THE RUNNER'S ULTIMATE GUIDE TO FOAM ROLLING

DR. ALLAN PHILLIPS

About the Author

Allan Phillips

Allan is a Doctor of Physical Therapy with over 20 years' experience involved with running as an athlete, coach, andclinician. He is based in Tucson, Arizona.

Contents

Introduction

"If you can't do the little things right, you will never do the big things right."

ADM (Ret.) William McRaven

It was the early months of 2005 and I was only months removed from what may have been the best race of my life to date, coming in with a nine-minute PR at the Philadelphia Marathon in November 2004. The only problem was that by mid-February 2005 I still had trouble getting through a 20-minute run due to persistent left knee pain.

I'd start my easy runs hoping that my knee wouldn't hurt (praying as if trying to keep some evil spirits at bay), but usually by the five-minute mark the pain would start to set in. This was inevitably followed by dread, some negotiation with a higher being ("please let the pain not get any worse and I'll be a better person"), maybe a stop or two to stretch out, before finally giving up and feeling dejected. I would have gone over to the elliptical and put in some miles there, but once the pain demons took hold, even the elliptical was too much for my knee to handle.

The diagnosis was "iliotibial band syndrome" ("IT Band") and it was not my first go-round with this ailment. Weeks of stretching and ice and that little Velcro strap thingy didn't make much of a dent, though things did start to improve when I learned strength and balance exercises to improve my hip strength.

Like nearly everyone suffering from these symptoms, I was embarrassingly weak in the sides of my hips, despite being relatively strong in the front and back. I was also fortunate to have a friend who was a PT who would treat me almost every day at lunch, which ensured I would never dig too much of a hole for myself if I pushed too far into pain on the previous day's mini run.

But through it all, what really seemed responsible for the grandest improvements was this giant white foamy cylinder that was instructed to lay on. Ouch! OUCH!

It didn't feel very good but neither did the sharp pain in the side of my knee after ten minutes of running. If this pain from the roller would help get rid of the running pain, I was more than willing to put up with it. I didn't know

much about this thing (and it was years before Google Medical Center opened its doors, so I mainly learned about it through message boards and word-of-mouth) but when you're in that much pain and haven't run seriously for weeks, you're willing to try pretty much anything.

Yet a funny thing happened a couple weeks after I started using this thing. Twenty minutes of running soon became thirty minutes, which became forty. I no longer had to humiliate myself by stopping multiple times to walk out the pain. Eventually progressed to running back on the roads (I couldn't tolerate anything harder than grass originally) and even started tempo runs by late March.

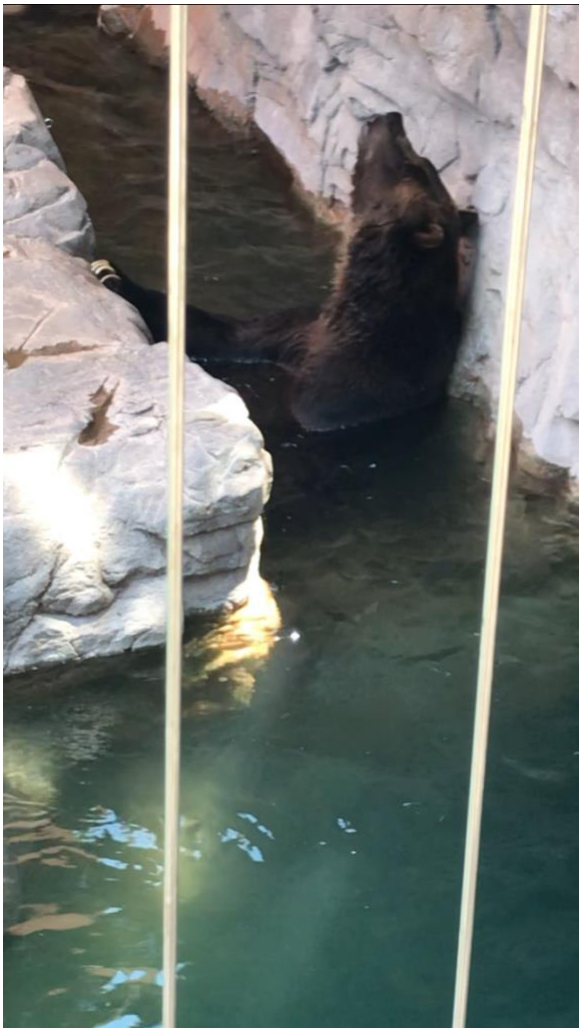
Before mini rollers were a thing, I bought a giant suitcase for travel specifically to fit the roller! I wouldn't go anywhere without that thing. Car or plane, the roller followed me everywhere. Fortunately, there was a happy ending to this story. By May I competed in an Olympic distance triathlon (hilly 10k run at the end) taking second in my age group and did my first half ironman in June, running what is still my second fastest half marathon off the bike (1:25).

Ever since then, I've regarded the roller as a valuable tool for any runner to own. I've always kept at least one on hand, and usually a couple different types. Over the years, we've become more accustomed to seeing young athletes walking around with foam rollers strapped to their backpacks. Stretching scenes from 1970s gym class have given way to athletes going through a foam rolling routine before practices and games. Many fitness studios even offer foam rolling classes as part of their weekly schedules!

Old-school runners may remember using a rolling pin from the kitchen before foam rollers were commonplace. It's all based on the same idea of compressing the tissue to elicit some change in the body's condition, ideally with reduced tissue tension. Other self-massage tools may perform the same or similar functions. But the roller earns high marks for its versatility

and relative comfort. Not too “pokey” yet still delivering enough pressure to feel like it makes a difference.

Self-massage is also a normal mammalian habit. Watch horses rub up against a fence, dogs roll on the ground, and even bears scratching against a rock wall! Foam rolling is simply a formal way to accomplish what the mammalian world already accomplishes in nature. We’re not reinventing the wheel; we’re simply taking the concept and applying it in a specific way to support athletic and fitness goals. I reckon a foam roller is going to be more comfortable than compressing your body against a fence, so you are more likely to be consistent with the roller if it feels good!



