

# How To Treat Your **Plantar Fasciitis** Naturally



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**Disclaimer:**

This book is not intended as a substitute for the medical advice of physicians. The reader should regularly consult a physician in matters relating to his/her health and particularly with respect to any symptoms that may require diagnosis or medical attention.

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## ***Introduction (by Dr. Philip Maffetone)***

Plantar fasciitis is a relatively common condition in runners, walkers, and many others who spend considerable time on their feet.

Characterized by pain at the bottom of the foot in front of the heel, plantar fasciitis (PF) is typically worse with the first steps in the morning or after a long period off the feet, prolonged standing, or following hard exercise. The pain is typically reduced with movement or warming up.

In the U.S., visits to health practitioners for this problem cost upwards of half a billion dollars annually. Many sufferers rely only on self-remedies or the problem spontaneously resolves, never visiting a practitioner.

Unlike a fracture observed on X-ray, a definitive diagnosis of PF, like other soft tissue injury, is often elusive. It's sometimes called *plantar heel pain syndrome*, perhaps a better name, albeit less sexy. Others include heel-spur syndrome, plantar fasciopathy or painful heel syndrome. PF is often confused with tarsal tunnel syndrome or an array of other foot problems that produce similar symptoms, even foot dysfunctions that can mimic PF but are without traditional names.

When occurring in only one foot it may be due to localized neuromuscular imbalance associated with microtrauma; in both feet, overuse or chronic inflammation may be a cause. In either case, wearing shoes that are too stiff, are too thick for natural movement, or don't properly match the feet is a common cause.

A clear diagnosis is difficult because of the lack of consensus on a definition, and the lack of extensive tests, which are often unnecessary to resolve the problem. Pain on the bottom of the foot, especially in front of the heel bone, does not automatically infer PT.

### **Common Causes**

Primary risk factors associated with plantar fasciitis.

#### Neuromuscular

- Weakness: Tibialis posterior, and intrinsic foot muscles.
- Tightness: Gastrocnemius, soleus, Achilles tendon, plantar foot muscles.
- Poor gait.

#### Lifestyle

- Improper shoes (too thick, too stiff, poor fit).
- Increased exercise stress.
- Foods that promote chronic inflammation.
- Loss of natural fat pad in feet (aging, poor health).
- Overfat.

## **What Is Plantar Fasciitis? (by Dr. Mark Cucuzzella)**

### **First, what are the Plantar Fascia**

The plantar fascia (PF) is a strong ligament that runs from the heel to the metatarsal heads in the front of your foot. This ligament helps absorb the shock that occurs when your foot contacts the ground. It has function in the windlass mechanism recreating the arch on takeoff.

### **Plantar Fasciitis- or Fasciosis?**

Plantar Fasciitis is the common term for what should be more accurately termed Plantar Fasciosis. **itis** is an acute inflammation caused by a trauma or infection. **osis** is chronic degenerative condition.

No evidence exists for an ideal treatment of this condition without identifying and treating the causes, which can be many. Since we have minimal quality literature to guide us, this advice comes from seeing hundreds of runners and guiding them in self corrections as well as an understanding of the basic anatomy and natural functioning of the foot.

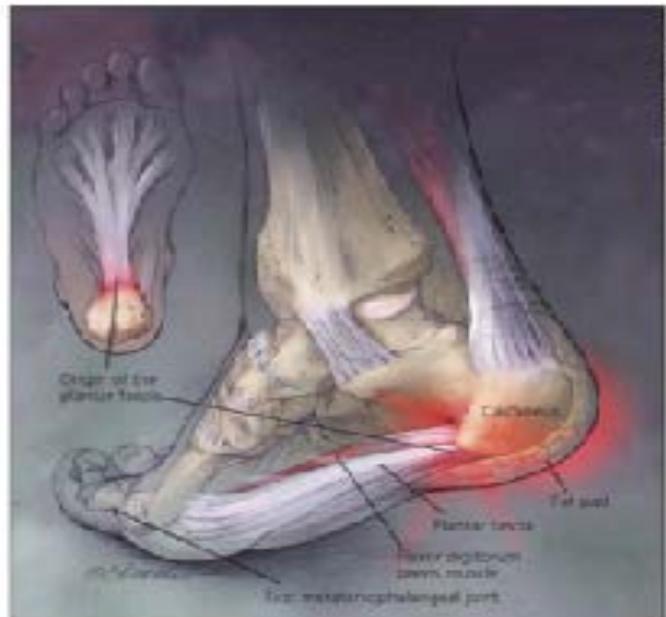
Diagnosing plantar fasciitis is an inexact science and there are no off-the-shelf remedies. Fortunately, this problem almost always resolves easily.

