

Medial Shin Smash and Floss

If you run a lot, or you're on your feet all day, there is a good chance that the tissues of your lower leg are brutally tight and in need of some serious love. The musculature extending from your knee to your ankle on the inside of your shin—specifically the soleus, posterior tibialis, and gastrocnemius muscle—is responsible for giving your foot arch support. Anytime you stand, walk, or run you are putting demand on these tissues. As the calf musculature becomes tight and locked up, people start defaulting to an open foot position. This causes the ankle to collapse and places stress on the upstream tissues.

To restore good positions and normalize those tissues, take a ball and smash it into the inside of your shinbone. Work from the base of the knee down to the anklebone. The idea is to create large pressures and work all the elements. You can pressure wave, contract and relax, and smash and floss by moving the foot through various ranges. People will find areas of high pain and areas of low pain. The key is to skip over the low pain and stay on the hot, grody areas behind the shin.

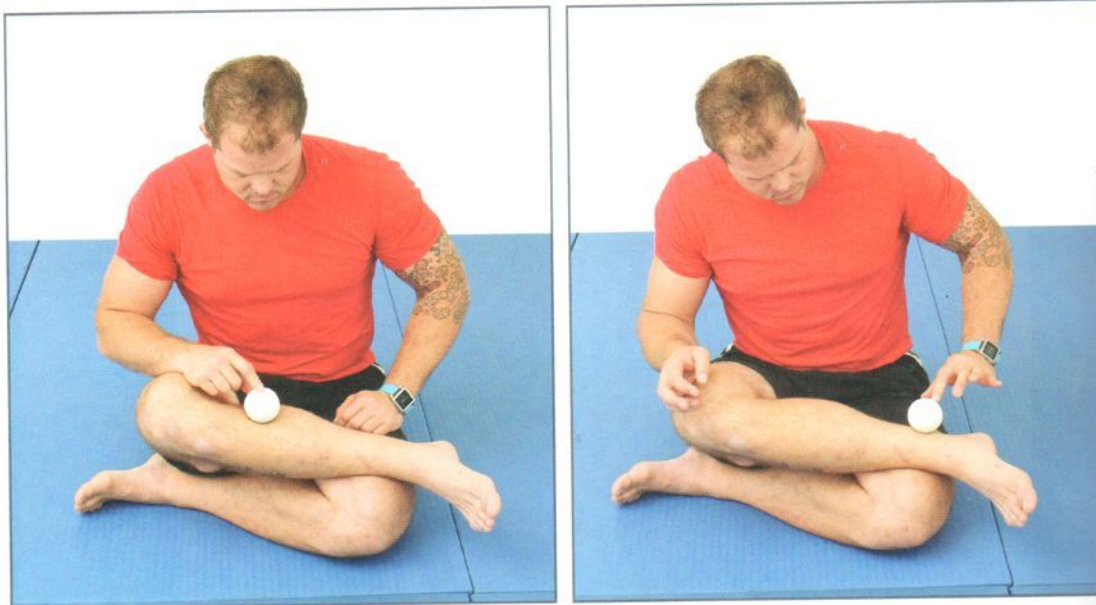
This mobilization should be your first stop if you have plantar fascia problems, posterior tibialis tendonitis, if you can't get your foot into a good arch, or if you're someone who does a lot of running—especially Pose-centric running.

IMPROVES:

- ▶ Neutral and Straight Foot Position
- ▶ Foot and Ankle Problems
- ▶ Knee Pain

METHODS:

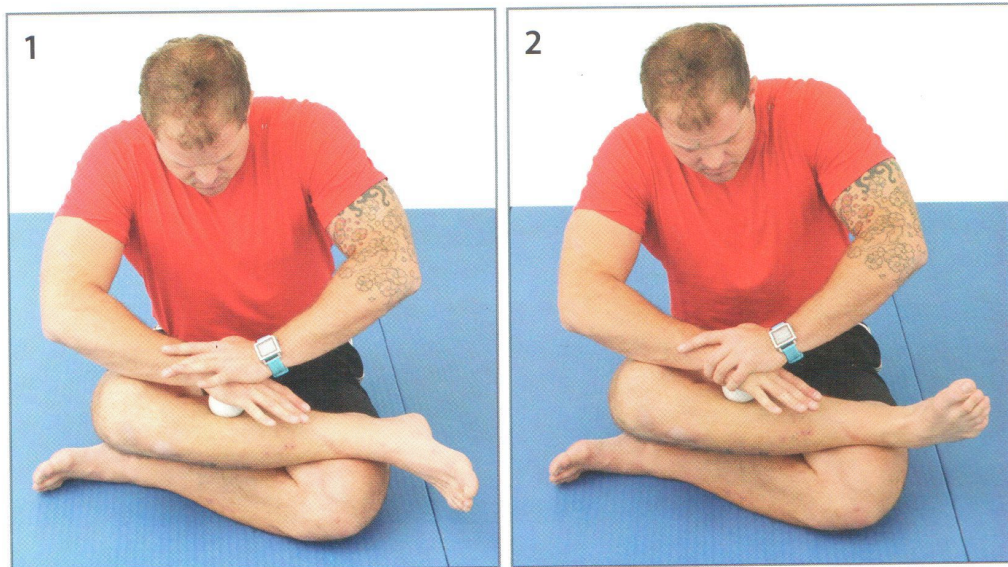
- ▶ Contract and Relax
- ▶ Smash and Floss
- ▶ Pressure Wave



The target area stretches from the base of the knee down to right above the anklebone along the inside of the shin.