The foam roller rarely comes with a detailed instruction manual. It's like you see this thing and you're supposed to know exactly what to do with it! There's plenty of info on YouTube and other online sources, but you need a good filter to sort through what's useful and what's nonsense when it comes to any health and fitness information.

You might try to imitate what you see others doing but that still doesn't instill much confidence that you're on the right track.

That's where this guide comes in…to share with you the best ways to use the foam roller specific to your needs as a runner!

CHAPTER 01

WHEN TO SEEK HELP

The primary intent of this guide is to help improve your readiness to perform. But for many runners, the foam roller is the first line of defense they seek when aches and pains arise. There's nothing wrong with that. Whenever possible it is ideal if we can manage aches and pains with self-management, which includes foam rolling among other interventions. Yet we also need to understand the limitations of foam rolling, or any do-it-yourself interventions, particularly if we're dealing with a potentially serious medical issue.

When do we know the roller will be inadequate to deal with our aches and pains? I'll state the obvious here, but if there's any reason to believe we're dealing with something other than strained soft tissue (muscle, tendon, fascia), the foam roller is probably not the best tool. A tear isn't going to get better by foam rolling. And you certainly wouldn't want to foam roll near a suspected stress fracture. Similarly, if there is any reason to suspect circulatory compromise, we should seek medical clearance first. Foam rolling might be safe, but it might also be dangerous depending on the condition.

Experience and will often guide you as to whether you need to seek outside help. When it doubt, get it checked out. On the other hand, if something feels like a mild annoyance and is a familiar feeling under similar circumstances as in the past, then there's a good chance you can manage it again.
If you feel better after you warm up, it's more likely something you can manage on your own. If your pain gets noticeably worse during your runs to the point where you're not finishing, your mind is completely occupied with pain or you dramatically alter your running stride, you probably need more than a foam roller.

You can certainly use the roller to bring your pain down in the short term,

but that might not be a standalone solution. Similarly, if you feel worse the following day, it could be a sign you need to consult a higher level of care. Note, in any of the scenarios, that doesn't mean foam rolling can't be part of the solution. It simply means the roller is a supportive strategy, not the primary strategy.

CHAPTER 02

FOAM ROLLER FREQUENTLY ASKED QUESTIONS

What is the foam roller used for?

There are several reasons to use the foam roller, some of which might be new to you. Several of these are interrelated, meaning you're rarely going after only one objective alone. The main point is whatever objective you're seeking, your approach should be tailored to that one.

If you want to improve mobility, very likely you'll need at least moderate amount pressure to create temporary change in tissue resistance.

If you're seeking post training recovery, a softer approach might be more appropriate.

Pain relief at the site of pain

If you have a sore spot, sometimes using the roller over that spot can provide relief. For intense pain, I wouldn't recommend the roller, although some people do find relief from the "hurts sooooo good" feeling of deep pressure. Every situation is different so don't assume that treating pain by inducing more pain is always the best approach.

Pain relief at the source/cause of pain

Sometimes, to address a tight or painful region, you'll roll another area besides the one that's giving you trouble. I'll give a couple examples here.

To provide relief for plantar fasciitis, foam rolling the calf muscles can be effective. Think of the calves and other structures in the legs as being a source of foot pain, rather than the site, which is the foot itself.

To make the low back feel and move better, foam rolling to the middle back and upper back can provide relief.

The key concept here is tensegrity. It might sound complicated but with an example, it is simple. Think of a spider web. It is supported by its own tension. Now if you push on one area of the spider web, it will have effects throughout other areas of the web. Same thing in the human body.

Delivering pressure to specific areas can have predictable effects in other areas. When we understand these interrelationships we can direct our energies away from the site of the pain, as the painful area can sometimes

be too irritated for aggressive treatment.

Warmups

The foam roller certainly has a place in a warmup but ideally should not be the only component. I think of foam rolling as a "force multiplier," something to make the rest of the warmup more effective.

That said, I do see value in casually rolling out the muscles for psychological purposes, signaling a transition that now is the time to train or compete.

Increase tissue mobility

Troubleshooting with the foam roller doesn't always have to deal with pain. When we put pressure on the foam roller, we know that increased motion often follows. This can be a function of pain reduction, but it can also be for other factors.

Contrary to popular legend, we aren't breaking up adhesions or permanently inducing tissue changes. But the pressure can convince the nervous system to become "less paranoid" about maintaining tension.

Posture and spinal mobility

A couple primary ways to go about improving posture and improving spinal mobility. (These are technically separate objectives but the treatment with a foam roller is basically the same).

One is if you have a long foam roller to position yourself along the full length of the roller.

Another way to address spinal mobility is to perform mini back bends with the roller positioned horizontally.

We'll cover back bends in more detail in the main body of this book.

Preworkout systems check

The foam roller offers opportunities for simple check-ins with your body. Almost everyone who has used a foam roller knows it can identify tight spots you never knew existed. There's a saying (not to be taken 100% literally) that "healthy tissue should not hurt." Exposing your body to some moderate pressure from the roller may alert you to potential problem areas.

Recovery

After a hard workout, "rolling out" the legs is a common practice. Unlike other approaches in which you may target very specific areas with more intense pressure, there's nothing wrong with a light, casual roll to de-stress both physically and mentally.

The key point here is that if your intent is to create more mobility, you'll need more pressure.

But if you're seeking nothing more than a few minutes to let your body calm down, adding some light pressure rolling is perfectly appropriate.

Should I foam roll before or after training?

Yes! I tell people, any time that encourages you to use the foam roller is the best time. If we're talking about before activity, so long as you aren't excessive with the duration and if you provide a break in time before performing strength or power activities, foam rolling should not adversely affect performance.

