FOAM ROLLING

FOR
{ALMOST}

EVERY DERBY SKATER

A GUIDE

Iron Octopus Fitness

What is SMR?

SMR stands for self myofascial release. For the purposes of this resource, the term SMR is going to be synonymous with “foam rolling” because all of the benefits that I’m going to talk about were received specifically with a foam roller.

Foam rolling is a way to manually manipulate the soft tissue inside your body; this includes the muscles, fascia, arteries, blood, and nerves. When you apply the pressure of a foam roller to these areas, they get compressed and this compression has been found to have a number of benefits.

1. **Increased Range of Motion (ROM)**

A number of studies suggest that foam rolling can significantly increase the range of motion of a given muscle post-release. Increasing your range of motion allows for optimal performance of the given muscle or joint attached to the area and can decrease the chance that you’ll suffer from musculoskeletal injuries. (GOOD NEWS!!) While a single time foam rolling can increase your ROM significantly, in order to create a lasting change in your ROM you need to set up a consistent foam rolling practice. ROM of motion can see an even greater increase when SMR is paired with static stretching.

2. **No effect on Muscular Force Production**

It’s become pretty common knowledge that some scientific research suggests that static stretching can decrease the ability of your muscles to produce force. (This decrease only lasts about 30 minutes, which is why suggestions are to only use static stretching AFTER exercise.) However, the use of SMR and foam rolling doesn’t show any effect on muscular force production. That means that you can do it BEFORE you exercise, DURING a bout, or AFTER exertion. (I’ve certainly been known to pull mine out during half time!)

3. **Aids in Recovery**

Foam rolling has been shown to decrease delayed onset muscle soreness (DOMS) and muscle fatigue when done following rigorous exertion. While studies did not indicate that foam rolling would increase the force output of your muscles, the ability to move without soreness and a greater ROM is thought to give athletes the ability to perform better during subsequent activities. Although that is just an educated guess made by the scientific community.

4. **Improves Circulation**

The actual act of foam rolling, and the compression and release that you are doing, affects ALL THE SOFT TISSUES!! Including the arteries. The same way that SMR can reduce stiffness in

the fascia, it can reduce stiffness in the arteries and increase blood flow to the areas that are being foam rolled. This is particularly important on areas of injury as increasing blood flow can speed healing time. (Before you ask, I'm not suggesting that you bulldoze over your torn calf muscle with a foam roller.)

How does SMR work?

The funny thing is that scientists don't seem to know exactly **HOW** foam rolling and self-myofascial release work. The research is still catching up to all the anecdotal evidence of people saying that SMR makes them feel and perform better.

Segen's medical dictionary (2011) defines myofascial release as:

> **"A type of soft tissue therapy used in osteopathy to release physically restricted musculoskeletal groups. It is believed that chronic tension and trauma cause the fascia, which envelop muscle, to become fixed in a particular position, known as a myofascial restriction. Manipulation of the myofascial group is believed to resolve the restriction."**

Here's what that really means:

Your muscles are surrounded by a layer of connective tissue called fascia. (Think of that thin, white skin on chicken breasts.) Through everyday life, chronic overuse, non-optimal movement, and trauma, that layer of connective tissue can go from being pliable to getting stiff and knotting up in places. When the fascia knots up and becomes less pliable, it can restrict the actual movement of the muscle.

One of the reasons that SMR is thought be effective is that it helps to break up and realign the knots within the fascia allowing the muscles to regain their full ROM and move more optimally. But science hasn't fully proven that and there may also be some additional reasons that SMR is useful. Like it might also help your brain and your muscles reconnect which each other so that your mind can actually recruit MORE of your muscle MORE effectively than it could before.

Maybe.

The science is playing catch-up, but most people that begin an SMR practice report feeling better.

That leads me to my ***DISCLAIMER***: Not every muscle needs to be foam rolled all the time. (Or maybe ever.) The best way to know which muscles you have that might benefit from foam rolling is to go see a Physical Therapist. It's their whole job to assess your movement patterns and determine where your kinetic chain might be breaking down. The recommendations below are generalized and should not be taken as a prescription to "fix" any issues that you have. If you try

the SMR techniques below and something feels off or strange. Stop. And go see a Physical Therapist. Or go see a PT anyway. Seriously.

Go see a Physical Therapist.

How does one SMR?

First, you have to have the right tools.