Medial Shin Tack and Floss—Option 1

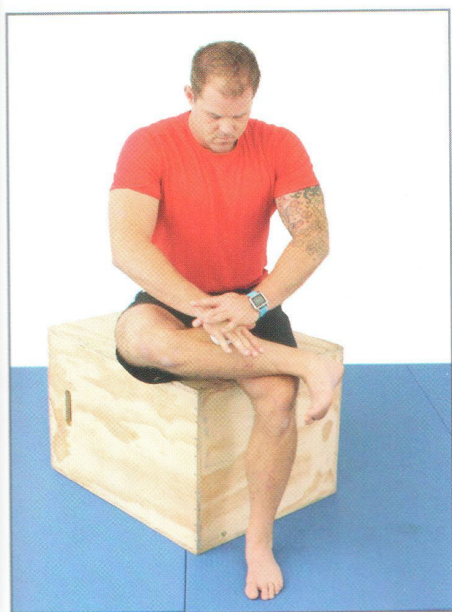
There are a few different ways to approach this mobilization. Personally, I like to sit on the ground with my legs crossed, but not everyone can comfortably get into this position. If you are physically restricted, you can cross your leg over your knee from the sitting position (Option 2) or implement the double lacrosse ball variation (Option 3).



1. Pin a lacrosse ball on the inside of your shin and apply downward pressure using both of your hands.
2. Once you find a hot spot, tack the tissue down and move your foot around in all directions. You can also apply a pressure wave or implement the contract and relax technique.

Executive Medial Shin Tack and Floss—Option 2

This is a fantastic option for the less flexible. It also serves as a perfect lower body maintenance strategy for the desk-bound athlete. It's a win any time you can work on improving your position and mobilizing stiff tissues while trapped at work or in a chair. It's kind of like you're getting paid to mobilize.



Cross your leg over your knee, wedge a lacrosse ball between your shin-bone and calf, and apply downward pressure with both hands. From there, you can contract and relax, roll your foot around in different directions, or apply the pressure wave technique.

Double Lacrosse Ball Medial Shin Smash and Floss–Option 3

This option is attractive because it's easy to get into the position, plus it allows you to target both sides of your leg. If you're an endurance athlete with tacked-down tissues, or you have foot pain or a weird ankle pain, consider this a gold star technique.



1. Position a lacrosse ball on the bottom and top of your leg.
2. Align the top ball over the bottom (on a tight area) and apply downward pressure using both of your hands.

Lateral and Anterior Compartment Smash

If you have foot problems or strange downstream pain, you have to look at the shin and calf. All of the tissues that run and control your feet are housed in your lower leg. The calf and shin are the master of puppets pulling the strings to your feet.

The problem is people tend to forget about the front of the shin because all the meat is on the back of the leg, which is where most people focus their attention. However, if an athlete does a lot of running, walking, and standing—especially if he heel strikes and stands with his feet turned out—those peroneal muscles that run down the outside of the lower leg are on constant tension and will get extremely tight. This is precisely how people get shin splints.

When I treat athletes who have shin splints, I'll ask them, "What are you doing for those tissues?" They'll pause, think about it for a second, then say, "Nothing." It's odd because those tissues are stiff and being pulled off the bone, but more often than not the athlete isn't addressing the area of localized pain. Obviously, working upstream and downstream of the problem is part of the conversation, but to restore those tissues to their normal function, the athlete has to get in there and give those stiff tissues some love.

It's important to realize that when this anterior compartment of the shin gets tight, the muscles don't contract very well, limiting dorsiflexion range-of-motion. It also inhibits your ability to point your toes. For this reason, the test and retest is to simply flex and point your foot back and forth. If your shin is working efficiently and the sliding surfaces are actually sliding, you will be able to pull and point your toes farther with less discomfort.

If you have strange knee or ankle pain, you're struggling to get your foot into a good position, or the front of your shins hurt—meaning that you have shin splints—this mobilization should be at the top of your list. Know that there are a couple different ways you can attack these tissues. You can use a rolling pin or stick massager, or you can pressure your weight over a lacrosse ball or roller as demonstrated here. The tools that you use are not important as long as you can get the job done.

IMPROVES:

- ▶ Neutral and Straight Foot Position
- ▶ Anterior Compartment Pain (Shin Splints)
- ▶ Knee and Ankle Pain

METHODS:

- ▶ Smash and Floss
- ▶ Pressure Wave
- ▶ Contract and Relax

MOBILIZATION TARGET



The goal is to work the anterior compartment and the lateral compartment (the peroneals) along the front of your shins and outside of your leg from your knee to your ankle.