Foam rolling after an activity can also help wind down the body after intense and/or prolonged work. The “magic” might not be in the foam rolling itself, but in allotting time for the body to gradually recover rather than coming to an abrupt halt.

Although it probably doesn’t have much effect on “flushing lactic acid,” (which the body does very efficiently on its own) we still know foam rolling can reduce soreness.

What exactly does the foam roller do?

To be honest, we don’t know for sure. MAYBE it “breaks up” scar tissue or “releases adhesions” as some purport, but that’s difficult to prove, and it’s very unlikely that foam rolling can provide the level of pressure needed to structurally remodel tissue. It may feel like the tissue has changed, and there may be some temporary changes, but most likely these are reactions by the nervous system to the compressive force of the roller.

The skin contains many different types of receptors, or structures that detect types of inputs, such as pressure, stretch and tension. If you press hard enough, you may impact pain receptors as well. Muscles also contain receptors. Whenever we press onto a foam roller, we’re providing an array of sensory input to the nervous system. If we correctly pair the type of the sensory input with the intended physical outcome, then we will be most effective with our rolling techniques.

Why should I foam roll?

We know that many people feel better and move more freely after using it.

Simple as that! Another primary benefit is it allows you to “check in” with your body and identify potential problems before they manifest into something that could sideline you. Stretching, practicing an activity or general movement will also provide this feedback. But when we exercise, we can sometimes move in ways that subconsciously avoid problem spots, which we could also call compensation.

Think of pilots and airplane mechanics going through preflight checklists. They don’t just show up, turn on the plane and take off. Before each flight there’s a procedure to check the aircraft’s functionality to ensure a safe flight. Foam rolling can fit into your own body’s pre-activity checklist, or even post-activity check-in, just like a plane after it lands and gets inspected.

We might also become so conditioned to how our body feels with certain movements that we become desensitized to small, but gradual changes. Direct pressure with a foam roller or other similar compressive object can expose sensitive areas that we wouldn’t have otherwise noticed.

Any good system has redundancies built into it to ensure safety. So long as we aren’t gratuitously mashing on tissue thinking that more soreness always equates to more effective treatment, an additional check-in with the roller can offer an added layer of vigilance.

Is foam rolling the same as getting a massage?

If you were to compare 30 minutes of foam rolling versus 30 minutes of any hands-on treatment from a quality professional, the hands-on treatment wins every single time. But unless you’re a professional athlete or business tycoon with access to pay for hands-on treatment every single day, there’s value in having the consistency to access something like foam rolling pretty

much any time you want.

What's the difference between the foam roller and other self-massage tools?

The foam roller has more surface area than most other objects. There are certain areas that may respond better to something smaller like a lacrosse ball. And of course, everyone's body is slightly different. But in general, the foam roller works great for the lower extremities and the back muscles and spine where the surface area is broader.

CHAPTER 03

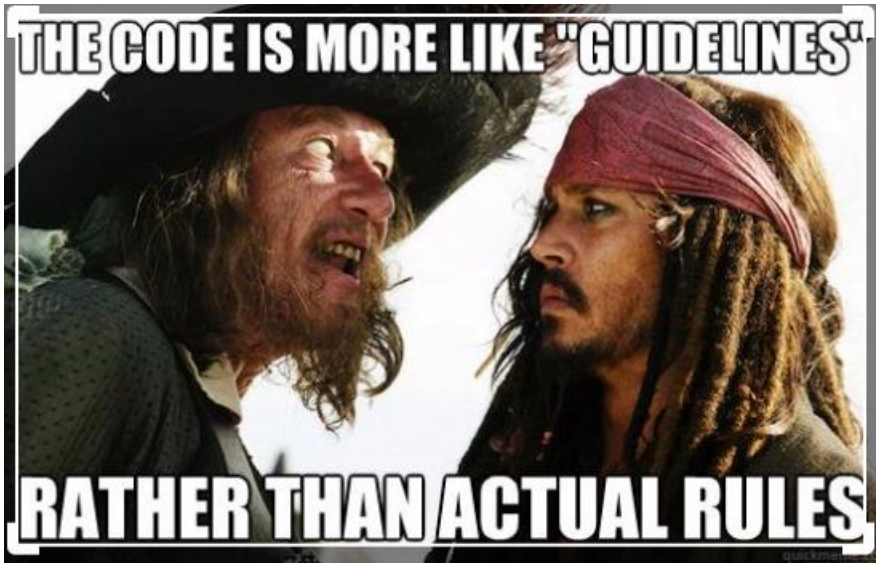
FOAM ROLLER TECHNIQUES

Foam Rolling “Rules”

The number one rule is this: Avoid prolonged direct pressure on joints. It’s fine to briefly pass over a joint to get from one muscle group to another…just don’t hang out there too long.

But…we’re not so fragile that we can’t put any pressure on joints. Prolonged direct pressure is what we need to avoid.

Otherwise, any rules are more or less “guidelines” that you can adapt to your own needs.



Search-and-Destroy

Many runners apply a “search-and-destroy” approach when using the roller. Search for a tight spot (a “knot”) and then “destroy” it by rolling across it. Sometimes this might be the perfect strategy.

Tight spots can prevent our bodies from moving optimally so giving proper attention to working them out can keep us running without interruption.

However, search-and-destroy is NOT the ONLY way to approach foam rolling. We're not trying to create the most pain possible, although discomfort is often part of the process.

Instead, we're looking to make the tissue ready for running, whether that is short term for an upcoming run or long term to give us the best chance to stay healthy.

Four specific techniques you can use, each with their own usefulness:

1. Moderate rolling back and forth along a region: one of the two most common approaches
2. Sustained direct pressure: the other most common approach. Tends to be a bit more intense than rolling back and forth
3. Sustained direct pressure with movement: assuming equal pressure as other techniques, this technique is the most intense
4. Gentle movement across a broader region (something akin to petting…more for social or general relaxation...Would not say this technique lacks value; just don't expect it to create any observable changes beyond what we'd expect from any gentle cooldown)

More on these later when we get into the specific regions…

How long?