### **What Are the Plantar Fascia?**

The plantar fascia (PF) is a strong ligament that runs from the heel to the metatarsal heads in the front of your foot. This ligament helps absorb the shock that occurs when your foot contacts the ground. It has function in the windlass mechanism recreating the arch on takeoff.

### **The problem...**

The PF is not designed to manage the majority of the load of running and walking. The intrinsic and extrinsic muscles of the foot are designed to receive signals from the fascia and in turn manage the majority of the load. When those muscles are dysfunctional the load gets transferred to the PF which is unable to handle it likely leads to tears or *plantar fasciosis*.



**Pain may not just be Fascia.** The pain often localizes to the inside front edge of the heel. There are muscles that share an insertion with the plantar fascia. The **flexor digitorum brevis** muscle runs directly above the plantar fascia. On the inside part of the heel the **abductor hallucis**, an important arch stabilizer muscle, attaches. (see image)

The tendinous insertions of these muscles might play a role in this painful condition.

You can repair these tears by using passive methods such as rest and bracing but as soon as you hit the road or trail again you will likely suffer the same process. **The only way that you can actually fix plantar fasciitis is to address the root cause.**

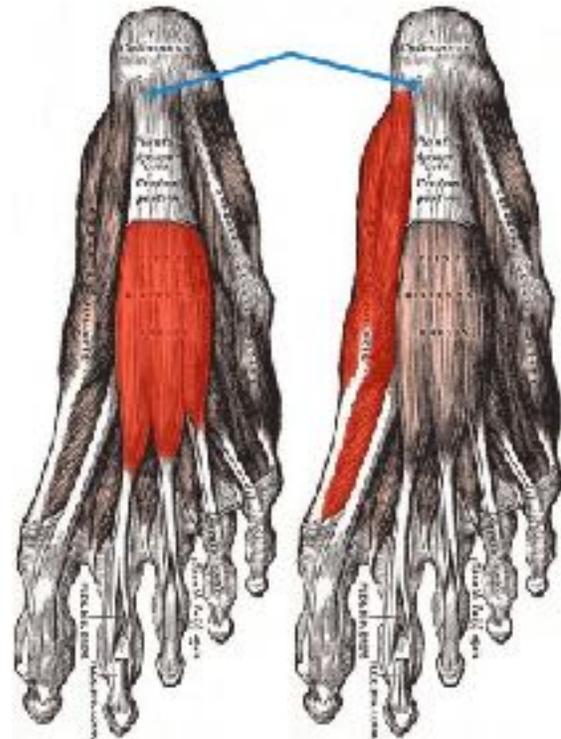
Several structural causes can contribute to the problem

- Weak intrinsic muscles of the foot
- A misaligned and weak first toe
- Tight shortened calf muscles
- Tight plantar fascia
- Poor neuromuscular reflexive function of the foot- proprioception

A great read on “The Foot Core” by Dr. Irene Davis [can be found here](#).

### **Other Important Contributors**

1. Increased mechanical stress from the amount of running or activity
2. Obesity
3. Adapting too fast from supportive footwear which inhibits intrinsic muscles to flat shoes or barefoot (i.e. summer if going quickly into flip flops or barefoot)
4. Poor walking and running mechanics
5. **Overly supportive footwear leading to instability.** This is a paradox as shoes that over support will weaken the foot, which leads to the foot’s instability



## **Common Causes And Symptoms of Plantar Fasciosis?** **(by Dr. Ray McClanahan)**

Inappropriate footwear is the No. 1 cause of plantar fasciosis. Footwear that possesses **toe spring** and a **tapered toe box** holds your big toe in an adducted and extended position. In this position, your abductor hallucis muscle—the muscle responsible for moving your big toe away from your foot’s midline—pulls on a foot structure called the flexor retinaculum and may restrict blood flow through your posterior tibial artery, the vessel that carries blood to the bottom of your foot. Tissues in the sole of your feet begin to degenerate as blood supply to this area is decreased.

Other recognized causes of or contributors to this health problem include the following:

- Calf muscle shortening
- Plantar fascia contracture
- Obesity
- Rheumatoid arthritis
- Reactive arthritis
- Psoriatic arthritis
- Corticosteroid injections

Heel pain is the most common symptom associated with plantar fasciosis. Your heel pain may be worse in the morning or after you have been sitting or standing for long periods. Pain is most common under your heel bone, but you also may experience pain in your foot arch or on the outside aspect of your foot.

