

### I'm Dr. Angela The Plantar Fasciitis Doc



Hi, I'm Dr. Angela Walk. I am a sports chiropractic physician in Nashville, Tennessee. I specialize in foot and gait analysis and I am in my 25th year of private practice.

My goal for writing this guide is to help as many people as I can who suffer from plantar fasciitis, and arm you with the tools you need to effectively treat plantar fasciitis at home.

Are the first steps in the morning excruciating? Are you confused by everything you read online? Have you followed your doctors advice, but still have pain? Are you tired of buying more and more shoes? Have you tried EVERYTHING and feel hopeless?

You are in the right place!

### Introduction



I have worked with thousands of patients all over the world with severe plantar fasciitis. I have been testing and perfecting this protocol for over a decade.

Most of the information out there regarding plantar fasciitis is incorrect. This will have you wasting weeks, months, and even years on outdated tactics and misguided information that only give you symptom relief.

# Orthotics, night splints, rolling your foot on a frozen water bottle, endless calf stretches, cortisone shots, and thick, cushiony shoes with built-in arch support are some of the biggest mistakes people make with plantar fasciitis.

All of these methods are short-term band-aids and do not produce lasting results. You may be pulling your hair out trying to sort through all the conflicting information.

### I'm here to make this easy for you. I am ready to hold your hand and walk you through how to resolve this debilitating condition.

I'm obsessed with helping people return to the activities they love and enjoy life again. It's my purpose. It's my whole life's work wrapped up in one program and I'd love to help you in any way I can.

This program offers a new type of revolutionary technology that can be implemented with a few very specific protocols and easy lifestyle changes.

What if you could start each day pain free? What would that mean to you? Stick around and see what a difference these methods can make for you.



I wanted to share with you how this program was developed. About 15 years ago, one of my patients was training for our local Music City Marathon in Nashville and developed plantar fasciitis.

She had been to 2 other practitioners prior to her visit with me. They fitted her for orthotics, gave her a cortisone shot in the heel (ouch), recommended she ice her foot, and stretch her calf muscles 3 times a day. None of these methods made any difference for her.

When she came to my office, I began treating her with the traditional protocols that had worked for most of my patients in the past. However, Lauren's condition wasn't improving with these methods, and it only seemed to get worse.

### This forced me to dig deeper into disorders of the foot and lower extremity. I discovered some new information that changed what I knew about how to treat plantar fasciitis effectively.

I learned that plantar fasciitis was more of a degenerative condition and less of an inflammatory condition, and rolling her foot on a frozen water bottle was prolonging recovery.

I learned that long-term use of conventional footwear with narrow toe boxes begins to alter the function of our feet and weakens our foot muscles overtime.

I also stumble on new research that listed the 3 primary causes of plantar fasciitis as weak foot muscles, inflexible calf muscles, and weak peroneal leg muscles. Upon further examination, Lauren had all 3 of these findings.



We altered our treatment protocols and Lauren's condition began to improve immediately.

#### Here's what we stopped doing:

I stopped telling her to ice her foot

I told her to ditch her orthotics (they weaken your foot muscles)

I stopped telling her to stretch her calf muscles with static stretching (holding a stretch for longer than 30 seconds)

#### Here's the protocol we initiated:

We transitioned her to running shoes with a wide toe box (game changer) We included targeted strengthening exercises and progressive loading of her calf & peroneal muscles We implemented Active Stretching vs. Static Stretching to increase ROM in her calf & achilles We showed her ways to strengthen her feet (barefoot walking)

We were thrilled with her results. She shared her experience with her running group and out of those 100-150 runners, 4 or 5 had plantar fasciitis.

My new treatment protocol resolved their foot issues as well. I began getting more and more referrals for foot, and lower extremity conditions and it became a specialty for me.

This program offers a new type of revolutionary technology that can be implemented with 6 very specific steps and easy lifestyle changes. My patients can do it, and so can YOU!

### What Is The Plantar Fascia?



Before we get into each step, I wanted to review the anatomy of the foot and define a few important terms.

#### What is the Plantar Fascia?

The plantar fascia is a long, thick fibrous band of tissue located along the bottom of the foot.

It originates at the inside of the heel bone and attaches to the forefoot at the base of the toes.

It is a dynamic stabilizer and helps to provide stability to the arch. It is designed to take the strain of resisting the body's weight in every movement.