General guideline: ***One to two minutes at a time per region for most efficiency***

If you can do one area for longer than two minutes, you're probably not using enough pressure for a significant effect on mobility. If you can't make it to one minute of pressure, then you're probably going too hard for it to be sustainable. Harder isn't always better.

I also recommend foam rolling durations by counting breath cycles. One secondary benefit is it helps remind you to breathe. Instead of rolling for one minute, you might roll for 15 breath cycles.

Think of like a volume dial. The intensity should be like a song you really like. You crank up the music so you can hear better but not so loud that it hurts your ears. But if the volume is conversational, it probably isn't loud enough. And certainly, if it is communicating to you in a whisper, you probably won't get much lasting effect either.

Types of foam rollers

Round, foam cylinder. The original foamy foam rollers are still around, but compared to when they first came out, are more durable now. Back in the day, almost uniformly they had a limited useful life, and eventually they'd lose their firmness and become more like a pillow than a roller!

Ridged foam roller. Many foam rollers are designed with specific patterns into the shape, such as ridges and knobs. These typically won't be made of foam, but instead some type of plastic materials. Each company has a reason for their proprietary design, but the main key is the uneven edges simply give you more options.

Think of it as a tool having more features. The uneven surfaces can perhaps go deeper and allow you to target more specific points. But also note having some other massage tools around (lacrosse balls, tennis balls, etc.) can also perform a similar function.

Vibrating foam roller. Remember when we talked about the different receptors that detect specific types of stimuli. We also have receptors that detect vibration. By adding vibration into the roller, you're targeting the nervous system in a different way. Not better or worse, just different.

Temperature controlled foam roller. There are even foam rollers that can transmit heat and/or cold. Personally, I have not used one of these but having thermal and mechanical inputs may be an efficient way to deal with soreness, as you can gain the benefits of normal foam rolling but without having to carve aside additional time for thermal treatments.

CHAPTER 04

CALVES

Gastrocnemius
Soleus

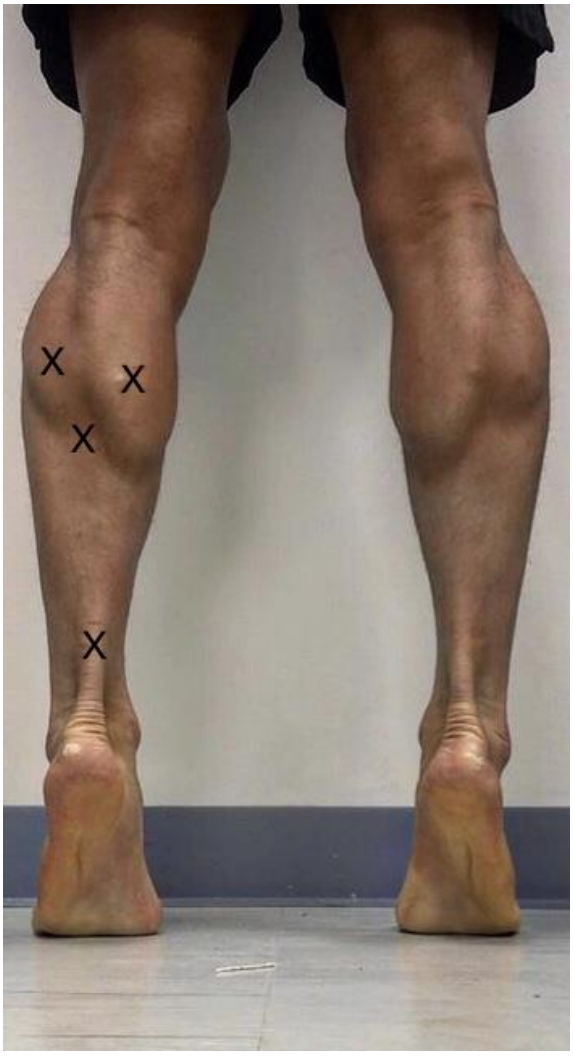
The calves consist of two muscles, which are the gastrocnemius (the one closest to the surface) and the soleus which lies beneath the gastrocnemius and below as well (closer to the foot).

Four main areas we want to target in the calves…

First, we have two points on the gastrocnemius, one on each head.

Below those two points there is a point where the gastrocnemius and soleus meet

Further below you can target the middle of the Achilles tendon.



My preferred way to address these is to first scan the entirety of the area. Roll up and down the length of the calf paying special attention to those areas listed above, as they are the ones most likely to be sensitive.

Once you find a spot or spots to address, you can condense your focus and roll more intently over a particular area.

Unlike broad scanning strokes you'd use initially, the amplitude of your rolling will be less but the frequency of rolling onto that area will be greater, meaning it will get more exposures per unit of time to that specific area than if you were rolling across a broader area.

To get even more focused, you provide direct pressure onto a point that you've identified as being stiff or sensitive. Even if you don't put direct pressure on that area (perhaps the sore spot is too sensitive adding pressure to a very near adjacent area an also have a favorable effect. You

may have to make subtle adjustments to your body positioning to achieve the perfect angle to treat the tissue.

Tissue exists in three dimensions. In other words, the body is not just a flat plane like an anatomy drawing in a book. The implication here is that you'll need to address the tissue from different angles.

Think of it like painting a house. You don't just paint the side that's facing forward.

