Self-Myofascial Release Foam Roller Massage

How it works.

Traditional stretching techniques simply cause increases in muscle length and can actually increase your chances of injury. Self-myofascial release (SMR) on the foam roller, on the other hand, offers safe benefits and breakdown of soft tissue adhesions and scar tissue in fascia. Fascia is a three dimensional fibrous matrix that interconnects throughout all cells of the body. Fascia surrounds muscles, bones, and joints which gives our body structural integrity and strength.

Abnormal fascia can be the leading cause of chronic pain, reduced flexibility and decreased athletic performance. SMR on the foam roller offers an effective, inexpensive, and convenient way to both reduce adhesion and scar tissue accumulation and eliminate what's already present. Just note that like stretching, foam rolling doesn't yield marked improvements overnight; you'll need to be diligent and stick with it (although you'll definitely notice quick benefits).

Self-myofascial release (SMR) on a foam roller is possible due to the principle known ***autogenic inhibition*****.** A Golgi Tendon Organ (GTO) is a mechanoreceptor found at the muscle-tendon junction; it's highly sensitive to changes in tension in the muscle. The muscle contraction that precedes the passive stretch stimulates the GTO, which in turn causes relaxation and allows for greater range of motion. With foam rolling, you can simulate this muscle tension, thus causing the GTO to relax the muscle. Essentially, you get many of the benefits of stretching without the inherent risks associated with poor technique.

It's also fairly well accepted that muscles need to not only be strong, but pliable as well. Regardless of whether you're a bodybuilder, strength athlete, or ordinary weekend warrior, it's important to have strength and optimal function through a full range of motion. While stretching will improve the *length* of the muscle, SMR helps to adjust the *tone* of the muscle.

How to do it.

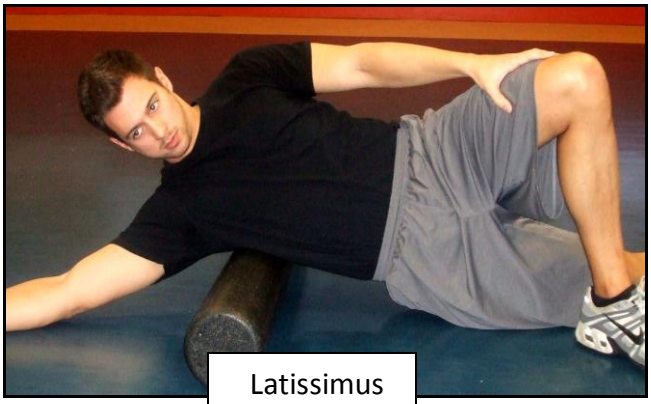
These techniques are actually very simple to learn. Roll at a slow pace and actually stop and bear down on the most tender spots ("hot spots"). Once the pain in these spots diminishes 50% to 75%, roll the other areas. Eventually you will not have sore or painful areas, in which case you roll for ten repetitions as maintenance and prevention. Use the roller prior to physical activity and afterwards to reduce muscle soreness and enhance recovery.

In order to increase the pressure on the soft tissue, simply apply more of your body weight to the roller. The simplest way to do this is by either moving from working both legs at once to one leg, or by "stacking" one of your legs on top of the other to increase the tension. As you get more comfortable with SMR, you'll really want to be bearing down on the roller with most (if not all) of your body weight. You'll definitely want to play around with the roller to see what works best for you. Be careful to avoid bony prominences, though.

It is recommended to work from the proximal (nearest the center of the body) to the distal (away from the center of the body) attachment of the muscle. For instance, instead of working your quadriceps from top to bottom all in one short, shorten your stroke a little bit. Work the top half first, and after it has loosened up, move on to the bottom half. This is an important strategy because as you get closer to the distal muscle-tendon junction, there's a reflex increase in tension. By working the top half first, you decrease the ensuing tension at the bottom, essentially taking care of the problem in advance.

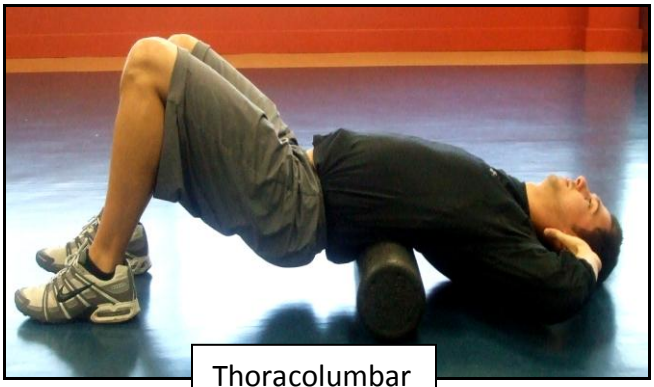
Paraspinals

With your arms behind your head (not pulling on the neck), lie supine with roller positioned in the middle of your back; your glutes should be off the ground. Roll upward, reversing direction when you reach the level of the armpits.



Latissimus

Lie on your side with the same side arm overhead. The roller should be positioned at the attachment of the lat on the scapula in the starting position. You'll want to roll toward the attachment on the humerus (roll toward the armpit).