However, when there is too much pressure or stress on the plantar fascia, the tissues can become strained.

This turns into a severe ache in the heel and arch better known as plantar fasciitis.

### What Is Plantar Fasciitis?

### What is Plantar Fasciitis?



Plantar fasciitis is a painful area along the bottom of the feet mostly along the inside portion of the heel. Most people feel pain that is worse with your first steps after getting out of bed in the morning.

Plantar fasciitis regularly appears when people wear footwear that narrow at the toe, overexert themselves during certain activities, stand excessively, or have poor foot mechanics.

### **Common Characteristics of Plantar Fasciitis**



### **Characteristics of Plantar Fasciitis**

- Pain at the bottom of foot near the inside portion of the heel
- More severe pain in the morning with your first steps out of bed and lessens as you continue to walk
- Pain that is worse with standing after a long period of rest as in a long car ride or sitting for a prolonged period at your desk
- Pain or limited movement with extension of the big toe (pulling your big toe toward your knee)
- Pinpoint heel pain after increased activity

### **Common Causes of Plantar Fasciitis**

Common Causes of Plantar Fasciitis

### **Causes of Plantar Fasciitis**

✓ The most common cause of plantar fasciitis is wearing footwear that narrows at the toe or has an elevated heel. Often, the shoes you think are helping your PF (Hokas, Brooks, Asics, New Balance) are actually contributing to your problem.

✓ Increased physical activity that puts too much stress on the foot and heel such as running or standing for prolonged periods of time. Excessive strain of the fascia leads to adhesions and scar tissue formation.

✓ Tense/overly tight calf muscles and limited ankle dorsiflexion. If your calf muscles are too tight, this limits normal ankle mobility. This alters our gait, and puts perpetual stress on the plantar fascia.

✓ Weakness of the intrinsic muscles of the feet. The 2 most common causes of weak foot muscles is wearing narrow toe shoes that hinder normal foot function, and wearing foot orthotics.

✓ Abnormal foot mechanics or altered gait patterns can adversely affect the heels. Changes in gait (the way you walk) can lead to added stresses on the plantar fascia causing micro-tearing and pain.

✓ Weakness of the peroneal muscles of the lower leg. The peroneals are important for arch stability and function.

### **The Truth About Plantar Fasciitis**



This may surprise many people, but if you have had plantar fasciitis for longer than 2-3 weeks, inflammation is not your problem.

#### This is the number one myth regarding plantar fasciitis

Within the last decade, studies have observed microscopic anatomical changes indicating that plantar fasciitis is due to a non-inflammatory structural breakdown of the plantar fascia rather than an inflammatory process.

However, the most common treatment applications are applying ice, getting a cortisone shot, taking antiinflammatory meds, and resting and bracing your foot.

Each of these methods are short-term band-aids and essentially useless in terms of resolving plantar fasciitis.

Furthermore, they are not addressing the underlying cause, and could be sabotaging your recovery.

### Plantar Fasciosis vs. Plantar Fasciitis

### Plantar Fasciosis vs. Plantar Fasciitis

Plantar Fasciosis is the more appropriate name because PF is due to a break down or degeneration of the collagen vs. inflammation of the fascia.

Since inflammation plays either a lesser or no role in this phase, a review proposed it be renamed plantar fasciosis in light of these newer findings. Since most people are more familiar with the term plantar fasciitis, I tend to keep things simple and continue to refer to the condition as plantar fasciitis.

Discovering this information is changed how I treated Plantar Fasciitis forever. This is also why most rehab efforts fail. They focus on treating the inflammatory component, and not the underlying cause.

### **6 Steps To Recovery**

My Plantar Fasciitis Recovery Guide includes 6 specific steps to resolve plantar fasciitis at home.



### **Step 1: Transition To Functional Footwear**



### The first step in my plantar fasciitis home recovery program is to transition to functional footwear.

Making footwear modifications is critical for your recovery. Wearing shoes with damaging design features is the #1 cause of plantar fasciitis.

Functional footwear supports the natural shape of our feet, and allows our feet to function as they should. Most conventional footwear prevents proper movement of our feet and leads to injury.

#### **Design Features & Shoe Terminology:**

There are a few design features and shoe terms that you should know to help you better understand what makes a healthy shoe.

#### Widest at the toe:

A healthy shoe should have a wide toe box that supports the natural shape of our feet and toes. The toe box should be wide enough to allow for normal toe splay.