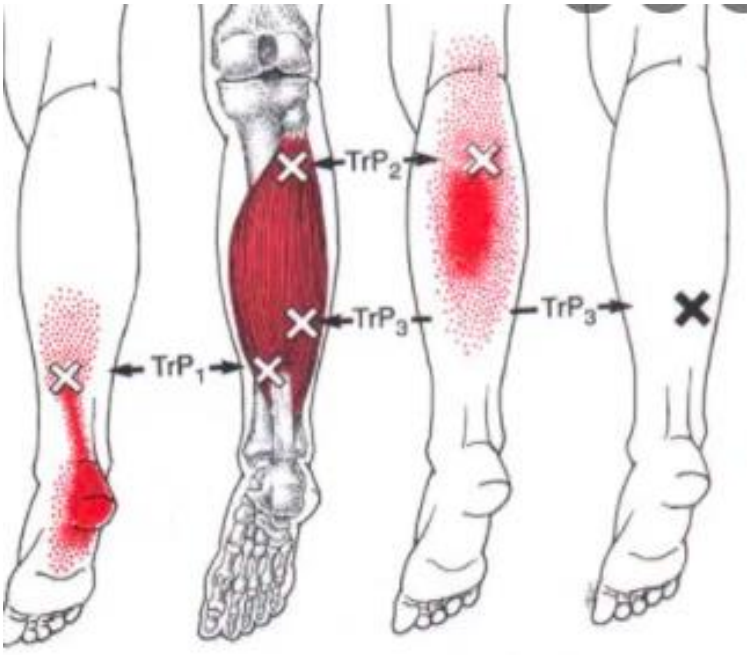
The most intense treatment would be mixing direct pressure with movement.

While pinning a specific area of the tissue, you would take your ankle through different directions including an up-and-down pattern (dorsiflexion and plantarflexion), but also circular and side-to-side.

Not surprisingly, the Achilles tendon is often more sensitive than other areas of the roller, simply due to having less tissue to insulate it from pressure. But if the pressure doesn't bother you, then feel free to use the

roller.

Just note that because it is very “tough” tissue it might be hard to achieve a discernable effect, although by putting pressure on the Achilles you may be influencing other areas of the lower leg.



Working the calf region with the roller can also assist with foot pain, as the tissue along the entire back of the leg works all the way down to the feet.

CHAPTER 05

SHINS

Tibialis anterior
Tibialis posterior
Fibularis longus

The shins are often overlooked, which is understandable given that the shin is a predominantly bony region. In some runners it can be difficult to treat shin muscles with the roller simply because these aren't very large muscles.

But for some runners, using the roller can provide relief they never knew existed. And it can certainly be a welcome improvement to simply icing and resting!

On the outside of the shin, we're treating mainly the tibialis anterior muscles. On the inside of the shin, the muscle we're targeting in the tibialis posterior, although that can sometimes be difficult to access since it lies mainly behind the shin bone.

However, addressing these muscles with the foam roller can be incredibly valuable for treating and preventing shin splints. All too often, runners feel defeated when dealing with shin splints as they don't realize the ways you

can get to the muscles in the area.

We can also include the side of the leg in our shin discussion it can be hard to distinguish exactly where the side of the leg begins and where the front ends.

Addressing these sections can also be helpful to improve motion in the foot and manage any tight spots we're feeling in the foot and around the toes.

CHAPTER 06

QUADRICEPS

Rectus femoris
Vastus Lateralis
Vastus Medialis
Anconeus

The quadriceps, as its name indicates, consists of four muscles on the front of the thigh. For this reason, we'll want to work all the way around the front of the thigh, not simply one region.

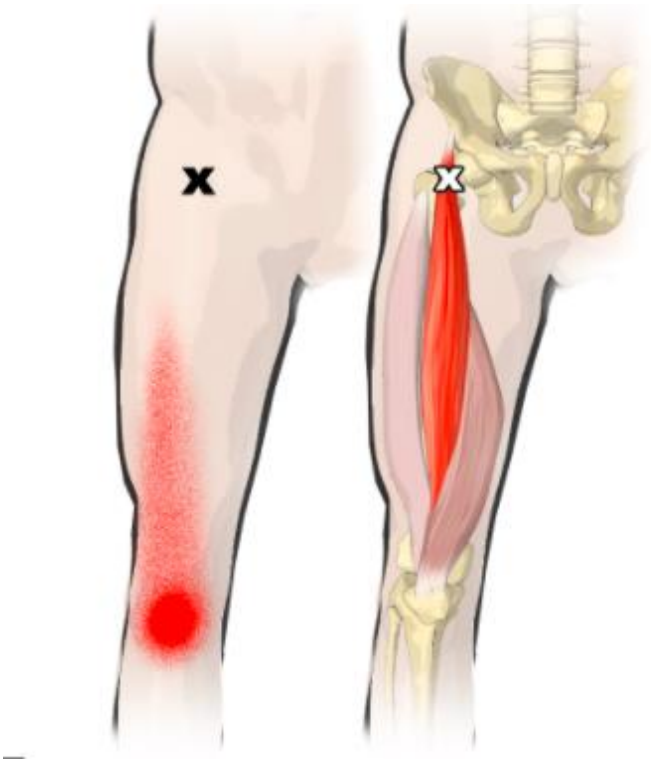
Some of the key areas include the thicker part just to the outside side of the kneecap (vastus lateralis, shown above), a similar muscular section to the other side of the kneecap (VMO, pictured below), and the entire the length up the center of the thigh (cover photo for this chapter).

As with other areas, the quads are fair game for any of the techniques we discussed, but they respond especially well to pressure with movement.

Pick a spot to position the roller, bend your knee as much as you can, then straighten your knee. This should happen at a relatively smooth pace. Something like 1-2 bend, 1-2 straighten. Or 1-2-3 bend, 1-2-3 straighten. You can also pace yourself according to breath cycles.

Addressing the quads can also improve motion at the hip, mainly hip extension which is often lacking.

The quadriceps are mainly associated with straightening the knees, but also has a secondary role as a hip flexor. When tight, it can restrict hip extension in your stride.



Addressing the quadriceps can also alleviate pain on the front of the knee, as tense quads can cause a pulling sensation on the kneecap and provide less room for the knee joint to move freely.

