition advice, metabolic testing, etc., then you know how well I serve my patients. When you refer your friends and relatives to us, everybody benefits. We can serve you better. We send you a nice gift. And we assure that we'll take the very best care of any friends or family that you refer

our way! For more information about our referral reward program, just give us a call at: **714-528-9400**. It's a great program where, as our way of saying "thanks", we send you a token of our appreciation for recommending our services!

Also: If you would like any of your friends, coworkers, relatives, business acquaintances, etc. to receive a FREE subscription to this newsletter, please call me at the same number: 714-528-9400. We'll also send them a note with their first issue telling them that you suggested they receive this newsletter, and to contact us if they would like it to stop at any time. *If you enjoy this newsletter, share it with people you know, with no hassle for you!*