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A New Foot Health Solution

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**A New
Foot Health Solution:**

**How to Help
Heel Spurs, Plantar Fasciitis,
Achilles Tendon, Flat Feet,
Shin Splints and Foot Pain**

by
Dennis Denlinger

Foreword by
Dr. Gerald B. Henson

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Chapter 1

An Overview

Do you want a new foot health solution? Do you want a solution that has your foot working the way it is made to work?

Okay, I'll tell what I know.

No school has ever taught the new foot health solution for foot pain and shin splints (lower leg pain) as taught in this book. The new knowledge and skill presented in this book was recently developed by the author.

The new foot health solution you will get in this book deals with the right way to use the foot. It was developed using basic engineering principles which have been made easy to understand. The discovery shows how and why pain can happen in the foot or lower leg when the foot is not used correctly. That pain is a warning that something could break if nothing is changed. People have relieved pain by using this solution.

This new foot health solution for foot pain and shin splints (lower leg pain) is not high tech. It is something many could possibly do pretty much on their own. Maybe you can benefit, too.

If you know what to look for you can walk down the street and see many foot

and shin splint problems. People just like you often have this problem even though their feet do not hurt at the moment. In fact, it may never hurt...or it could start to hurt just when you can least afford to have another problem.

By doing nothing about the solution to the problem now, when things are going well, an injury could occur when the foot is highly stressed.

Why learn the solution now, even if there is no pain? Not to be ridiculous, but you might look outside and see your two-year-old toddler about to toddle into a busy street. You start running. You don't just run, but you *RUN*. Suddenly there is a new pain in your foot. That new pain slows you down. It could be the stuff of nightmares. Okay, you don't have children and never will. Most likely there is something else equally important to you.

Whether your foot or lower leg hurts at this moment or not, now is the time for you to learn the new foot health solution for yourself. You never know when you might need it.

What kind of pain will the new foot health solution relieve?

Not blisters. Not cancer growths. Not broken bones. Not ingrown toe nails. Not athlete's foot. Yes: plantar fasciitis, heel spurs, heel pain, Achilles tendon and flat feet. These all have a solution in common which is taught in this book.

The new foot health solution can relieve the pain of over-stretched ligaments. Remember ligaments? Ligaments are the tough material which holds bones together at the joints. You can see a ligament next time you eat a chicken leg. As an example, it is the tough, gristly stuff holding the thigh bone to the drumstick bone.

Your ligaments do an important job. They are the backup to your muscles. When your muscles are not working, such as when you sleep, your ligaments keep your bones together at the joints. Without your ligaments you could wake up with your big toe tickling your tongue or your top rib behind your knee.

The ligaments are a backup for when your muscles are not working, or not working correctly.

Imagine your body is a machine. As with any good machine, when the backup to an important system is called into action, there are loud bells or flashing red lights to let the operator know something is wrong.

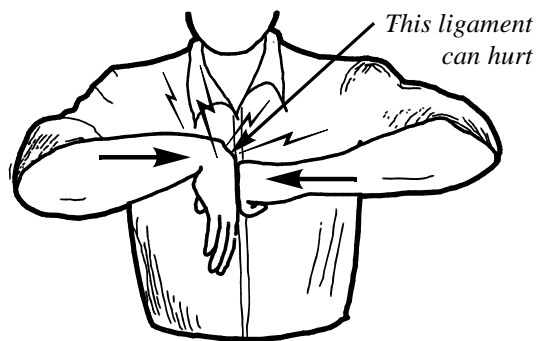
Your car has a system like this. Your car's brakes are made in two sections: the front brakes and the rear brakes. If something fails in your front brakes, your rear brakes will still stop your car safely. At the same time a red light will appear on the instrument panel and a

loud bell may ring. Perhaps in more expensive models, a sweet voice will tell you to have your brakes checked.

In your body, pain takes the place of loud bells and flashing red lights. Pain is your warning that something needs to be fixed. That is when you really need the new foot health solution.

When your muscles are not working right and ligaments in your feet or lower legs are over-stretched, they will hurt. The painful sensation is your warning that something is wrong which you need to fix.

There are other places ligaments can hurt. For instance, relaxing the arm muscles, letting the hand flop and pressing the back of the hand like in the drawing can cause pain in the wrist ligaments.



The muscles in your foot and lower leg are voluntary. That means *you* can direct them to work or not work. If you are not directing them, they may possibly work incorrectly or not work at all. If you do not know how your muscles should operate to move or shape a certain part of your foot, it may not operate correctly. This could stretch ligaments, causing pain.

The main thing about the solution to foot health is the correct use of the foot arch. When the foot is arched correctly many other pains and problems can disappear. More on this later.