CHAPTER 07

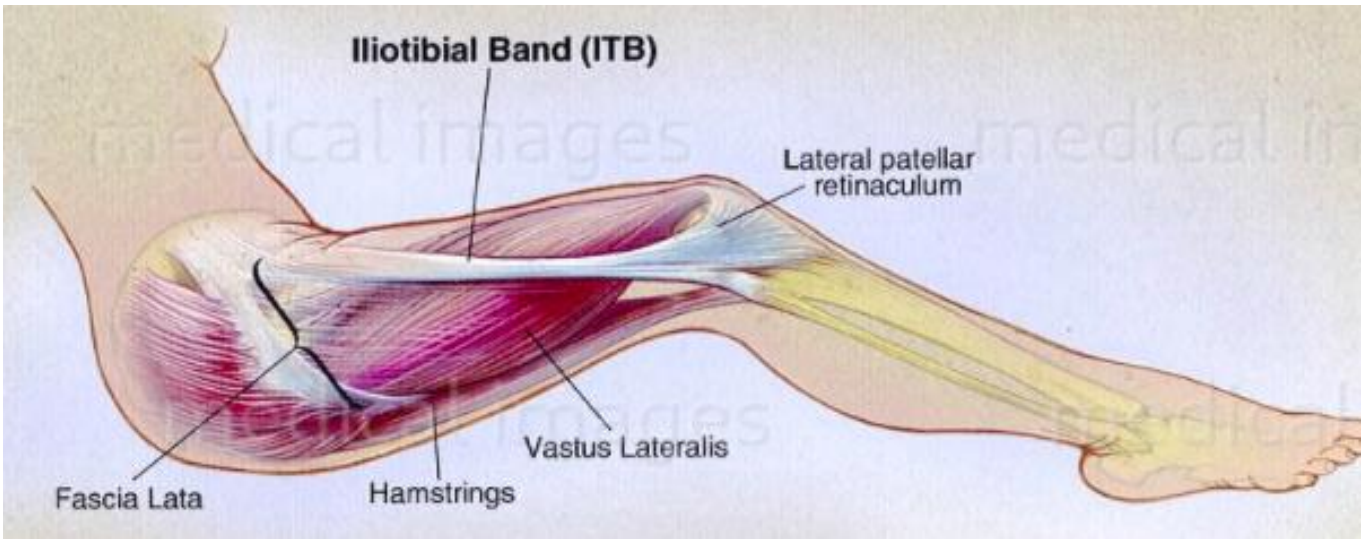
IT BAND

This is often runners' introduction to foam rolling. It was for me. And it can be quite painful, even with only light pressure! Even if you don't have IT band issues, there's a good chance you'll find this quite uncomfortable.

But that also can highlight the importance of doing a check in, as the tissue on the outside of the leg can absorb a lot of stress, especially if the side hip muscles lack stability.

Popular lore often suggests that we foam roll the IT band to "break up adhesions." Although we're making some observable changes to function, it is very unlikely that we're delivering enough force to change the tissue.

Whether we're affecting the IT Band or treating the vastus lateralis (the outside quad muscle) or the biceps femoris (part of the hamstring) is unclear.



For our purposes here, the distinction isn't critical. The main thing to remember with the IT band is to avoid rolling directly on the side of the knee, even though that site is often where we feel the most pain.

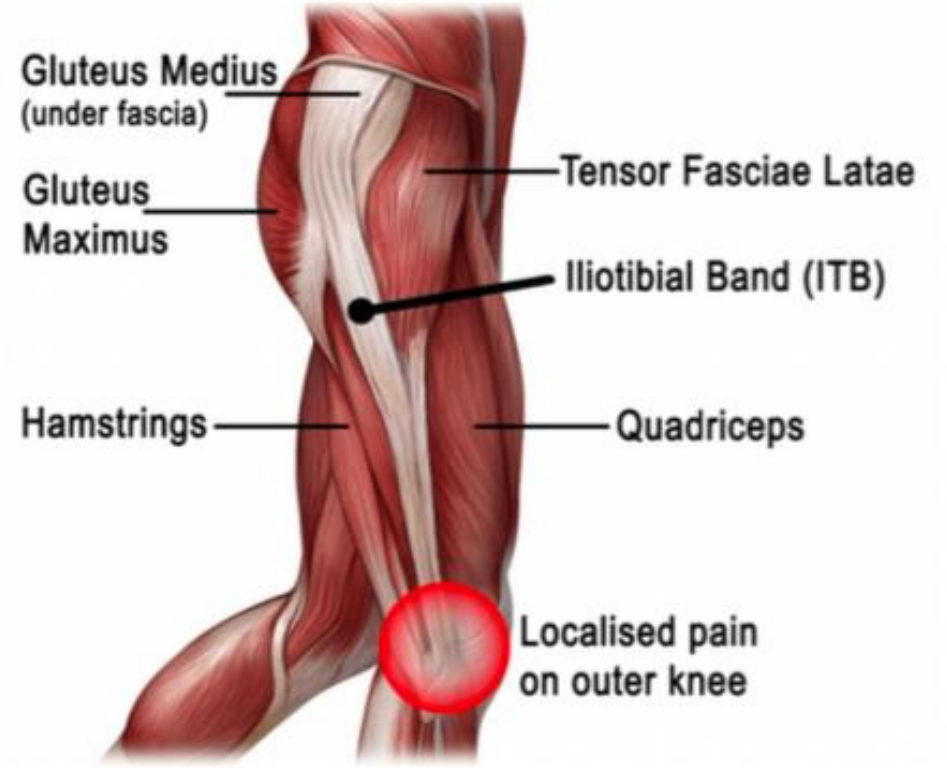
Our intent is that improving the movement along the side of the thigh will relieve some tension off the side of the knee. Since IT band conditions can

often be attributed to compression of the tissue and nerves, giving some attention along other areas of the IT band can ease some of the discomfort caused by compression.