#### **Avoid A Tapered or Narrow Toe Box**

Are you cramming your feet into shoes that taper at the toe? Sadly, most footwear narrows at the toe creating tremendous stress on our feet.

Our feet and toes should spread and splay as we walk and run. Narrow toe boxes rob us of normal foot function and weakens our foot and arch muscles.

This leads to many foot and lower leg disorder including bunions, hammer toes, neuromas, achilles tendonosis, posterior tibial disorder, and knee pain.

To function optimally, the foot should splay wide at the forefoot to distribute the load of our body. If this action is interrupted, our feet begin to conform and deform to the shape of our shoes.

### Zero Drop:

Drop refers to the height difference between the heel and the forefoot. Zero drop is a shoe that is flat from heel to toe with no elevation of the heel.

#### **Avoid Elevation Of The Heel**

Elevation of the heel in footwear is one of the most damaging characteristics. Sadly, it's not just high heels and women's shoes. It is present in casual shoes, men's shoes, and even running shoes.

The foot is placed in a downward angle and places perpetual tension and stress on the forefoot.

Heel elevation also causes a chronic shortening of the heel cord (the Achilles tendon and calf muscles). Raising the heel above the ball of the foot can lead to hammer toes, neuromas, and ankle instability, and of course, plantar fasciitis.

A completely flat heel distributes body weight evenly across the foot.

#### **Stack Height:**

This refers to the total amount of material or cushioning on the sole of the shoe. I am not opposed to a higher stack height in the earlier phase of plantar fasciitis, but encourage less cushioning as your feet become stronger.

#### **Avoid Heavily Cushioned Shoes**

The more cushion there is below ones foot, the more proprioception is hindered leading to abnormal biomechanics. Proprioception refers to the ability of the foot to sense what it comes in contact with, and then signal the brain which fires the nerves to contract the appropriate muscles to position the foot and leg during locomotion.

When this pathway is disrupted, we see a disruption of shock absorption capacity which leads to an increased rate of injury.

In the early phase of plantar fasciitis where you are experiencing more symptoms, I typically recommend a moderate amount of stack height, not to exceed 30mm. As you progress in my program, I recommend a full transition to footwear with little to no stack height

### **Toe Spring:**

Toe spring is an upward angle of the toe of the shoe and should be avoided. A flat sole is ideal for proper foot function.

#### Minimalist Shoe/Barefoot Shoe:

These shoes are intended to closely approximate barefoot running or walking. They provide "minimal" interference with the natural movement of the foot. They have minimal stack height, have a highly flexible sole, and are zero drop.

#### **Transitional Shoe**:

A transitional shoe is a shoe that has all of the characteristics of a barefoot shoe such as zero drop and a wide toe box, but has a thicker sole/higher stack height. This shoe is the best option for someone new to my program, and who is accustomed to heavily cushioned shoes.

I often recommend a transitional shoe first before you transition completely to a barefoot shoe. As you progress in my program, I encourage a transition to lower stack height or minimalist footwear.

### Dr. Angela's Approved Shoe List Find The Best Shoes For PF Here

### **Anti-Pronation Technology**

Another important consideration regarding footwear is the presence of anti-pronation technology, builtin arch support, or foot orthotics. I will discuss orthotics later in the guide, but I wanted to mention in this step how damaging these features can be.

Our feet are inherently strong and do not need extra arch support or orthotics.

It seems that the less "technology" a shoe has, the better it is for the foot. The more a shoe externally "supports" the feet, the less internal strength the the feet develop.

The feet actually become dependent on "supportive" shoes with extra stabilizing features and orthotics because they've become so weakened and deformed by the shape and technology built into the footwear.

I have compiled a comprehensive list of the functional footwear that I approve and recommend to support plantar fasciitis. You can find that below.

#### Dr. Angela's Approved Shoe List



### What Is Micro-dosing?

#### How To Transition To Functional Footwear

Transitioning to functional footwear should include a slow, gradual approach. Most of you have been wearing footwear with narrow toe boxes and elevation of the heel.

Our feet and lower legs can become sore and tight from activating weakened foot muscles, and stretching short calf muscles. Our gait and foot position is also changed (for the good), and our body will need to adjust and adapt.

### What is Micro-Dosing?

The best way to transition to functional footwear or barefoot shoes is with micro-dosing. Micro-dosing is essentially taking small steps towards adapting to footwear with less stack height and zero drop.