Other common signs and symptoms of plantar fasciosis include:

- Mild swelling and redness in your affected area
- Tenderness on the bottom of your heel
- Impaired ability to ambulate

Dr. Ray has an eye-opening video on what’s happening to cause PF. [Click here to watch...](#)



## ***I Woke Up with Plantar Fasciitis... Or Did I? (by Steven Sashen)***

It happened this morning. I woke up, took one step out of bed, and felt the searing pain in my heel that's a sure sign of plantar fasciitis.

Clearly, all this barefoot running isn't good for me and caused this horrible injury.

Except that it didn't!

In fact, I've had a cold and barely been out of bed for the last 5 days. And for the last two weeks I haven't done any running, thanks to frigid cold weather (I'm a sprinter, so we don't do cold) and being at a trade show (which went VERY well, thank you for asking).



So, what gives?

Simple. For some reason that I'll never know, last night while I was sleeping my calf tightened up just enough to pull on my heel and give me symptoms that mimic plantar fasciitis.

Once I got up and took a couple of steps, my calf loosened up and all the pain instantly disappeared, and I couldn't recreate it in any way.

I don't have, and haven't had, plantar fasciitis. But I often talk to people who have the same symptoms I've reported and THINK they have P.F. when, in reality, they have tight calves.

Now, I'm not suggesting you don't see a doctor, or that if you have PF symptoms you don't have PF.

But if you have pain that you think may be plantar fasciitis, before you reach for an orthotic or some motion controlled shoe, or worse (surgery!), try foam rolling your calves... or get a massage, or soak in a hot bath with some epsom salts, or do a bit of trigger point work (find a spot that's tight and apply pressure until it "gives").

See what happens if you loosen up the calves and let me know what you discover.

## ***The Miracle That Is Your Foot (by Dr Emily Splichal)***

“Think of the magic of the foot, comparatively small, upon which your whole weight rests. It's a miracle and the dance is a celebration of that miracle.” —Martha Graham

As we go through life – running and jumping – occasionally we may experience the bout of foot pain. At first sign of pain we may back off, ice the foot, and pop a few anti-inflammatories. Often this does the trick, but what if this doesn't work? What do we do if the ol' RICE (rest, ice, compression, elevation) protocol isn't providing the expected relief?

### ***The Anatomy***

Understanding the anatomy of the plantar fascia is important in understanding the pathomechanics of this injury and why it may persist in some patients. The plantar aponeurosis or fascia consists of 3 bands: lateral, medial, and central all of which are further divided into superficial and deep fibers. The central band originates from the medial tubercle of the plantar surface of the calcaneus and travels towards the toes as a solid band of tissue dividing 5 slips, each of which inserts onto the proximal phalanx of each toe.

When the toes are extended (dorsiflexed), the plantar fascia is functionally shortened, creating stability in the foot and engaging the “windlass mechanism” of the plantar fascia. The windlass mechanism assists in supinating the foot and releasing elastic energy during the push-off phase of gait.

In many cases plantar fasciitis is the result of repetitive tensile stress or stretch that exceeds the elasticity of the tissue. This repetitive stress or stretch causes micro-tears within the plantar fascia which results in inflammation and edema. These micro-tears are then repaired by the body through the release of collagen type III which is like scar tissue (non-elastic). If the stress or stretch continues then this collagen type III repair accumulates and the tissue becomes chronic.

### ***The Presentation***

The most common site of pain in patients complaining of heel pain diagnosed as plantar fasciitis is near the origin of the central band of the plantar aponeurosis at the medial plantar tubercle of the calcaneus with occasional pain in the mid-portion of the central band just prior to it splitting into the 5 slips. Patients typically report pain first step in the morning or after a period of rest, also known as post-static dyskinesia. Pain will often subside with activity only to return toward the end of the day. Pain is described as sharp or burning as is localized to the plantar surface of the heel, with paresthesias uncommon.

Isn't it fascinating that 26 small bones are able to carry the body weight of man? Often taken for granted the coordination and integrated strength of the human foot has evolved to allow miracles in movement. As a Podiatrist, I have dedicated my career to helping others find the beauty in movement through the science of barefoot stimulation. Daily foot strengthening is

one of the most effective means for preventing foot pain and for optimizing energy transfer with each step.

What you'll learn in this book are the same things I do with clients, everyday.

## ***What Can You Do About Your Plantar Fasciitis? (by Dr. Philip Maffetone)***

Anyone with the problem needs individualized care. Since PF has different causes, there's not one single solution (hence the different recommendations you'll find in this book). Dr. Rachel Johnson of the Podiatric Medicine Department at Kent State University College says that "treatment is patient-dependent and commonly requires a combination of different modalities to successfully alleviate the symptoms."