Yes, just like our cars, we should have had an instruction book in the glove compartment of our bodies. It should have been there when we took delivery. I can't do anything about giving your body a glove compartment, but here is the instruction book which tells how to operate your foot arch correctly. Perhaps with it you will be able to relieve yourself of some pain now or in the future.

No, I won't bore you with the detail of every little muscle. If you have problems like that, you need more than this book. Many people to whom I have told the simple things in this book have been able to get their foot arches working correctly. Once you know how to use the main muscle and one or two other things, the other muscles usually just fall into line. I do know more and I will put it into a thorough textbook someday for those unusual special cases.

How difficult is this to do? There is no way to tell before you do it. I once told a lady who had flat feet how to operate her foot arch. She went out for a walk. An hour later she came back with a big smile on her face and her feet working correctly.

On the other hand, I had a terrible time. Once I discovered the way the foot arch works, which itself took three months, I needed three more months to strengthen the muscles. Once I got the

muscles strong enough to get rid of the pain, it took me a year to train the muscles well enough to operate automatically without my constant attention and four years until I could forget about it altogether.

Most people are somewhere in between. Many have only taken a couple weeks. Some may never get it corrected. Who knows why? Could be they are lazy. Sometimes a severe injury to the foot can make correction impossible.

Why has this solution not been discovered before? How did I, having never attended a medical school, discover this solution? Why didn't a much brighter and more highly qualified person make this discovery? I'll try to answer.

Part of the solution was necessity. I had a bad pain which wasn't getting any better. I simply had to get a solution. That gave me the incentive to keep going until I solved the problem.

Another more important part of the solution was a certain type of training which I had that most medical specialists never get. The special training I had was in the field of engineering. I had studied structural engineering as part of earning a degree in architecture. The basic principles that apply to holding up a building also apply to the human body.

Probably the most important reason I discovered the secret was I took a different look at the human body than most researchers do. I looked at it as a living organism which I - or you - control. I did not look at it as something the doctor controls or fixes.

The doctor looks at the body as something he has to fix for his or her patient. In that viewpoint, when she sees something wrong, such as the foot being flat, she thinks *she* has to do all the work.

The doctor has you stand or sit. He sees the foot is flat. He knows that people with good arches do not have foot pain. He thinks he has to do something to give you a good arch. He never looks at the possibility that you could make that arch yourself, if you just knew how. So, for foot pain he makes a special shoe which shapes an arch taking stress off the ligaments. This does relieve the pain but does little to improve how well the foot works.

The difference is that I looked at how the foot works. I looked at what the muscles are supposed to do when the body is up and walking or running. I saw what the muscles are supposed to do and made them do it. After all, I can move my leg by making muscles operate. I can "make a muscle" to show off the strength in my arm. I can make my jaw muscles operate to open and close my mouth to eat. In the same way I can make my foot arch by using the foot arch muscles - if I know how.

I took the viewpoint that I, rather than the doctor, have to control the body. This does not mean doctors are unneeded. For instance, I could not set my own broken bone. For that I would need a doctor. However, for certain things such as relieving foot pain caused by improper use of the foot arch muscle, the doctor cannot do it. The operator of the body

has to do it. All the doctor can do is guide or teach you.

That concept just is not in the typical doctor training. In fact, doctors are warned that often patients just do not follow his instructions regarding the taking of medication. The poor doctor is thus taught that patients cannot do it for themselves and that he has to do it all for them.

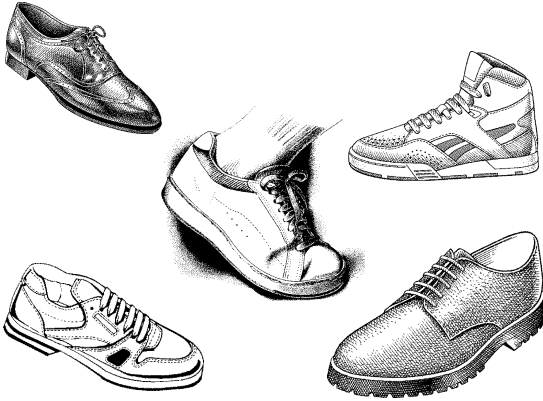
Another thing the doctor does is give pain relief medicine (drugs) which in effect cuts the nerve...or he just goes in and cuts the nerve with a knife.

What if you did that in your car. Let's say you are out on a lonely back road at night. The low-oil light on your instrument panel lights up. That light is annoying you. You do not want to see it. So, you tape a piece of paper over the red light. Drats, the light still glows through the paper.