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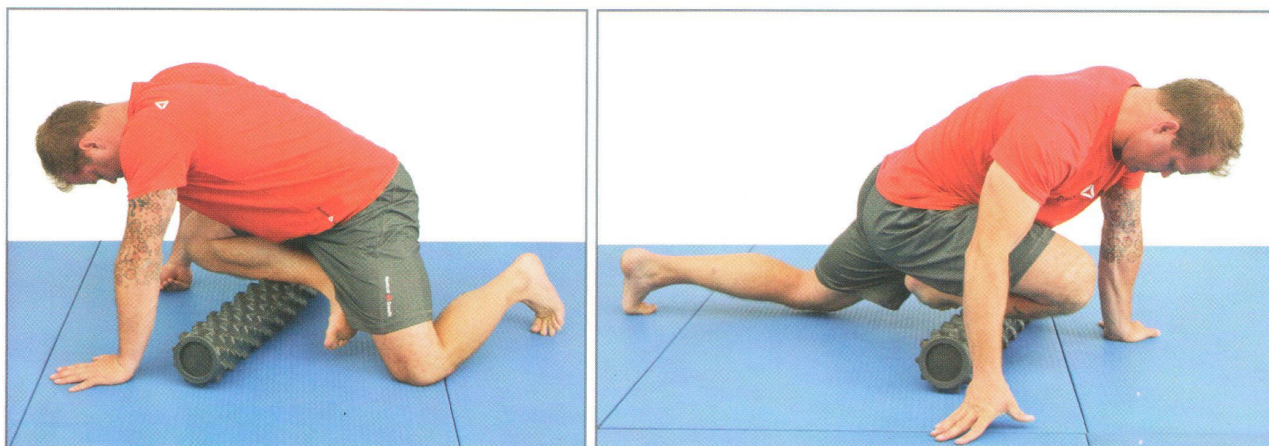
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1. Kneel on the ground and position a lacrosse ball to the outside of your shin. To add more pressure, you can sit your butt back, or reposition your center of mass over the ball.
2. Work across the tissue, pressure waving from the outside to the inside of your leg. If you stumble across a painful spot, stop and move your foot around in all directions. You can also contract and relax to penetrate deeper into the tight tissues.

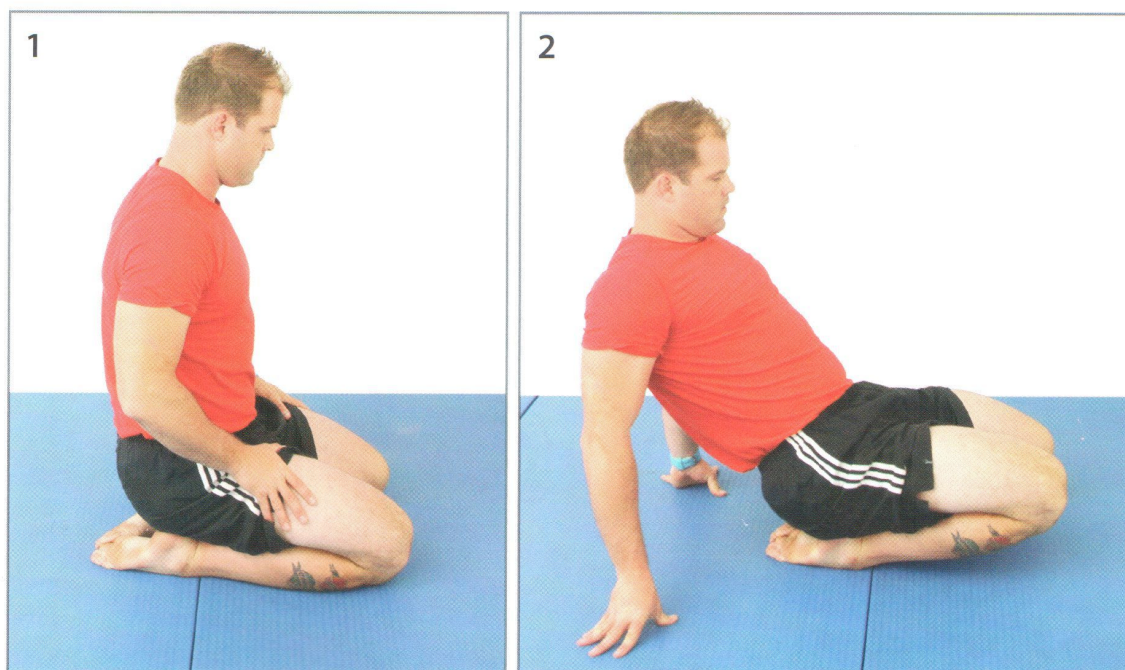
Roller Variation

You can also use a foam roller—ideally a Rumble Roller. Work up and down the length of the tissue hunting out tight areas. When you find a hot spot, rock back and forth from side to side across the tissue while moving your foot around in every direction.



Global Plantar Flexion

This is a sweet and simple global dorsiflexion mobilization and a low-budget way to stretch the front of your shins. It's a powerful counter mobilization to the previous technique that puts the anterior compartment into an end-range position. You can stretch both legs at a time as demonstrated here or stretch one leg at a time by posting up on your foot.



1. Kneel on the ground with the tops of your feet flush with the ground, positioning your big toes right next to each other. **Note:** If you want to isolate one leg, plant one foot on the ground. For example, if you want to stretch your right shin, you would post up on your left foot and plant your right hand on the mat to counterbalance your weight.
2. Keeping your back flat and knees straight, lean back and allow your knees to come up off the ground.

Calf Smash

Calf muscles have a serious job. An athletic person takes an average of ten thousand steps per day while walking. That is 5,000 loads per calf over the course of a single day, and 70,000 over the course of a week. This doesn't even include going up and down stairs, running, working out, and playing sports. If you have bad foot positioning, whether you're walking with your feet turned out or wearing shoes that compromise position, the insidious calf tightness that accumulates is insane. It's no accident that people's calves are in a state of constant stiffness and their heel cords are like a couple of steel cables.

If you're missing ankle range-of-motion, you have no choice but to compensate into an open foot position. This means that you stand, walk, run, and move with an open knee and collapsed ankle. When this happens, you can't expect everything to be okay. It's the same issue when people are missing wrist extension; they turn their hands out and wonder why their shoulders hurt. If you're missing foot extension or dorsiflexion, you're going to turn your foot out to solve that range-of-motion problem and buffer the issue. Do this and ultimately say hello to bone spurs, Achilles tendonitis, Achilles ruptures, and a slate of other ankle problems. You can avoid all of this if you have full ankle range-of-motion and understand good positioning. You have to make sure that the large drivers of your ankles are full range and supple.