CHAPTER 08

TFL
GLUTEUS MEDIUS

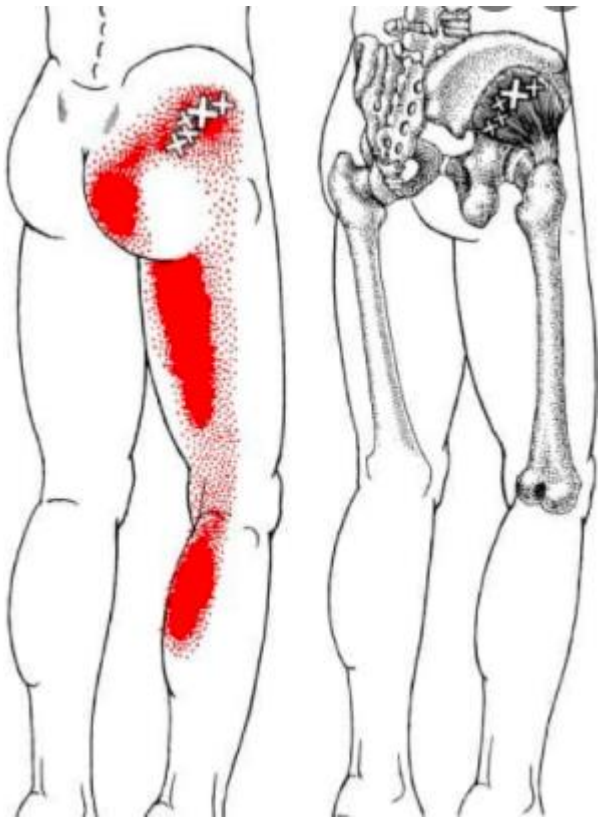
These are separate muscles but for foam rolling purposes they are quite similar. For many IT band cases, you can achieve significant improvement simply by treating the TFL, or tensor fascia latae.



To locate your TFL, find the pointy part on the front of your pelvis and work slightly out toward the side until you feel muscle. As you work back around your pelvis along the same level, between your side pocket and rear pocket you will find your gluteus medius (and gluteus minimus which lives beneath). If you feel the “ball” portion of your hip joint you’ve gone too low.

This is not a broad area, so you likely won't be able to roll very much across; you're probably going to use more sustained direct pressure. These muscles are in part responsible for maintaining a level pelvis and keeping your legs aligned during the single leg stance portion of the running stride. Not surprisingly, they get worked hard and can present with soreness.

Additionally, note that trigger points, or "knots" this area can singularly be responsible for pain further down the thigh. Your leg pain might not even be a hamstring or quad issue but instead could be reflective of excess tension in the hips.



This is often one of the more sensitive areas for foam rolling. Again, just make sure you're focusing on the muscle and not rolling directly on the hip joint.

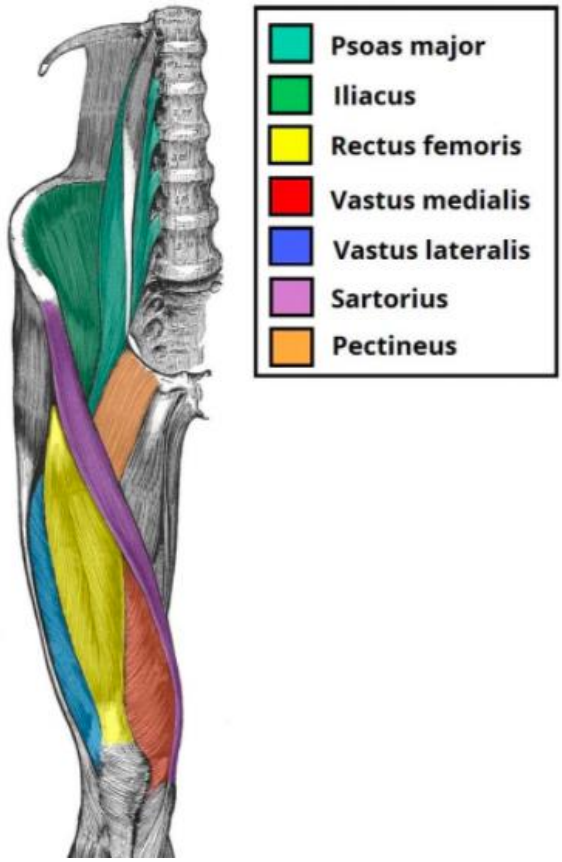
Also be sure to recognize that foam rolling is only one piece of the puzzle, especially for these lateral hip and thigh muscles. Foam rolling may make things feel better and provide some added mobility but to create lasting change we must pair our rolling with some form of strength or balance training to ultimately transfer into our running technique.

CHAPTER 09

GROIN

Adductor Magnus
Adductor Longus
Gracilis
Pectineus
Sartorius

The groin is actually a group of muscles located on the inside of the thigh. Although not a primary muscle involved in distance running, the groin muscles can become stiff from excess strain. The groin muscles contribute mainly toward lateral movements.



However, when the muscles on the outside of the leg lack strength to keep the pelvis level during the single leg stance phase of the running stride, the groin muscles can absorb additional stress, leading to persistent tension and soreness.

These muscles also work harder during trail running due to the intense demands of maintaining balance on varying and uneven terrain.

Another potential cause of groin discomfort in distance runners is limited ankle mobility.

When the ankles can't work through an adequate range of motion during the running stride, you'll often see the feet turned out. When this happens, the groin muscles take on a different role than for what they are intended and contribute more to hip flexion along with their role in maintaining lateral stability.

Overall, the groin muscles respond best to sustained pressure and rolling along the length of the muscles. Although potentially an effective technique, combining movement with pressure can be difficult in this area.