The next thing you do is stop your car, get the wire cutters from the glove compartment, step out of the car, lift the hood and cut the wire to that pesky red low-oil warning light. Then you drive happily down the road. Two miles later your engine freezes up and stops. There you are on a lonely back road with a broken car. Does that make sense? By the same token, does pain-relief medicine at those times make sense?

Doctors also prescribe specially built shoes. One thing these shoes do is support the foot arch. Since the specially built shoe takes over control from the foot arch muscle, that muscle can weak-

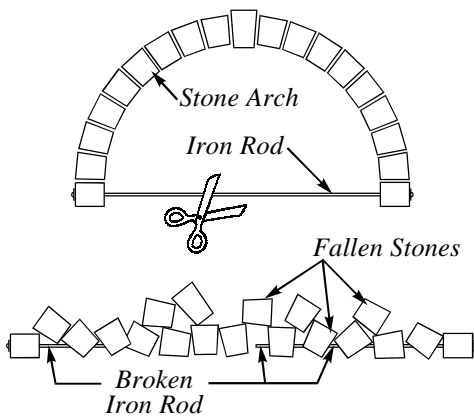
en and even be less able to do its assigned job.



Many Shoe Styles Are Made with Arch Supports

In addition, architecture school taught me how to solve problems. I noticed that some people had no pain in certain situations. I noticed that I did have pain in similar situations. Thus, since some others had no problem and I did have a problem, I concluded that I was doing something wrong. I looked at my foot. I tried different things.

I knew the foot should have an arch. I knew I had flat feet with no arch. I



Stone Arch Story

remembered stone arches I'd seen in churches in Europe. Some of them had a heavy iron rod holding the bottom parts of the arches together.

Something clicked. The light bulb went on in my mind. I had a bright idea. I tried the idea on one of my own feet. My foot hurt less. The arch was shaped better. I had discovered which muscle was the foot arch muscle! From then on it was simply a matter of strengthening that muscle until it could do its job all the time.

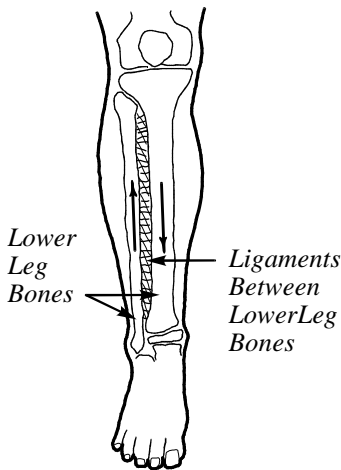
I also discovered the main purpose of the foot arch. It is designed to absorb mechanical shocks like a spring. The foot arch is designed to bend more, or less, as it shapes itself to the ground to improve its shock absorbing capability. In so doing, it absorbs the shocks of jumping and landing as well as provides extra spring force to improve movement in running. Artificial "fixes" such as arch support shoes or the fusing of bones disable the foot's natural ability to do its proper job.

No, I never had lower leg pain, commonly called shin splints. That was a neighbor girl named Tina. As a teenager she was a member of a Scottish Highland Fling dance troupe. One evening they danced on a stage with a hard concrete floor concealed below the carpet. The next day her shin (lower leg) hurt fiercely.

Her mother asked me to show Tina how to use her foot arch, so I did. I then forgot all about Tina's shin splints problem. Around a year later Tina told

me that using her foot arch correctly made her shin-splint pain go away.

That was quite a surprise to me. So, I took a look in the medical student's bible, *Gray's Anatomy*. Sure enough, there is a ligament holding the two lower leg bones together. When the main foot arch muscle isn't working correctly, the balance of forces in the lower leg becomes upset. One of the lower leg bones can be pulled up while the other stays in

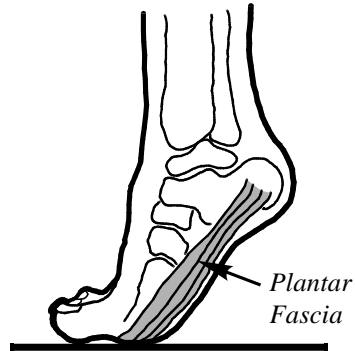


Shin Splints

place. This stretches the ligament between the two bones, causing pain. Operating the foot arch correctly can relieve the shin-splint type of pain in the lower leg due to imbalance which includes the foot arch muscle.

Note that there are many other muscles attached to these two lower leg bones which when not operated correctly could possibly pull one of these bones up or down while the other bone remains in place. This could also cause pain from the ligament being over-stretched.

* * *



Correct use of the foot arch can relieve other types of foot problems. One is called "plantar fasciitis." The "plantar fascia" is a strong ligament-type material across the bottom of the foot. It connects the heel part of the foot to the toe part of the foot. When the plantar fascia stretches, it causes pain which is called plantar fasciitis.