Although the chief problem is usually in the heel cords, the tightness transmits upstream. The gastroc, which is a powerful lower-leg muscle that makes up your calf, is responsible for controlling your ankle. If those tissues get stiff, ankle and knee pain generally follow.

What you have to remember is that you have a lot of musculature controlling your feet, and all that tissue is running through a very small space. This is why you need to prioritize some of the smashing effects as a first step when you're trying to deal with knee pain or trying to improve ankle range-of-motion. You can't just roll aimlessly around on a foam roller. You must smash.

There are several smashing techniques that you can incorporate, ranging from the horribly painful to the mildly uncomfortable. Depending on your level of stiffness and pain tolerance, you may have to start with the most basic, which is the roller calf smash, and work your way up. Just remember, the more uncomfortable the mobilization, the more change you will see, feel, and realize.

IMPROVES:

- ▶ Neutral and Straight Foot Position
- ▶ Ankle Range-of-Motion
- ▶ Ankle and Knee Pain
- ▶ Calf Tightness

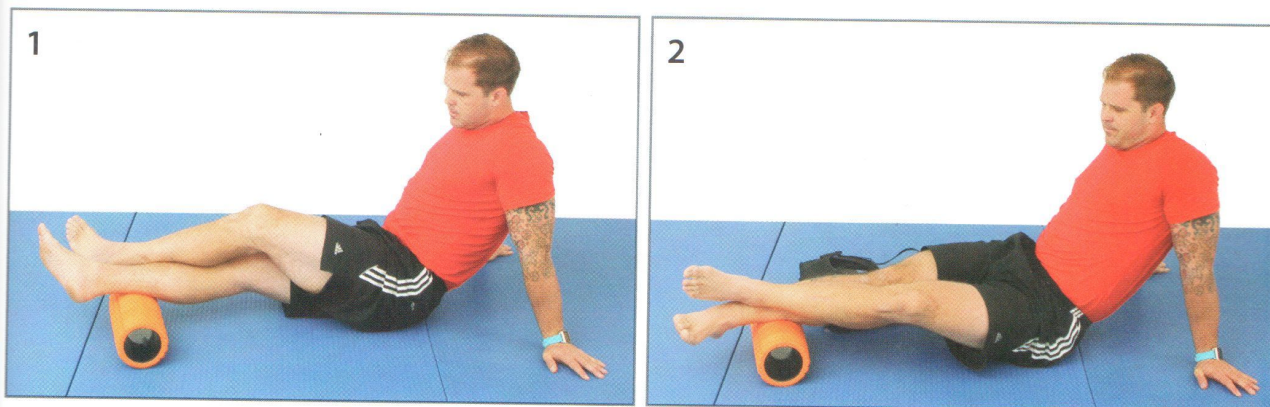
METHODS:

- ▶ Contract and Relax
- ▶ Pressure Wave
- ▶ Smash and Floss

Roller Calf Smash

This is the most basic calf-smashing technique that we use. It's usually reserved for athletes that are extremely sore. As you know, tight calves are very sensitive, making it tough to mobilize without passing out or vomiting on yourself. This is why it's good to have low-level mobilizations that you can throw in as a warm-up to the more aggressive techniques. Remember, in order to make observable and measurable change, you need large acute pressures, which is difficult to get using a foam roller or pipe.

To execute this technique, position your calf and heel cord on a roller or pipe, cross your opposite leg over your shin to add pressure, and then roll your leg from side to side. You can also contract and relax and point and flex your toes.