In a recent review of published studies on PF between 2006 and 2016, Petraglia et al. concluded that it is quite difficult to suggest clinical practice guidelines due to insufficient data. However, very good options exist for individuals with PF — the problem can be remedied conservatively in most cases.

There are usually three options for people with PF. First, it's not uncommon for it to resolve on its own as the body corrects many of its own problems, although appropriate lifestyle changes can greatly encourage this process; a healthy body does not usually develop PF. If unsuccessful after days or a few weeks, a second option is that plantar pain can be evaluated and treated with a conservative approach by a clinician through hands-on care. Only very few difficult unresponsive cases require the third option of more radical assessment and treatment. Beware of skipping options — treating PF in an unhealthy body or while wearing bad shoes, for example, is more difficult if not impossible for all involved.

### **Plantar Fasciitis: 3 Options**

1. Individual lifestyle adjustments:
  - better shoes (natural fit and flexibility, e.g. Xero Shoes)
  - reduced training stress (volume and intensity)
  - dietary factors to help reduce inflammation (avoid all junk food)
  - allow reasonable time for the body to heal
2. Health practitioner/conservative care:
  - history and physical exam
  - hands-on treatment
  - as needed: X-ray to rule out stress fracture, bone spur, other
3. More detailed assessment:
  - magnetic resonance imaging (MRI)
  - diagnostic ultrasonography (US)
  - nerve conduction study and other bone scans as necessary
  - more aggressive therapy (drugs, surgery) as indicated by assessment

The onset of plantar discomfort is the first warning sign that something is not normal and should be heeded. Shoes, exercise routine, and other lifestyle factors should first be carefully evaluated and addressed. Moreover, preventing any foot dysfunction is important to living a healthy active lifestyle and can be accomplished using these same steps.

## ***Can You Correct Plantar Fasciitis? (by Dr. Mark Cucuzzella)***

There are a few basic principles but they will vary depending on the cause:

- **Any support from an orthotic, arch support, or taping in most cases should be a temporary modality while you strengthen and lengthen the tissues.** Unless you have a true structural deformity, using one of these forever is akin to breaking your arm and leaving the cast on forever (in one week muscles begin to atrophy from disuse). If you have an uncorrectable structural problem a lightweight support might assist you.
- Doing eccentric drop down and heel raise exercises from a stair can help. Place your foot on stair and drop your heels down and then go slowly up to the ball of foot. It is OK to have a little pain doing this as long as it is getting progressively better. This helps increase ankle dorsiflexion- a common culprit for PF.
- Get out of heels - gradually - in *ALL* activities. Do not wear shoes with heels that shorten your PF and place your foot in *all-day-dysfunction*: wear level footwear with a wide toebox, such as Xero Shoes.
- Do some deep soft tissue work with rollers, balls, and your thumbs.
- Practice a technique of running that encourages more natural form, lighter ground contact and loading rates, and more proprioceptive cueing. **Go really light and slow at first, even for weeks if condition has been chronic.** Just learn good impact moderating behavior.
- Strengthen your big toe by pushing it into the ground as often as you can whenever you are standing throughout the day. This will wake up the foot muscles and help recreate the arch.
- If your first toe is bent in consider a product to straighten it like [Correct Toes](#) from Dr. Ray McClanahan.
- Use the principle of gradual progression and body sensing when making any changes
- Avoid NSAIDS (Motrin, Ibuprofen, etc.). These drugs interfere with natural healthy healing processes.
- Good nutrition and avoiding inflammatory junk food and eating healthy fats is more important than most think.
- See a good health provider who understands natural running and walking

## Foot Intrinsic (by Dr Emily Splichal)

The intrinsic are major muscles in the feet. This diagram explains further:

Here are some things you can do to strengthen the intrinsic muscles in your feet:

- Pick things up with your foot.
- Walk barefoot.
- Work on short foot posture (see below).
- Do the toe spreading exercise below.
- Do the six foot drills described below.
- Do the 5-minute foot release described below.



### Short Foot Posture

Short foot posture is an exercise in which you shorten your foot by picking up the toes and the outside of the heel and put your weight on just a portion of the foot. [Watch this video for a clearer understanding.](#)

The fingers in the next photo show the range of the foot you're shortening. The places to put your weight are where the thumb and index finger are in the photo, plus the metatarsal head behind the pinky toe. Don't put your hand on your foot for this exercise – the hand is just in the photo to show various points of the foot. This will be much clearer when you watch the video.

The next photo shows where the metatarsal head by your pinky toe is. The index finger is pointing to it.

The three parts of the foot pointed out in these photos is where to put your weight to do this exercise.