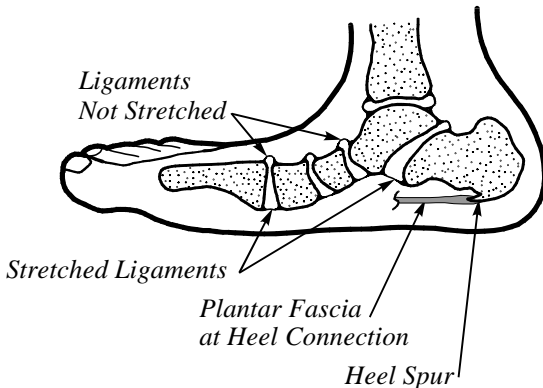
The plantar fascia is a backup to the main foot arch muscle. When the main foot arch muscle works correctly the heel and the toes are closer together than when the foot arch muscle does not work correctly. Look at the stone arch drawing for a better idea of what happens. When the heel and toes are further apart, as when the foot arch is not working, the plantar fascia can over-stretch and hurt. That is a likely source of the plantar fasciitis type of pain.

One way to relieve the plantar fascia from being stretched too tight is to learn how to use the foot arch correctly and then use it that way all the time. You will learn more about the main foot arch muscle in Chapter 3

On a number of internet web sites about feet, heel pain is linked to plantar

fasciitis pain. That would make sense. When the toes and heel are allowed to spread further apart, as when the foot arch is not working, the plantar fascia is stretched. This pulls it away from its connection to the heel bone.

Have you ever held a rubber band with two fingers of each hand and then stretched the rubber band? Did it feel like the rubber band wanted to pull out from between your fingers? Did it ever escape and snap to your other finger? Well, when the ligament type of material called the plantar fascia is stretched, as when the foot arch muscle isn't working, the plantar fascia *will* try to pull away from its attachment with the heel bone. This pulling apart can be painful.



Heel Spur

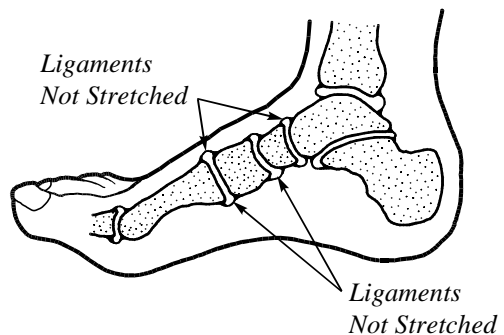
As that stress on the heel continues year after year the body can start to build up bone material where the plantar fascia attaches to the heel bone. That buildup of material is another foot problem called a "heel spur." Heel spurs have also been linked to heel pain as well as to planter fasciitis by the experts in the field.

By no longer stretching the plantar fascia and pulling it away from the heel bone, the heel spurs could hurt less and could possibly even be re-absorbed back into the body.

Then there are flat feet. Flat feet are also called "under pronation" which means that the feet are not rotated or turned about the ankle enough. Once again, when the foot arch muscle works correctly the heel and the toes are closer together than when the foot arch muscle does not work correctly. When the foot arch muscle does not work correctly and the heel and toes pull further apart, the foot goes flat. This is similar to what happened to the stone arch when the iron rod was cut in the earlier drawing.

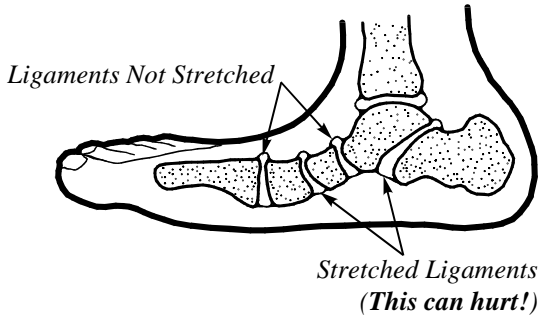
Try this. Make a cup of your hand and place it palm down on the table. In the cup shape, the finger tips are closer to your wrist than when you flatten out your hand on the table. That is about what happens when a person gets flat feet.

When the foot arch is not working as it should and the feet go flat, the ligaments holding the foot bones together



Well Arched Foot

(Note: For the sake of simplicity, many of the stronger and more complex ligaments have not been shown on the Heel Spur, Well Arched Foot and Flat Foot drawings.)