### Start slowly and wear your new shoes for only 15-20 minutes at a time. Slowly increase wear-time each week.

Our feet will accept this new concept more readily if you have been focusing on strengthening your feet and calf muscles with my recommended exercises.

#### **Avoid Doing Too Much Too Soon**

How do you know if you have done too much too soon? Your body will tell you! Your PF symptoms may increase, your foot and legs may begin to cramp, you may experience soreness in your hips and lower back. Decrease your wear-time until you experience relief of your symptoms.

### Here's What You Will Need:

Before we move forward with the next step, I wanted to share with you the tools you will need to perform the recommended stretches & exercises in the other steps of my program.

In Step 2, you will need a towel (any type of hand towel or bath towel will do)

In Step 3, you will need a ball to place between your heels (tennis ball or a lacrosse ball), and a stair step or a foot rocker

In Step 5, you will need a large spoon or a fascial release tool

In Step 6, you will need a pair of toe spacers.



As you can see in the image above, I offer alternative resources of similar objects you can find at home.

However, to make it easy for you, I created a comprehensive bundle of therapy tools to aid in your recovery.

### Take a look at my Plantar Fasciitis Home Therapy Kit that has ALL the tools you need to resolve your PF at home.

### Here's What's In The Kit



### Here's What's Included In The Kit:

**1. Mobility Ball:** Use the mobility ball to release areas of restriction in the soft tissues in the foot and lower leg. Effective for rolling out adhesions and managing morning foot and heel tension.

**2. Foot Rocker/Calf Stretcher:** A uniquely designed deep stretching tool to stretch the hamstrings, calf muscles, Achilles tendon, and plantar fascia.

**3. Fascial Release Tool**: a stainless steel soft tissue massage tool designed to assist in effective release of fascial adhesions and scar tissue from overuse injuries.

**4. Toe Spacers:** Straighten, stretch, & realign your toes. Gently realigning and stretching your toes to help combat the damaging effects of narrow shoes. Also help provide comfort from plantar fasciitis, bunions, hammer toes, Achilles tendonitis, and overlapping toes.

**5. Plantar Fasc-X Pain Relief Blend:** A combination of essential oils specifically chosen to help ease discomfort and calm muscle & fascia tension.

### Order Your Plantar Fasciitis Home Therapy Kit Here

### **Step 2: Strengthen Your Foot Core**



#### Does your foot have a core?

Yep! Weakness of the core muscles of the foot is one of the most common causes of plantar fasciitis, Achilles tendinosis, and other lower extremity disorders.

The small muscles of your arch are called the intrinsic muscles of your feet. I like to call it our foot core.

It turns out that most everybody has a weak foot core, and it's almost entirely due to wearing improper footwear that narrows or tapers at the toe.

### In fact, 90% of shoes have a narrow toe box that compress and restrict your toes and do not allow your feet to function normally. This sets you up for plantar fasciitis.

Our feet have 26 bones, 33 joints and over 100 muscles, tendons and ligaments.

The human foot is amazing and complex. When our feet and toes cannot spread and splay as we walk and run, this incredible group of muscles, joints, and tendons can no longer work to support our arches and gait.

### **How To Strengthen Your Foot Core**

The intrinsic muscles of your feet are located entirely within the foot and are responsible for the finer movements of your foot, and for helping support your foot's arches.

If you've got dysfunctional or weak intrinsic foot muscles, you will experience imbalances in the foot altered gait mechanics.

Your foot also starts to rely too much on surrounding musculature – including the plantar fascia and over time, the plantar fascia will begin to react to the additional stress.

#### How To Strengthen Intrinsic Foot Muscles:



This step involves performing (3) exercises

(1) Short Foot Exercise(2) Towel Grabs(3) Toe Spreading

Each of these exercises should be performed one time per day, and as your feet get stronger, perform two times per day!

### <u>Need Video Demos of The Exercises & Stretches?</u> <u>Take a look at my 6-Step Video Series (\$49)</u>

#### **1. Short Foot Exercises**



The goal of the short foot exercise is to "shorten" the foot by contracting the intrinsic muscles to raise the arch.

First, make sure you are barefoot and standing on both feet. Evenly distribute your body weight over both feet. Then, spread your toes as far as you can. Make sure all of your toes are in touch with the ground.