Weighted Calf Smash

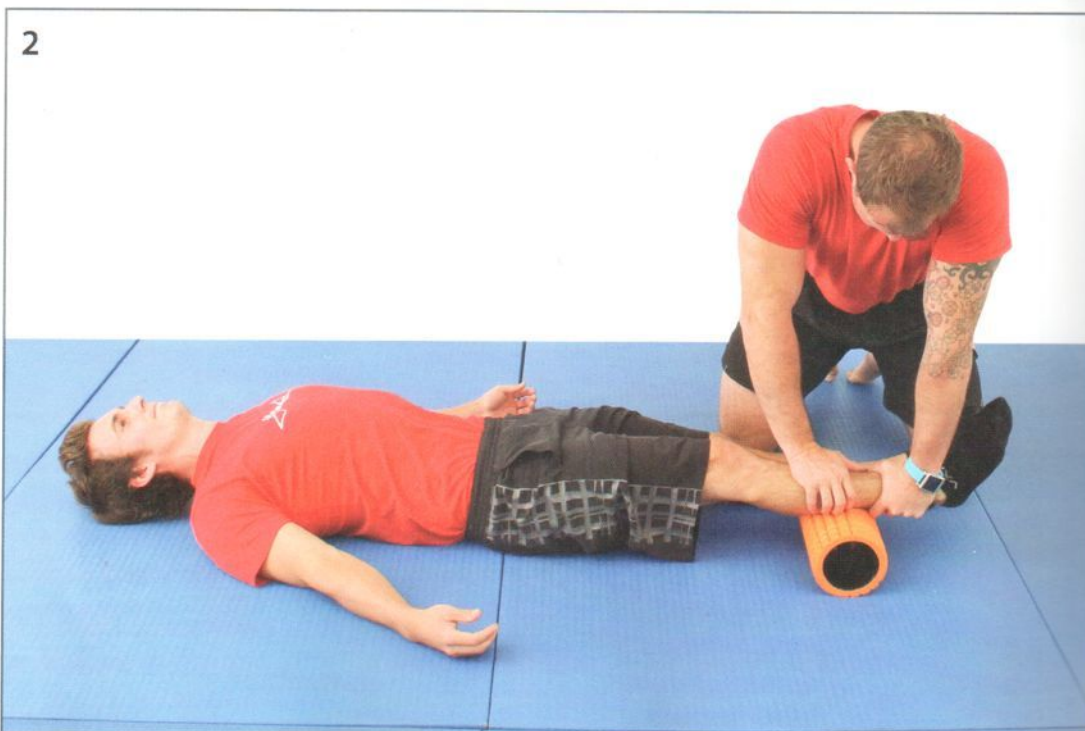
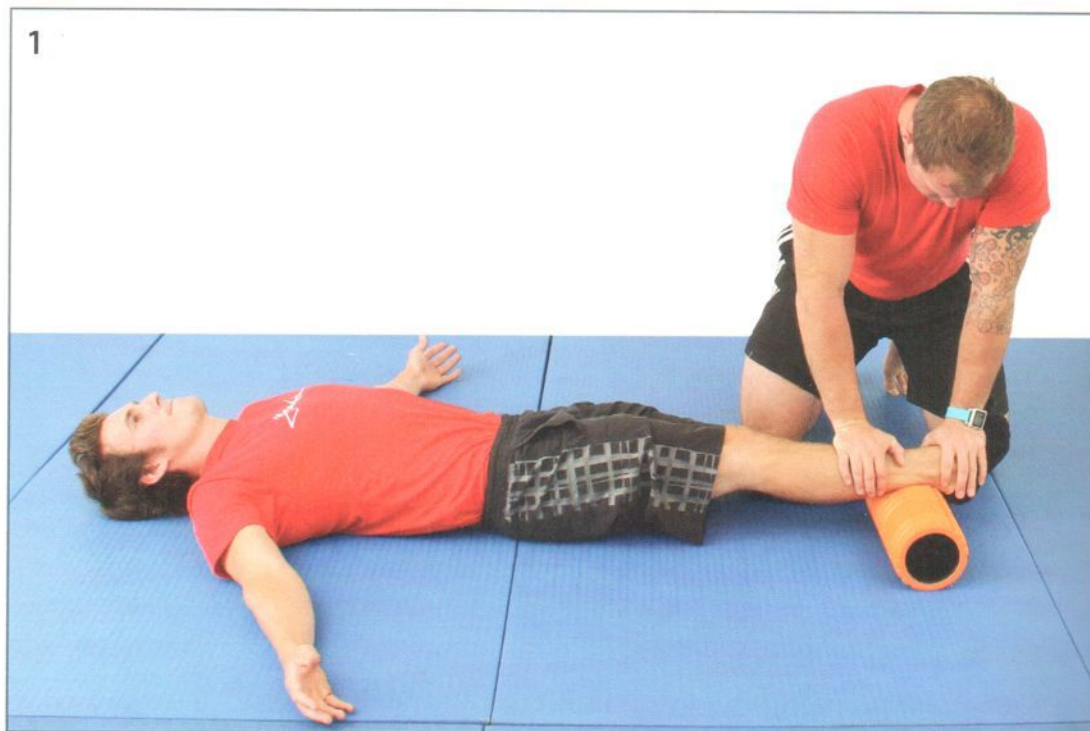
Placing a heavy sandbag over your shin to add additional compression force is another good option. Although having a Superfriend apply pressure to your leg or doing the bone saw calf smash yourself (see coming techniques) are more effective, this one is certainly valid.



Superfriend Calf Smash

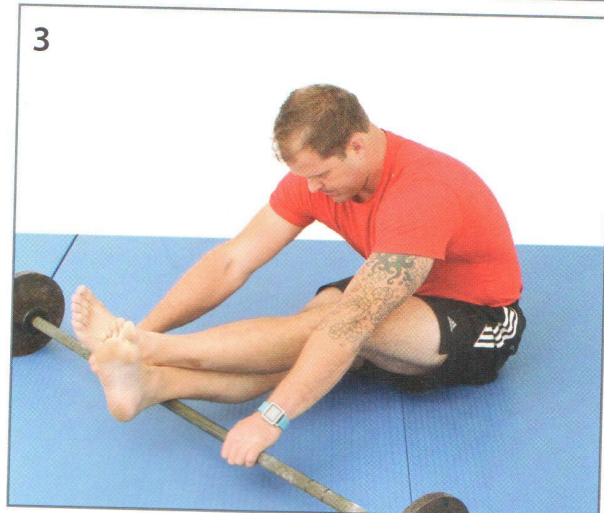
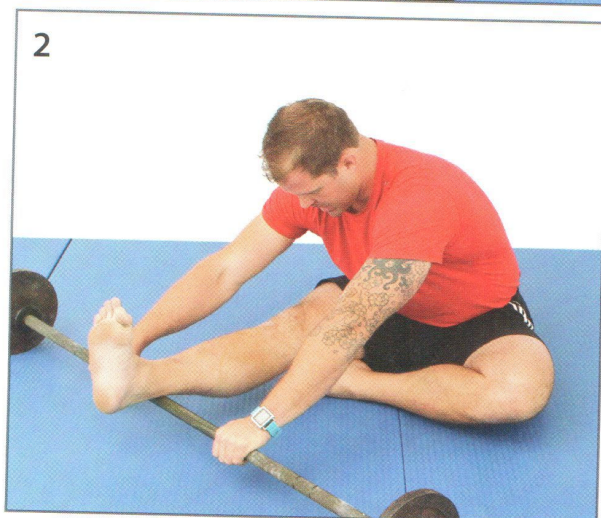
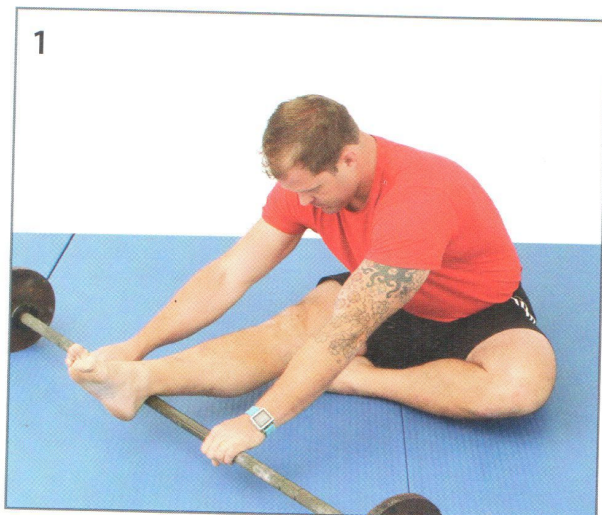
The Superfriend calf smash is great for two reasons: You can get a ton of pressure into your calf, and you are more likely to tolerate higher compression forces than you ever would on your own. The bottom line is there are not too many people out there who will apply the same kind of tortuous pressure as a Superfriend.