**Toe Spreading:** This one is pretty simple. Just spread your toes as shown in the photo below:



### **Six Foot Drills**

Another group of exercises you can do is the Six Foot Drills. These drills will help with plantar fasciitis, shin splints, Achilles tendinitis, and knee problems, as well as reducing your odds of a severe ankle sprain. You can just watch this [watch this video to see the exercises demonstrated](#) or read the instructions here:

Find a place where you can walk around, preferably grass. At least make it a flat, clean surface.

Do the following drills barefoot or in socks, the last one.

Walk in each position for 80 feet. If that seems like too much at first, do what you can and work up to it.

### **Drill 1: Inversion**

Walk on the outsides of your feet, like this:



### **Drill 2: Eversion**

This is the opposite of inversion. Walk on the insides of your feet.



### Drill 3: Toes Out

Walk with your toes pointed outward and your heels close together, forming a V shape with your feet, like in this image:



### Drill 4: Toes In

Walk pigeon toed, with your toes pointed toward each other and your heels far apart. This is still a V shape but the opposite of the Toes Out exercise.



### **Drill 5: Backward on Toes and Balls of Feet**

This one is like a bad impression of the moonwalk. Simply walk backward on your toes and the balls of your feet like in the next photo.



### **Drill 6: Walk on Your Heels**

Wear shoes for this one.



### **5-Minute Foot Release**

In the morning and evening, do 5 minutes of trigger point foot release for the bottom of the foot. See the photo below



**Do not wear these!**



## ***What About Orthotics? (by Dr. Mark Cucuzzella)***

Custom orthotics and similar products attempt to stabilize the subtalar joint by supporting the arch, claiming to correct the poor biomechanics of the foot. This claim of correction is quite misleading. Orthotics can mask the symptoms by artificially supporting a dysfunctional structure along with its inherent muscle imbalances, while introducing a new angle of ground interface to the foot.

Plus, the current practice is to recommend new orthotics at least every couple of years, which can ultimately cost many thousands of dollars.

In most cases, the artificial support provided by orthotics has little or no effect on the alignment or structural integrity and your foot will become increasingly weaker and dependent on the support. These bracing and supporting characteristics may actually prevent proper alignment in the foot and ankle as they manage multi-directional activities, contributing to increased stresses at the ankle and knee. And the chance of injury increases when misalignment and increased stress combines with an unlocked structure.

From a biomechanical perspective, by introducing a new angle of ground interface, orthotics cause a shift in the dynamics of the repetitive movement. The symptoms resulting from the old dynamic disappear and the problem seems to be corrected. Unfortunately, over time or with increased activity levels at the new ground interface angle, the repetitive movement often results in new symptoms at different locations. This creates a recurring cycle where new orthotics are prescribed to compensate for the ever-migrating symptoms and pathologies.

I am a fan of an insert called [Barefoot Science foot strengthening system](#). Developer Lance Todd and I share a similar opinion and practice here. We have had a wonderful experience with these as people transition to natural footwear.

The Barefoot Science system doesn't support your foot, but helps develop intrinsic foot muscle strength, which can work at solving the root cause of PF in many cases.

## ***Plantar Fasciitis: Healing Up Your Heel Pain (by Dr. Steve Gangemi)***

The two muscles I find to be most important in PF are the tibialis posterior and the soleus.

The tibialis posterior is significantly involved in proper foot pronation and ankle supination. Yes, your foot needs to “roll inwards,” or pronate during your gait cycle, especially when you run. If you have a fatigued tibialis posterior muscle you might lean towards the outside of your foot when you’re standing for a bit.

The soleus eventually makes up that one tendon that everyone has heard of, the Achilles tendon. If your soleus isn’t functioning well you can get anything from shin splints, [Achilles tendonitis](#), heel spurs, Morton’s neuroma, and plantar fasciitis. If your soleus is more of the problem you might feel more pain pushing off (plantar flexion of the foot), walking tippy-toes, and climbing stairs.

There are countless reasons for PF and no, it’s not a “runner’s problem” or an “overweight problem” or a “high arch” or “fallen arch” disorder. PF is essentially from one thing that results in many health problems from pain to many diseases – stress.

Of course, saying something is from too much stress is sort of a cop-out because although not necessarily incorrect, it is rather vague. But realize that your feet are a great reflection of stress and in the case of PF, your feet are likely telling you that you are not handling your stress very well.

The tibialis posterior and soleus muscles are two muscles that are closely clinically related to respond to excess stress. The muscles will become inhibited (fatigue to some degree), resulting in perhaps a foot ailment (PF), or maybe a gait imbalance (and therefore sudden back or hip pain).

So if you’re too stressed out, whether from too much training (running, walking, lifting, swimming), too little training (sitting, sleeping, not moving), a poor diet (excess sugars, caffeine, refined inflammatory oils), emotional stress – or whatever the case may be – you just might end up with PF.