Without scrunching your toes, try to shorten your foot by bringing the ball of your foot toward your heel, doming the arches in your feet.

If performed correctly, you should be able to feel the strong contraction of the muscles underneath your foot.

If it feels like it's going to cramp? THAT'S a good sign. That means that You are recruiting the right muscles, and doing the exercise correctly If you do begin to cramp, pause for a moment, and then resume. You can focus on one foot at a time or do both at once.

Contract your arch, shorten your foot core, and hold the short foot exercise for 2 seconds and repeat this 10 times.

Perform the short foot exercise one time per day, and as your feet get stronger, perform twice per day.

#### 2. Towel Grabs



With your toes on a towel, flex and scrunch your toes, pulling the towel toward you. This can also be adapted to picking up golf balls, or anything that causes toe flexion. Perform 10 repetitions.

To create greater flexibility and strengthen your calf muscle group and peroneal muscles, I recommend (3) exercises. Perform these 3 exercises one time per day.

- **1**. Calf Raises With A Ball Between Your Heels
- 2. Eccentric Loading Of Your Calf & Achilles
- 3. Active Stretching Of Your Calf Muscle Group

Most people aren't aware that strengthening a muscle also increases flexibility. So, this step includes improving strength and mobility with targeting exercises and active stretches.



#### 1. Calf raises with a ball between your heels

Using a ball isolates the peroneal muscles and tibialis posterior muscles of the lower leg. These muscle are incredibly important for arch stability and proper foot function.

#### Weakness or dysfunction of theses muscles can lead to flat feet and weak arch control.

Perform a calf raise on the floor or on a stair step. To increase muscle development, you can perform the calf raises on a slant board.

Squeeze the ball throughout the exercise, and perform 3 sets of 15 repetitions.

#### <u>Need Video Demos of The Exercises & Stretches?</u> <u>Take a look at my 6-Step Video Series \$49</u>

#### 2. Toe Spreading



Toe spreading involves spreading your toes away from each other as far as you can. It is not hard. It just takes practice for some. This strengthens the smaller muscles that control the toes and foot.

#### Spread your toes as far as you can and hold for 5 seconds. Repeat 10 times

Barefoot walking is another simple and effective way to increase the strength of your feet.

Many people have been told that barefoot walking is bad for your feet. This simply isn't true. I will explain this later in step 6.

### Step 3: Strengthen Weak Calf & Peroneal Muscles



Calf inflexibility is one of the most common causes of plantar fasciitis. Tight calves also limit normal movement of the ankle (dorsiflexion) and alters our gait to the extent that it places added tension on the plantar fascia.

When our calf muscle group is tight, it limits the normal movement of our ankles. We need proper mobility to progress through our walking and running gaits.

When this motion is restricted, it places added stress on areas of the body that were not designed to withstand such pressure such as the plantar fascia.

The (2) most common causes of calf muscle tightness is wearing footwear with an elevated heel and prolonged sitting.

1. Most conventional footwear has an elevation of the heel. Not just women's high heels, but casual shoes and even running shoes. Transition to functional footwear that has zero drop.

2. This may surprise you, but sitting too much causes our calf muscles to shorten. In our current modern day culture, sitting is the position we are in most often. Many of us sit to work, we sit to eat, we sit to drive, we sit for entertainment in front of a television.

If you have a sitting job, stand as often as you can. Consider an adjustable workstation that would allow you to shift from sitting to standing throughout the day.

### Step 3: Strengthen Weak Calf & Peroneal Muscles



According to the latest research on plantar fasciitis, peroneal weakness was shown to be one of the strongest predictor of the development of the condition.

The peroneal muscles are two muscles on the outside of the leg. They are major movers and stabilizers of your foot and ankle. They run down the lateral side of your leg behind our ankle bone and attach to your foot.

The peroneus brevis attaches on the outside of your foot. I have patients who complain of pain at this attachment site and it is often peroneal tendonitis.

The peroneal longus goes behind the ankle as well. it is the longer of the 2 and attaches on the plantar surface of the foot at the first metatarsal.

The function of these muscles is to evert the foot (moving it to the outside) and plantarflex the ankle (point the toe). The peroneus longus is especially important in PF cases as it provides support to the arches of our foot.

After I included peroneal strengthening exercises into my protocol, I noticed significant improvements in long-term outcomes of plantar fasciitis.