Have your training partner apply downward pressure and slowly roll your leg from side to side, clearing one section of tissue at a time. As with the Superfriend quad smash, you probably need to agree on a “safe” word that will cue your partner to ease up.



Barbell Calf Smash

The barbell calf smash offers more acute pressure, which is what you want when dealing with tight heel cords because it allows you to restore superficial sliding surfaces to the tissues near the base of your heel and ankle. You can roll your foot from side to side or twist the barbell up your lower leg to get a pressure wave effect. Crossing your opposite leg over your foot and leaning forward is a great way to add more compression force.

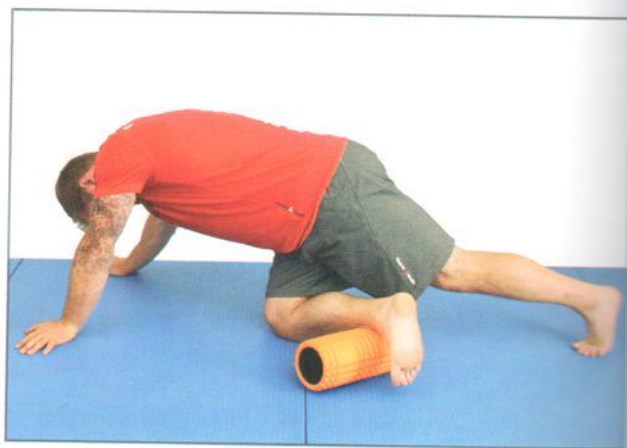
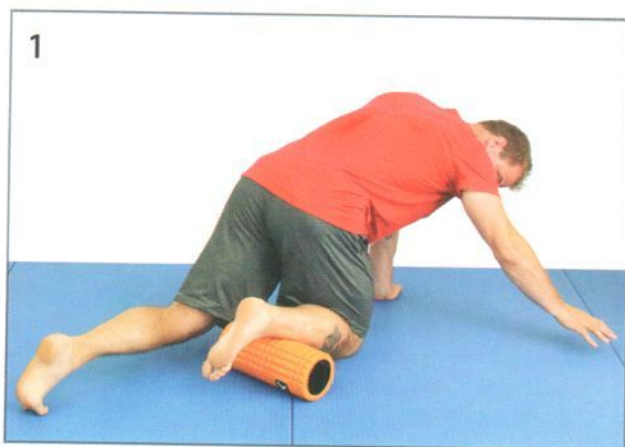


Bone Saw Calf Smash

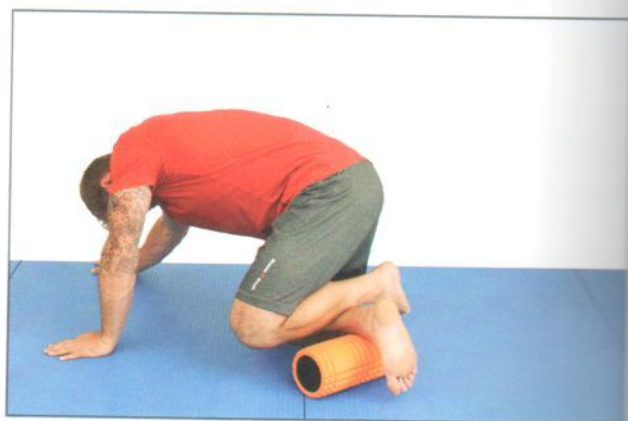
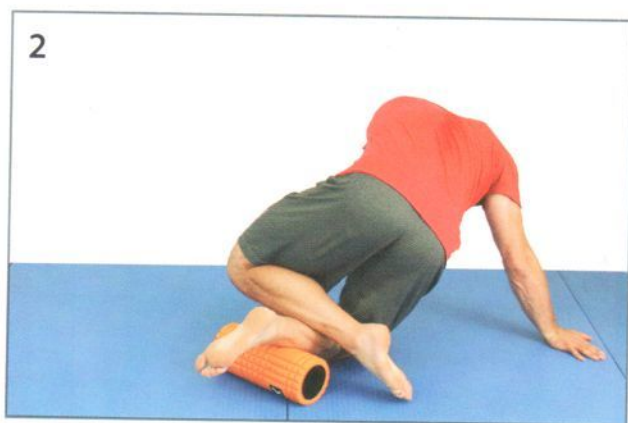
This is my favorite calf smash mobilization and the first one I use when I have calf and heel cord tightness or ankle or knee related issues. But I'm not going to lie: It's pretty nasty.