Therefore, the way to really address the cause of the problem is to address that stress (or stressors) to help heal your PF, regain your health, and hopefully prevent your problem from returning.

Orthotics will only, at best, temporarily “improve” your pain as your foot dysfunction only becomes more of an issue as your gait mechanics are further distorted and you “just somehow” have another injury in a few months or years later. Supportive shoes will do just the same – they support poor function (dysfunction), poor mechanics, and poor foot health.

However, if your foot is just killing you, even to just stand on, some cushion is probably a good idea so you’re not in pain as you move through your day as pain is not only going to

increase your stress level, but it will most likely cause more issues as you alter your gait to move away from the pain.

So cushion a little, but don't "lift" too much.

If your soleus is the reason for your PF then you'll feel better by shortening the Achilles tendon and that can be accomplished with a bit of a heel lift – 2-4 mm at most – not 1-2 inches, and just until you're out of distress. You might consider equalizing the other side too, even if asymptomatic. Let's not create new foot problems.

Preventing injuries involves integration of the health of your entire body, not just one part. So that's back to stress – eating well, sleeping well, training well, etc.

To help prevent PF and other foot problems you've got to of course look towards the feet to some degree too. Strong, supple, healthy feet! The easiest way to begin to improve foot health is to be barefoot as much as you comfortably and safely can. No, don't go running barefoot if you've been wearing shoes all day long, but start by moving around barefoot in your house, little by little.

Here's a video where we talk about these muscles associated with plantar fasciitis, why people get this type of foot pain, and natural treatments for plantar fasciitis.

[Click here to watch the video.](#)



Plantar fasciitis occurs most often in the heel, but also in the arch, ball, and really anywhere in the bottom of the foot. Do some self massage to relieve muscle tension around the lower leg.

The tibialis posterior (next photo) is the most central of all the leg muscles and is located in the deep posterior compartment of the leg. It is the key stabilizing muscle of the lower leg.



In the next photo you can see where to push up and into the tibia region.



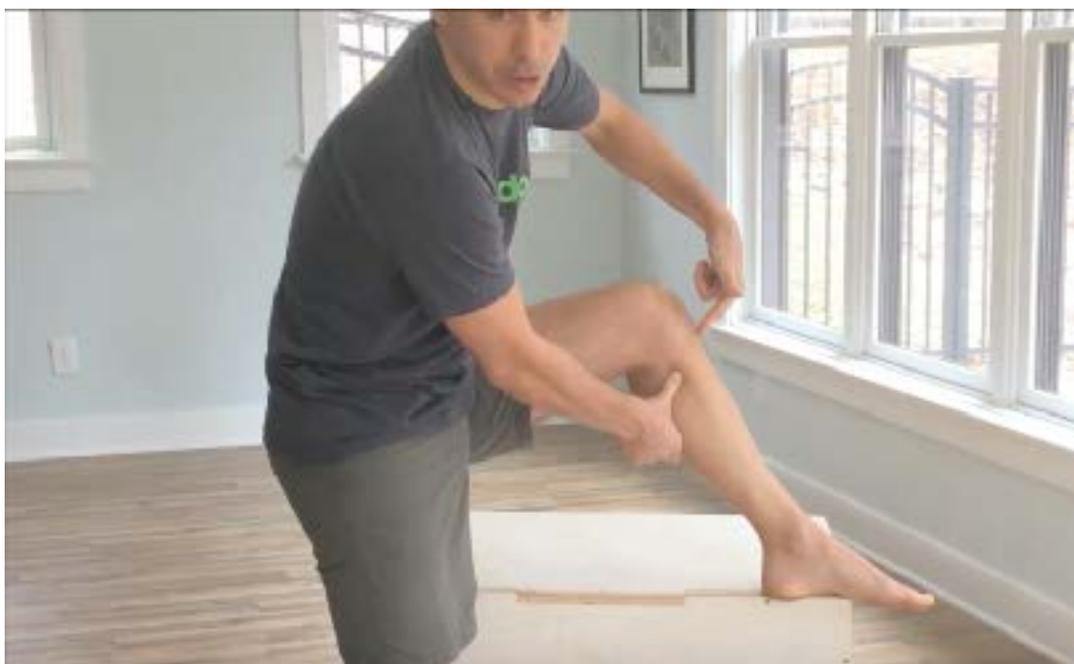
Keep the muscle relaxed and look for trigger points, as in this photo:



On the top, try to get underneath toward your knee where the tibialis posterior originates, as in the next photo:



Push up toward your knee, as in this image:



On the back side, look behind your fibula bone – the tibialis attaches there as well. See the next photo.