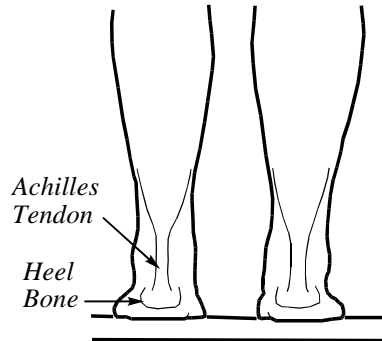
Flat Foot

can stretch and hurt. As noted above, there are many more of these ligaments than are shown here.

The opposite of flat feet, or under pronation is "high arch" or "over pronation" which means that the foot is rotated too much. In this condition the arch has to be made too high in order for the ball of the foot (the part just behind the big toe) to touch ground. Those with high arch do not carry much weight on the main arch of the foot, the forward end of which is the ball of the foot which is just behind the big toe. Instead, they tend to walk mostly on the outside edge of the foot. Bones on the outside edge of the foot do not have the strength of the bones on the inside edge of the foot. The same applies to the muscles which operate the bones on the outside edge of the foot. Their main job is balance.

Another problem comes with the Achilles tendon at the back of the heel. It is a very strong and large tendon. A

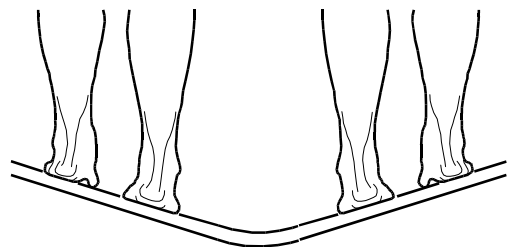
tendon is a very strong, rope-like material. The Achilles tendon is designed to carry loads across its entire width, not just on one side or another, except for short periods of time.



Ankle at Mid-point **Foot Arched Correctly**

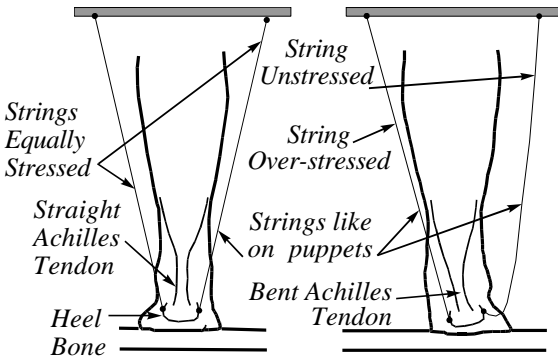
Imagine walking on one side of a mountain. Think of how your foot would rock to one side, and vice versa on the other side of the mountain. However, you usually do not walk on just one side of the mountain.

Sometimes the foot rocks one way or the other on flat ground when it is not being used correctly. When the foot is rocked to one side it puts more load and thus more stress on one side of the Achilles tendon. This stress is put on the



Ankle made to bend when walking on side of mountain

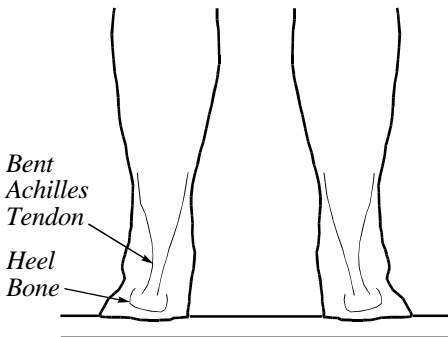
edge of the Achilles tendon *all the time*, not just once in a while as when walking on the side of a mountain.



Foot Arch Correct

Foot Arch Flat

One can get a better idea of this by thinking of puppet strings. When the puppet is level strings on both sides are tight. When the puppet is not level strings on the higher side are not tight and the strings on the downhill side can be carrying more weight than they should.



Feet Not Correctly Arched (Feet are Flat)

Walking with the ankle bent to one side all the time can cause one side of the Achilles tendon to stretch too much

and then to hurt. Part of learning how to use the foot arch correctly includes keeping the foot centered, as when walking on flat ground, unless one is actually walking on the side of a mountain. Thus, using the foot arch correctly could possibly help Achilles tendon pain.

Other foot problems can resolve when the foot arch is used correctly.

I first discovered how to use the foot arch in 1977. However, foot pain wasn't the only pain my body had back then. Over the years, starting with the shoulders in 1975, I made additional discoveries about how other muscles in the human body work. With those discoveries I got rid of severe pains in my back, neck and head by training my muscles to work correctly.

My first book on the subject was written in 1980 and published in 1982. It was titled *Muscle 'N Bone: A User's Handbook for the Human Body* and first copyrighted in 1980. The information on how the foot arch works was first released to the public in that volume.

Look for future books similar to this book on other parts of the human body.

For now, help for foot and shin splints pain is available here in workbook form. I hope it is of benefit to you. Enjoy!

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