#### 2. Eccentric Loading Of The Calf Muscle & Achilles Tendon



Roll up a towel and placed it under your toes. This helps to increase range of motion in our toes, and especially our big toe.

Proper movement of our big toe is essential for our gait sequence and limited movement can contribute to plantar fasciitis.

Use a chair or the wall for support

- 1. With your toes on the towel, lift both heels and rise up on the balls of your feet
- 2. Lift one leg, and slowly lower your other foot and leg down
- 3. Then, alternate and lower the other foot and leg. That's one repetition

### Eccentric loading (the lowering slowly part) has been shown to provide greater strength gains to the calf muscle group and improve overall recovery.

Perform 10-15 repetitions one to 2 times per day

#### 2. Active Stretching With A Stair Step or Foot Rocker



#### Active Stretching vs. Static Stretching!

One mistake many plantar fasciitis sufferers make when stretching is doing the wrong type of stretch.

There are multiple styles of stretching that target different goals. The most common types of stretching are Static and Dynamic/Active Stretching.

#### **Static Stretching:**

When most people hear the word "stretch," they think about holding a stretching position for a prolonged period of time, most often recommended is 20-30 seconds.

The problem with static stretching is that if a muscle is stretched too far, too fast, or for too long, it elicits a protective action known as the myotatic reflex.

This causes the muscle to automatically recoil in an attempt to prevent the muscle from tearing. This occurs about three seconds into a stretch.

### **Active Stretching:**

Active Isolated Stretching (AIS) and is a type of dynamic stretch. This stretch feels more like repetitions than stretching, and incorporates movement as you stretch.

# Active Isolated Stretching is my preferred type of stretching technique for increasing elasticity in muscles and fascia, and is the most effective type for a plantar fasciitis.

AIS is stretching to your natural range of motion (hold for 2 seconds), before the negative stretch reflex kicks in, then return to the start position and repeat 10 times.

1. Steady yourself by holding onto a chair or the wall.

2. Using a foot rocker or stair step, carefully lower your heel without bending your knees, letting your toes rise naturally. This will create a stretch in your hamstring, calf muscle, and plantar fascia.

I recommend using a foot rocker as it offers a special angled platform made specifically to elongate the calf muscles.

3. Now, hold this stretched position for 2 seconds then come back to the neutral position. **Do not hold for longer than 2 seconds. This is very important.** 

Perform 10 repetitions of this exercise on each side

### **Step 4: Increase Ankle Dorsiflexion**



Limited ankle dorsiflexion has been associated with a whole host of lower extremity injuries including plantar fasciitis, Achilles tendinopathy, calf strains, shin splints, patellofemoral pain, IT band syndrome, and even ACL injuries.

Ankle dorsiflexion is the action of bringing the foot up toward the shin. When this movement is limited, it alters our gait sequence and places added stress and compensations on other parts of the body that were not designed to withstand such pressure.



We need proper motion of the ankle joint to progress through each step we take. When it is limited, our body will take the path of least resistance and find compensations.

Our arch will collapse and we will overpronate through our midfoot, which puts increased stress on the plantar fascia!

Another way to describe compensations is to say that we borrow actions from another part of our body.

### **Step 4: Increase Ankle Dorsiflexion**

This may be a little technical, but I think it's important to understand if one part of your body is not functioning normally, for example the ankle joint, we will borrow an action from another part of the body that may not be ready or capable of handling that sort of load (the plantar fascia)

So, The way this compensation plays out, is if your ankles are stuck, it causes your arch to collapse and causes overpronation in your foot which puts excessive stress on the plantar fascia.

It eventually breaks down and shows up as a repetitive strain in the form of PF.

The plantar fascia is not the only place where we find added stress with Limited ankle dorsiflexion. It has also been associated with injuries like Achilles tendinopathy, knee problems, and even lower back pain.

In my practice, when a patient complains of any combination of these symptoms, I am definitely assessing their ankle mobility.

I suggest one exercise for improving ankle dorsiflexion. Perform this exercise one time per day.

#### Kneeling ankle rocks:

Kneel in front of a wall. Shift your weight to your front foot. Attempt to touch the wall. Hold for 2 seconds and repeat 15 repetitions.



### **Step 5: Removing Fascial Adhesions**



When the load placed on the body is greater than the capacity of the body's tissues to handle that load, the result is dysfunction.

Any time muscles or fascia is overworked, a repetitive strain occurs on the fascia. These strained/overworked areas create micro-trauma. The body responds to micro-trauma by laying down small amounts of scar tissue to repair the injured tissue.