By placing your instep over a foam roller and positioning your shin over your leg, you can get large pressures working through the back of your calf. The idea is to slice the blade of your shin into the areas that are tight, oscillating from side to side, as if you were playing a fiddle. What's great about this technique is that your foot is off the ground, so you can mobilize with a relaxed leg, allowing you to smash and floss tight areas. The contract and relax technique also works here.

It's important to note that you can control the pressure by adjusting your weight. Sitting your weight back will increase compression, while shifting forward will take pressure off your leg.



Kneel and place your instep over a foam roller, keeping your foot neutral.



Using your arms to support the weight of your upper body, bring your opposite leg up and place your shin or instep across the tissue you're trying to change.

3



To add a compression force, sit your butt back and shift your weight over your top leg. **Note:** You can control the amount of pressure by shifting your weight forward and backward. The more you sit back, the more aggressive the pressure.

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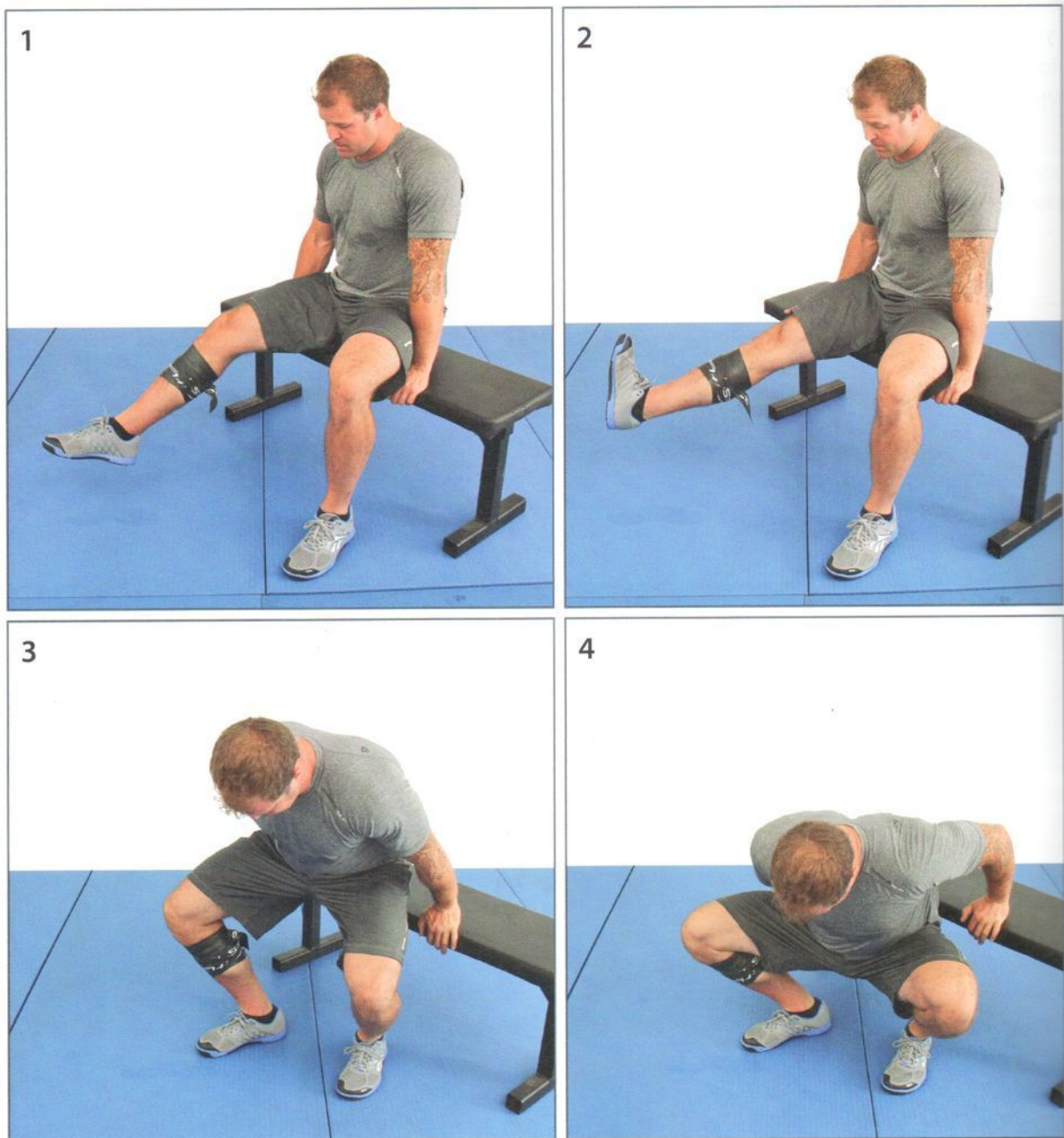


Keeping your weight centered over your leg, slowly smash your shin across the back of your calf. The idea is to shear back and forth across the back of your calf. You can also hang out on a tight spot and apply the contract and relax and smash and floss techniques.

Voodoo Calf Mobilization

If you had to consume a human being (not that you ever would), the calf muscle would be one of the worst pieces to eat. It is so thick and fibrous that you would have to literally boil it for eight hours to break down the grisly muscle tissue. As I said, your calf undergoes an intense number of loading cycles: Walking, playing sports, lifting, wearing high heels, and running all add up. Not to mention that most people spend very little time undoing all that insidious, accumulated stiffness.