Look for a tender spot behind the fibula:



## ***Can You Cure Plantar Fasciitis with Barefoot Running?***

A new study by Michael Rathleff and his colleagues offer a new approach for treating plantar fasciitis: strength training. More specifically working on foot and calf strength. [Click here to read about the research.](#)

I can't say I'm surprised by this. It's often the case that gaining strength cures many movement-related problems. But what's most interesting to me is that this research suggests why many barefoot runners report an elimination of plantar fasciitis. Specifically, when you look at the report about the research and read the recommendations for the type of strength training to do, you'll see that the movements are very similar to what you do when you run with a forefoot or midfoot landing.

Running this way "pre-loads" your plantar fascia, positioning your foot in a strong position when it contacts the ground, rather than being in the pre-stretched and weak position that you're in when you heel strike, especially in a highly padded shoe.

Here's an exercise you can do. Just follow along with the photos:



## ***When to See a Podiatrist or Other Medical Professional (by Dr Emily Splichal)***

So you've tried the above conservative treatment options and have seen no improvement. Your concern is starting to rise and you are curious when it is time to see the Podiatrist.

When I see a patient with plantar heel pain my first questions are always:

- **How long have you had the pain?** If you have had the pain for over 6 months, it is now considered chronic and may not respond to conservative treatment.
  - o If you have had plantar heel pain for less than 3 months, this is the most responsive plantar fasciitis and should respond to consistent (daily) treatment of myofascial release, icing or anti-inflammatories, and a decrease in impact activities.
  
- **Have you been doing treatment every single day and reduced impact activities?** If you do not reduce impact forces to the plantar fascia, you will essentially be taking one step forward and half a step backwards in your recovery. Consistency is the most important aspect of recovery.
  - o If you have not done a 2-week daily routine of the following, I would start here:
    - 10 minutes foot release followed by 5 minutes of calf release
    - 15 minutes icing the bottom of the foot
    - Elastic arch strap or kinesiology taping plantar foot
    - Avoid flat footwear ONLY for this period
    - No excessive impact included prolonged walking
  
- **Have you had any imaging?** If you have had plantar heel pain for > 3 months or have a history of plantar fasciitis in the past then I suggest getting an ultrasound of the foot. An ultrasound can determine the thickness of the plantar fascia, which suggests degeneration and weakening of the tissue.
  - o If you have had plantar heel pain for over 6 months and have been doing conservative treatment including daily foot recovery and are not getting any improvement, then I suggest getting an MRI. An MRI will not only confirm thickness but it will also rule out differential diagnosis such as nerve entrapment, plantar fibroma, plantar fascia tear or calcaneal stress fracture.

Based on the above questions and answers this will better guide you and your Podiatrist to appropriately treat your heel pain. Now, the good news is that 90% of plantar fasciitis or heel pain responds to conservative treatment. This means that at the first sign of pain in the heel it is best advised to limit activity, ice and begin releasing the bottom of the foot and the calves.

In medicine, prevention is the smartest approach – and foot health is no different.

## Getting “Proper Footwear”

Throughout this book, the contributing doctors commented that “proper” footwear could be helpful and, more, the wrong footwear could worsen or even cause your PF.

The qualities they recommend for a shoe include:

- Flexible soles that let your feet move naturally
- Thin soles that let your feet feel the ground
- Non-elevated heels
- Light weight
- Wide toe boxes that let your toes splay naturally

They’ve mentioned Xero Shoes because that product meets all those characteristics.

Xero Shoes offers a collection of casual and performance sandals and shoes that are built with a “foot-first design” and Natural Movement philosophy.

- Natural Fit — wide toe boxes let your toes spread and relax. A non-elevated (zero-drop) heel for proper posture.
- Natural Motion — super flexible to let your feet bend and move naturally. Low-to-to-ground for balance and agility.
- Natural Feel — the patented FeelTrue® soles give you just-right protection while still giving the ground feedback your brain needs for efficient, natural movement.

Plus the soles are backed with a 5,000 mile warranty.

Research from Harvard’s Irene Davis and BYU’s Sarah Ridge shows that merely walking in minimalist footwear improves intrinsic foot muscle strength. [Read more here...](#)

When you switch to Xero Shoes, you’ll want to take your time getting used to them. Maybe start wearing them for 30-60 minutes/day for the first week, and then add time each week.

It’s like going to the gym: you don’t make your first workout 9 hours long. You do a short workout with light weights, wait until any soreness goes away, and build up the weight and reps you do over time.

Here’s a story from the [Xero Shoes](#) website:



Like your body, our SOL F is the foundation of everything we do. Letting your foot move naturally plus giving you just right protection, support, and comfort... and backed by our 5,000 mile sole warranty!