Unfortunately, over time, this scar tissue will build-up and accumulate into what are known as adhesions. As these adhesions form, they start to affect the normal function of the muscles and fascia.



In fact, they will often lead to pain, tightness, lack of flexibility, muscle weakness, compromised muscle endurance, restricted joint motion, and diminished blood flow.

Adhesions remain until they are removed. Rest, ice, stretching, and ibuprofen will not make them go away! You may get some temporary relief, but once you resume your activities, the issue will make itself known once again.

The best method to remove fascial adhesions in with a specific instrument. I have used Instrument Assisted Soft Tissue Mobilization (IASTM) in my practice for many years with great success.

I have extensive training in these techniques including Graston Technique and Gua Sha. It involves the use of a stainless steel instrument or stone to "scrape" away scar tissue adhesions.

These tools greatly assist in soft tissue mobilization and improve blood flow to the affected area and in turn, release adhesions in the muscle tissue and create healing.

I know most home rehab protocols recommend the use of a lacrosse ball, tennis ball, frozen bottle of water, or foam roller to self-massage your plantar fascia.

Those objects can be helpful, but are not as effective at removing the fascial adhesions.

#### What you will need?



I recommend using a muscle scraping tool like the one I offer in my PF home therapy kit. It has a beveled edge that is specifically designed to help you locate adhesions.

You will sense a vibration when you scrape across an adhesion. I offer this tool in my shop for a reasonable price. It can be used for other parts of the body as well including neck, shoulders, elbows and lower back.

An alternative would be to use a the handle of a large table spoon or serving spoon. It would be the closest object with similar surface and weight. Find one that has a thicker surface and handle.

### Fascial Release Using A Table Spoon



#### The tissues we are working on each session:

- 1. Gastrocnemius muscle (upper calf)
- 2. Soleus muscle (lower calf)
- 3. Achilles tendon (the heel)
- 4. Plantar Fascia (the bottom of the foot



#### How To Use the Fascial Release Tool/Table Spoon

- Start by applying an emollient such as lotion, coconut oil, or essential oils to each of the soft tissues listed above.
- Begin with applying light pressure with the massage tool or table spoon to the soft tissues and determine if they are tender, hardened, or feel restricted.
- Start with the gastrocnemius muscle. It starts pretty high with two heads of the muscle located at the knee joint. Many people have areas of tender scar tissue right in the center of this big muscle.
- Now, begin to scrape. You can scrape back & forth or in one direction.
- When you locate an area of tenderness, continue for 15-30 seconds, then move to the next tender area.
- Then move on to the soleus muscle closer to the heels and more towards the side.
- Now find the Achilles tendon. Most people at risk of PF have an area of tender scar tissue right above the thick tendon. Don't forget the areas around the heel.
- Now, use the tool to scrape every inch of the heel and bottom of the foot, especially the area that tends to hurt.
- Once you feel the muscles and tendons you are working getting warmer and pinkish that is an indication that you have increased blood flow and circulation. Don't aim to resolve all the scar tissues in one session.

At the end of each session, your calf, and foot should feel lighter, looser, and warm from the increased blood flow. You may also see redness or red dots.

This is evidence of scar tissue that has been released or broken up. It's a good sign, however, wait until the redness has resolved to start another session.

#### How often to repeat the treatment?

If everything went well the first time. You can do this every 2-3 days. That would be around 2-3 times per week for 4-6 weeks until the PF pain goes away.

It's very important to NOT overtreat the area. You must allow time for tissues to heal before you scrape again! Expect to feel sore in the treatment area in the following days. It almost feels like a bruise.

Again, this is normal and is an indication that your treatment was a success.

#### **CAUTION! IMPORTANT TREATMENT RECOMMENDATIONS**

1. It's important to use only light to moderate pressure. Deeper pressure isn't anymore effective and can lead to deeper soreness and will prolong the time before you can scrape again.

2. Expect the tissues that you have treated to be sore and tender to touch for a couple of days following treatment. Wait until the soreness resolves to treat again.

3. You may see redness, red bumps, or mild bruising. This is normal and expected, however, you must allow the tissues to heal before treating again. If you continue to see bruising, your pressure is too deep.



### **Step 6: Barefoot Walking With Toe Spacers**

Have you been told to NEVER walk barefoot if you have plantar fasciitis or any other type of foot condition?