The bottom line is this: Your calf is prone to sliding surface restrictions. Left untreated, that stiffness aggregates into intramuscular adhesions and knotted-up scar balls that compromise mechanics and increase potential for injury.



Wrap a band around the area that you are trying to change and then move your foot through as much flexion and extension range as possible.

Classic Calf Mobilization

When people have tight calves, generally their first thought is to just throw their foot on a wall or curb. It's a classic approach that you can do anywhere, anytime, and with zero equipment aside from shoes. (The shoe helps support your foot and provides traction on the wall so that you can keep the ball of your foot in place). However, there are a couple of problems worth noting with this kind of classic calf stretch.

The first problem is that it's difficult to change tissues by simply hanging out in a static position. These muscles are very, very strong and can handle large loads for extended periods of time. It's like hanging on a piece of steel cable hoping that it will stretch.

The second issue is it doesn't take a systems approach. That is, you're only addressing muscle dynamics and not your ankle capsule or sliding surfaces. You are putting yourself into a physiologic range and then hoping that you can get enough pressure to make change. For these reasons, it's imperative that you prioritize the previous mobilizations and, if possible, attach a band around your ankle to tie in the joint capsule.

What is great about this classic mobilization is that it challenges your heel cord and calf at full range and serves as an excellent supplement or counter mobilization of the previous techniques. You can also focus on the tissues at the base of your heel by bending your knee and loading the soleus complex. Just be sure to keep your foot in a good position and maintain a good arch as you hunt around for tight areas.



1. Standing a few feet away from a wall, lower into a quarter or half squat and place the ball of your foot as high up on the wall as possible—keeping your heel in contact with the ground, your foot neutral, and your glute squeezed. Sometimes it's easier to start high up on the wall and slide your foot down until your heel touches down. Once your foot is in position, straighten your knee. Don't try to bend your foot.
2. Keeping your foot pinned in place, stand tall and drive your weight toward the wall or pole. With your leg straight, mobilize both your heel cord and calf (gastroc). Remember to keep your glute engaged and your belly tight as you move your hip toward the wall.
3. To explore different ranges of stiffness, lower your elevation by bending your leg and scour around for tight areas by externally and internally rotating your knee.

Banded Distraction

It's a bit tricky, but if you can rig a band and apply a posterior distraction, you will increase the effectiveness of this mobilization twofold. Any time you take a classic stretch and apply a distraction to tie in the joint capsule, you turn a good stretch into a great stretch.



Banded Heel Cord: Anterior Bias

A lot of people report an impingement at the front of their ankle when they perform a classic calf stretch or pull their toes toward their knee. This is the equivalent of an anterior hip impingement. When your femur is resting at the front of your hip socket (usually from too much sitting), it runs into your acetabulum during deep flexion-based movements like squatting. It's the same idea here, but in this situation the bones of your ankle are resting at the front of your joint capsule, causing that familiar pinch at the front of the socket. As with the banded hip distraction, this is a simple way to clear that impingement and restore normal function and range-of-motion to the joint.

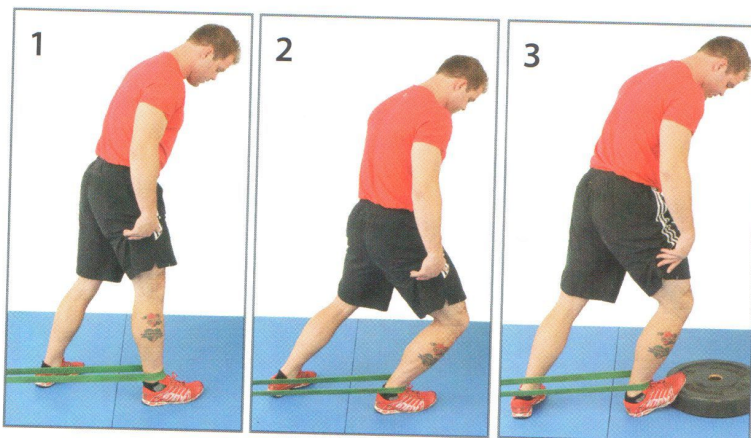
For the best results, create as much posterior tension as you can handle, drive your knee forward and out to the side—keeping your entire foot in contact with the ground—and oscillate in and out of end-range until you experience some kind of change.

IMPROVES:

- ▶ Neutral Foot Position
- ▶ Clears Anterior Ankle Impingement
- ▶ Ankle Pain
- ▶ Increases Ankle Range-of-Motion

METHODS:

- ▶ Paper-clipping (Oscillation)



1. Hook a band around the front of your ankle at the base of your foot and create as much tension in the band as possible. You want your entire foot in contact with the ground and your foot straight. This allows you to generate a little bit of external rotation force to stabilize your ankle in a good position.
2. Drive your knee forward. The idea is to oscillate in and out of end-range until you experience some kind of positive change.
3. You can also prop the ball of your foot onto a weight to challenge more end-range dorsiflexion.

Banded Heel Cord: Posterior Bias

The banded heel cord will tack-down the tight tissues at the base of your heel and restore sliding surfaces to the area. If this region gets tight, the skin will literally adhere to the underlying tendon. This restricts range-of-motion and causes an onslaught of other problems. This is a simple yet cogent way to unglue that matted-down tissue and help restore normal range-of-motion to your ankle.

Hook a band around the base of your heel and create as much tension in the band as possible. Keeping your entire foot in contact with the ground, drive your knee forward and toward the outside of your body, oscillating in and out of end-range. The idea is to maintain a slight external rotation force to prevent your ankle from collapsing inward.