There are A LOT of SMR tools out there since it became all the rage in the fitness community. But the only thing you really need to get started is a foam roller. I have this one and I love it. But you can pick up a foam roller almost anywhere these days.

If you're newish to foam rolling, make sure that the foam roller you choose is soft. I usually test this by pushing my thumb into it. I'm looking for my thumb to sink into the foam a little bit when I do that. ***A foam roller that is too hard will be a foam roller that you don't use.*** So err on the side of softness.

Second, you need to understand what you're getting yourself into.

Foam rolling and SMR can be uncomfortable. That's totally normal. But a lot of people don't understand and aren't prepared for exactly how uncomfortable it can be.

Typically, foam rolling should ***rate between a 5-7 on your 0-10 pain scale***. What does that really mean? It's probably going to hurt, but it shouldn't hurt so much that you can't relax through it. The only way to get an effective foam roll on is to be able to relax the muscle that you're rolling over so that the roller can do it's work on the fascia. If you can't relax the muscle, you need to pregress the exercise to make it less intense. Or consider investing in a softer foam roller.

Third, you need to be prepared to spend some time.

Gains in ROM, recovery, and circulation can all be made with as little as 20 seconds of foam rolling, but are more likely to occur when you're spending 1 ½ to 3 minutes on the area. And because some muscles might have multiple areas of stiffness that need to be rolled over and worked on, it can add up. This is why I do my in-depth foam rolling on an active rest day.

Fourth, you need to make sure it's working.

I like to use a simple flexibility test to measure the effectiveness of my foam rolling. Before I start, I slid my hands down the front of my legs toward my toes. At the first sign of tension anywhere in my body, I stop and make note of where my fingertips are on my legs (or on the

ground). I repeat this flexibility test after each section that I foam roll to make sure that the release was actually beneficial. An increased reach indicates that the release was effective and an unchanged or decreased reach indicates that it probably wasn't. This is called ***biofeedback*** and it can help you monitor your own foam rolling and SMR. (But also, go see a Physical Therapist!)

Fifth, you need to start from the bottom and work your way up.

Kinetic chain dysfunction (imbalances, etc.) are often caused by problems in our lower extremities: lack of ankle, knee, or hip flexibility has a huge impact on all of the rest of your body. Since a lot of problems originate at the feet, you should start there and work your way up through the ankles and all of the muscles that cross that joint, to the knees and all of the muscles that cross that joint, then to the hips and all of the muscles that cross that joint.

As you work your way up your body, you're targeting the most common problem areas first which can actually help loosen up the areas further up before you even get there.

Remember, your body parts (soft tissue, bones, joints, etc.) are all linked together!!

Sixth, you have to choose your battles.

Okay, okay. So this sounds a little threatening. What it really means is that you want to adjust your foam rolling plan based on when you're doing it.

You can foam roll before you exert yourself -- at practice or in the gym -- but you want to stick to the minimum effective dose of rolling: 20-30s. This isn't really the time to sit on those tender spots, it's just to quickly produce the benefits of SMR. Followed by a dynamic warm-up that takes your body through full ranges of motion. (Think of things like unweighted prisoner squats, clamshells, good mornings, etc.)

You can foam roll after you exert yourself OR on an active rest day. This is when you really want to focus on maximum time on each tender area (1 ½ to 3 minutes) and work on all of the areas that need it. On these days and at these times, you can pair your foam rolling with static stretching (toe touches, butterfly stretch, figure 4 stretch, etc.) to maximize your increases in ROM, flexibility, recover, and circulation.

What should I SMR?

The muscles that you benefit most from using foam rolling on can't be determined by me. (PT? Remember?) However, there are a few generally tight or immobile areas that **almost** all skaters can benefit from foam rolling on a regular basis.

So give these 4 a shot. Click on the stills below to access the videos (the password is *SMR4dayz*). Test your flexibility each time. And stop if something feels off.

FEET

CALVES

IT BAND

** I forgot to mention in the video that you can also lean back to create that 45 degree angle on the roller and get the part of your hamstring that is overlapped by the IT Band.

THORACIC SPINE

Now what?

Keep it up! Just like with stretching, the benefits of SMR become more pronounced and more prolonged the more often you practice it. (And, extra bonus, it becomes less uncomfortable the more you do it, too!)

Keep rolling and get kraken!

Prime

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CITATIONS

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