Barefoot walking is actually one of the healthiest things you can do for your feet, but sadly, most of you are told to avoid any barefoot contact with the ground and wear shoes with heavy cushioning, built in arch support and orthotics from the moment you awaken until you take your last step in the evening.

Unfortunately, all that "support" in your shoes weakens your feet over time, and although it may be providing comfort, it is not helping your plantar fasciitis.

Barefoot walking naturally strengthens the intrinsic muscles of your feet (which I like to call your foot core), and without a strong foot core, you will not resolve your PF

Barefoot walking also allows more freedom and movement of our big toe, and proper alignment is critical for correcting PF.

The benefits go well beyond mechanical. Conventional footwear separates us from the healing energy of the ground.

How would our feet develop if we never wore shoes? Actually, our feet would function more normally, be shaped normally, and be strong and flexible. Barefoot societies (Africa, Asia, Central America) have healthy feet with straight toes and strong arches.

They also have little to no foot issues. What does this tell us? Our conventional footwear with narrow toe boxes and elevated heels are destroying our feet.

## Adding toe spacers while walking barefoot further amplifies the corrective benefits.

Toe Spacers are a tool that promotes healthy toe splay by separating the toes and helping to restore the natural position and function of the feet.

I prescribe toe spacers to all of my patients with plantar fasciitis, bunions, hammer toes, and even Achilles tendonitis.

### **Step 6: Barefoot Walking With Toe Spacers**

They also help broaden the base of the foot, help reposition your big toe, and increase blood flow.

If you wear toe spacers during physical activity such as yoga, running, weight training, and barefoot walking, you can further enhance the corrective benefits.

- ~ Start with walking barefoot with toes pacers for 10 minutes a day during passive activity (reading, watching TV)
- ~ Progress to longer periods of time as your feet adjust
- ~ Set a goal to practice barefoot walking with toe spacers 2 hours per day
- ~ The next step is to wear them inside your wide toe box shoes and with activity



### **Do I Need Orthotics To Fix My Plantar Fasciitis?**



This is one of the most common questions I hear from my patients.

### Foot orthotics are one of the biggest roadblocks in healing plantar fasciitis. Orthotics weaken your feet overtime. Our feet are inherently strong and do not need this type of support long-term.

A practitioner would never put you in a cast on a broken arm and recommend you wear it for the rest of your life. Once the tissues and bone have healed, you remove the cast and begin to strengthen the muscles that have been immobilized with bracing.

However, with foot orthotics, there is a neglect to implement an expiration date. Using an external device like an orthotic is a temporary solution and doesn't address the underlying cause.

This also applies to shoes that have built-in arch supports or anti-pronation technology. Shoes that have motion-control and "corrective" technologies will actually weaken a foot and can lead to exactly the thing that you are trying to correct.

The newest wave of understanding is the importance of foot strength and the connection between the foot and the rest of the body. And implementing strengthening and mobility protocols. Until you correct the deficiency and weakness in your feet, you will continue to have recurring pain.

### How Can I Help?

I hope this guide has met your expectations. It's important for me to know you got what you needed to tackle this MONSTER of a foot condition.

If you still have questions, I wanted to let you know that I offer 1-on-1 Coaching/Direct Chat if you happen to need more guidance.

#### <u>1-on-1 Coaching/Direct Chat With Dr. Angela (\$39):</u>

Have questions about your specific challenges? Need help deciding what footwear is best for your feet/arches? Need more clarity regarding your diagnosis? Is your foot hurting in other places besides the heel? Feeling stuck, and not making the progress you were expecting?

Have all your questions ready! Help is on the way!

Dr. Angela

P.S. Direct Chat = Email Correspondence. Once you make your purchase, Dr. Angela reaches out to you, and the correspondence begins.

### <u>Dr. Angela's</u> <u>Plantar Fasciitis Video Series/Online Course</u>



Need Video Demonstrations Of The Exercises?

Want To See The Fascial Release Technique To Ensure You Are Getting It Right? Would It Help To Have Printable WorkSheets Of The Daily Protocol?



### Disclaimer

Note: This content is for educational purposes only and should not be taken as medical advice.

If you or any other person has a medical concern, you should consult with your healthcare provider or seek other professional medical treatment.

Never disregard professional medical advice or delay in seeking it because of something that have read on this blog or in any linked materials.}