CHAPTER 10

GLUTEUS MAXIMUS PIRIFORMIS

These are very different muscles but because the piriformis lives beneath the glute max. I'll address these together. It is impossible to address the piriformis without going through the glutes. In a sense, piriformis rolling becomes an exercise in how to creatively compress the glutes or push them aside.

This area responds best to direct pressure onto the muscles. To get the best effect on the piriformis you may have to get very close to the rear part of the joint. (Note, this is one of those areas that is sometimes better accessed by a tool with less surface area such as a ball of some type…sometimes you need a hammer, other times you need a screwdriver!).

Be sure to avoid direct pressure onto the hip bone/joint but if you can work directly across from the back of the hip bone, you'll hit the piriformis.

The piriformis helps rotate the hip outward, so if it is stiff and shortened, that may contribute to the common running form of legs and knees collapsing inward.

The glute max is responsible for hip extension, which is when your leg reaches backward during the running stride. If this muscle is stiff, it becomes very difficult to optimize leg drive, which will limit stride length.

CHAPTER 11

UPPER BODY

Latissimus Dorsi
Thoracic Spine

Latissimus dorsi. This is one of the largest muscles in our bodies. We might not think of the latissimus dorsi as critical to running since it lives mainly in the upper body. But it does connect at its lower end to the pelvis. We often see runners striding with tension the arms and trunk, so taking care of our trunk muscles will encourage more freedom in our movements.

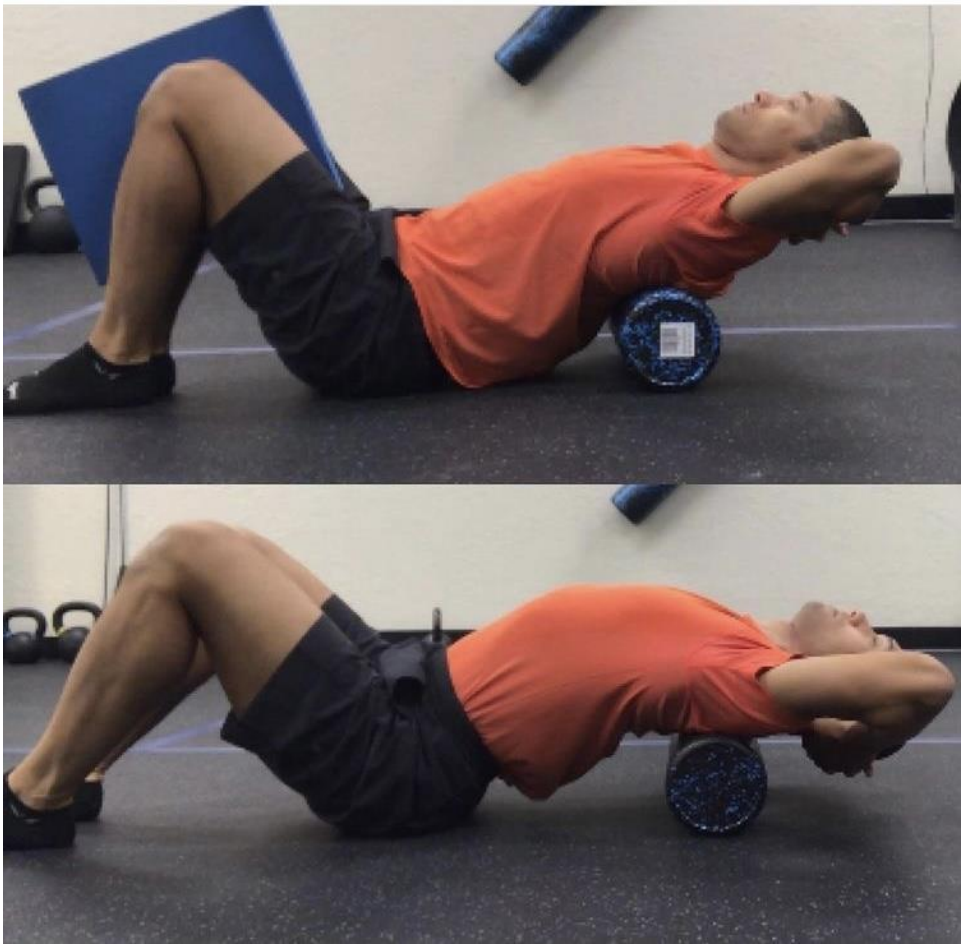
When the lat is tight it can affect pelvic mechanics, which of course can affect lower body function. By keeping the lats supple, we encourage the pelvis to function without interference and circumvent many possible lower extremities injuries.

The lats often respond well not only to direct pressure but also to reaching and rotational motions. The primary functions of the lats include arm internal rotation and extension, which are vital to efficient arm swing.

Below we can see the opening and closing of the rotation while pinning the lat to the roller.

Mid/Upper Back. Another upper body one but equally important. Functional mid and upper back muscles are vital to help posture but also to help open the ribcage, which is essential for unencumbered breathing. The key for this one is to focus on the middle and upper back, not the lower back.

As you bend backward, drive the bend with a fresh inhalation, trying to funnel air deep into your core area, not simply “breathing high” into the chest. Let that stretch release slightly as you exhale. Then repeat as you bend backward again, trying to go slightly further than before.



When you perform this stretch with proper intent by keeping your core braced, you might not get much extension. That's alright. It's more about the intent than the amount. If you're channeling your focus into the mid/upper back, then I'm less concerned with how far back you go.

Why not roll over or bend the low back? The reason lies in the interrelationship between the low back and the hips. If the low back moves too much, it can steal motion from the hips. Ideally, it is the hips that we want to be the source of the leg drive. If we teach our body to move a lot through our low back, we are simultaneously training our hips to move less.

To learn more...

Want to learn more about self-care techniques to support your training and help you run your best?

Want to get help in person to keep you healthy and in training?

Please reach out via my practice at Ventana Physiotherapy or contact me via social media on Instagram at @thekettlebelldoc