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## “Can you run in those things?”

Some people like to argue for their limitations.

They look at [Xero Shoes](#) and proclaim, with gusto, “I can’t wear those because \_\_\_\_.”

Then they fill in the blank with:

- I have plantar fasciitis
- I have bad knees
- I have flat feet
- I have high arches
- My credit score is below 700

Okay, they don’t use the last one, but in my mind they may as well have, because it’s just as relevant.

Then, if I start to explain why being barefoot may help them, they’ll be stunned.

“You can really run in those things?”

“Why yes,” I say. “I’m a nationally ranked sprinter and our Customer Service Manager, Bill, runs 100+ miles/week in his Xero Shoes.”

“Really?”

“Yup.”

But perhaps just sharing this story, from Jean Bird (originally posted on our Facebook page) would be a better way to respond:

“I am a walker, not a runner... but still, it applies. I have been suffering with Plantar Fasciitis for a few months now and have felt lethargic and unwilling to do any sort of exercise while on my feet (biking has been ok, and well, there are other sorts of exercise that don’t require that you are on your feet), so I have gained some weight. All this made me less happy, of course. So, I decided it was time to do something about the pain. I was told to get insoles for p.f. and take IB several times a day for pain/inflammation, etc... just like everyone else is told. When this did not show any signs of improvement over the course of a few weeks, I decided to do some research – – and boy, did I learn some things about my feet!

Needless to say, I got my Xeros on Tuesday, and have been wearing them ever since – – well, except in bed, I suppose.

Yes, indeed, there is a “learning curve” and I feel like I am learning how to walk all over again. On the first day, I felt like I was walking with swim fins on – imagine that picture – – LOL! On day two, I learned a bit more and was walking a little better. On day three, I could “feel the burn” of the muscles I had long ago forgotten about (or perhaps never really knew!), but it was/is a GOOD, INVIGORATING feeling. I know I must be starting to learn to walk “right”. Oh, and... Steven is absolutely right on this one... my feet surely tell me if I my stride or placement of my feet is wrong, by giving me jolts of pain or discomfort.

So, here’s to day four! The muscle aches in my legs/feet are abating and I am feeling so good!! OH, and I almost forgot! The plantar fasciitis...? Well, let’s just say that the pain in my right foot is simply gone and the pain in the left is almost unnoticeable (to the point that I almost forgot to mention it!). I think I am ready to burn off some of these extra pounds now!

THANK YOU to Steven, Lena, and the whole Xero crew for my Xeros – I love them! And I think I will be ordering more for my husband and two daughters, too!”

No, thank YOU, Jean!

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Find out more about Xero Shoes at [www.xeroshoes.com](http://www.xeroshoes.com)

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## ***Wear ANY Shoe You Like With Naboso Insoles!***

Imagine being able to wear any shoe you'd like while keeping your feet strong and connected to the sensory stimulation of ground beneath you. Imagine being able to control ground reaction forces with the accuracy of barefoot movement, but inside your cushioned footwear.

One doesn't have to imagine too hard because there's a company that's helping to make the above a reality. Enter Naboso Technology™, the first and only textured insole that is designed to stimulate the nerves in the bottom of the feet.

For the past ten years, textured insole research has demonstrated the positive impact these sensory stimulating insoles can have on posture, balance, joint position sense, perception of impact forces and foot strength.

The unique design of the Naboso™ Proprioceptive Insoles is based on texture research and surface science. During dynamic movement, the stimulation of the skin on the plantar foot leads to the contraction of the intrinsic or small muscles of the feet.

This stimulation:muscle contraction relationship is one of the most foundational concepts to optimal foot health. If we take away foot stimulation, as in the case of cushioned shoes, the intrinsic foot muscles subsequently weaken and atrophy.

This is specifically of importance for those who are suffering from plantar fasciitis or arch pain. One of the biggest contributors to plantar fasciitis is weakened foot muscles and a disconnect from the sensory stimulation of dynamic movement.

Naboso Technology™ is on a mission to keep feet strong, regardless of footwear, by bringing the sensory stimulation into the shoe. Users of Naboso™ Insoles have associated decreased foot fatigue, softer foot strike when walking and a reduction in plantar fascial symptoms.

[Click here to learn more about Naboso Technology.](#)

## ***Additional Resources***

If you're looking for additional help and additional ideas for curing plantar fasciitis naturally, here are some resources:

- [Plantar Fasciitis Relief in 7 Days exercise program](#)
- [Plantar Fasciitis System – Healthy pain-free feet](#)
- [Barefoot Science insoles](#)