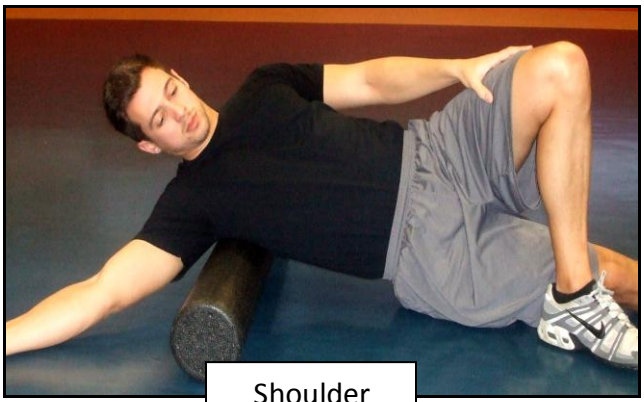


Thoracolumbar

With your arms behind your head, lie supine with the roller positioned under your mid-back. Elevate the glutes and arch backwards without touching the ground. Do not go on the lower spine.

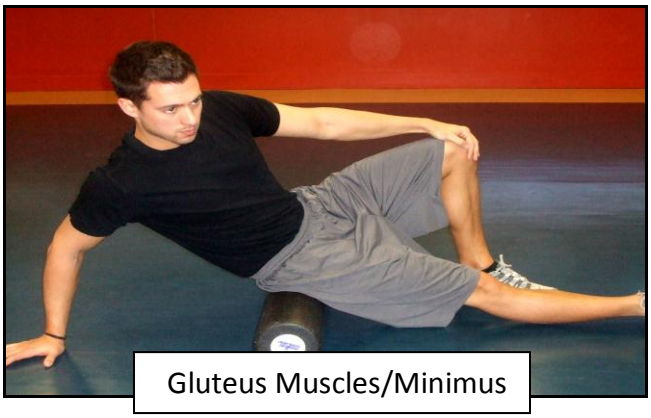
Quadratus Lumborum

With your same side leg extended place the roll in the space between your last rib and top of the pelvis bone. Lift off the ground with the opposite bent leg rocking back and forth leaning backwards.



Shoulder

Lie on your side with the same side arm overhead. (Palm up) The roller should be positioned at the posterior triangle of the shoulder (armpit). You'll want to roll back and forth towards the shoulder blade and lat.

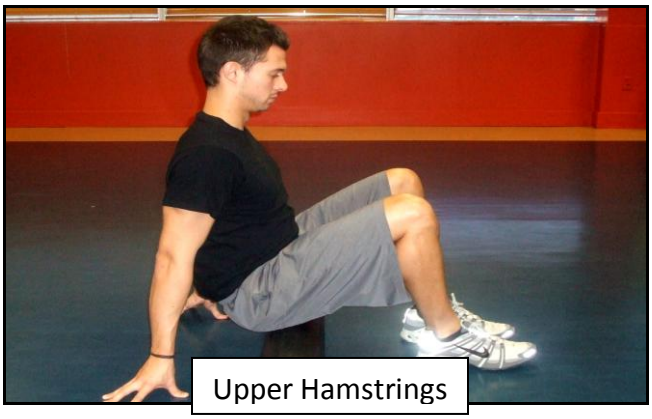


Gluteus Muscles/Minimus

Lie on your side with the "meaty" part of your lateral glutes (just posterior to the head of the femur) resting on the roller. Balance on one hand with the same side leg on the ground and roll that lateral aspect of your glutes from top to bottom.

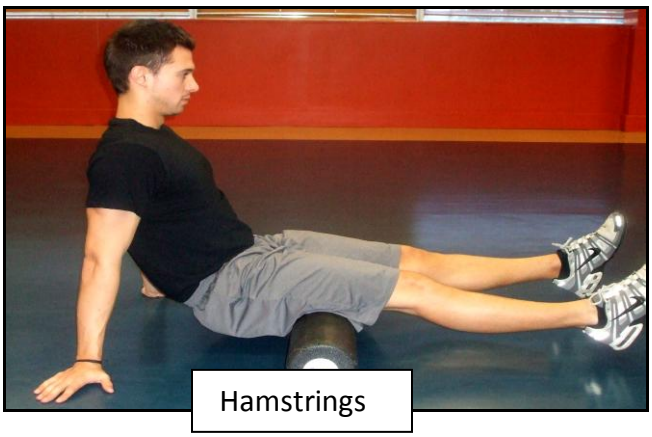
Piriformis

Sit on the side of glute area and cross the same side ankle over the opposite quad. Pull your knee towards the opposite shoulder and using your planted foot and stabilizing hand roll back and forth.



Upper Hamstrings

Balance on your hands and feet rolling over the upper hamstring area. You should be applying pressure directly on and over the 'Sit bone' on both sides (Ischial tuberosity) with a rocking motion.

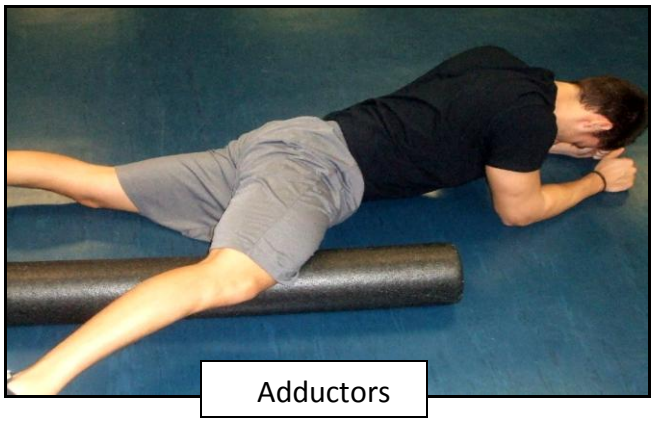


Hamstrings

You'll want to try these with the feet turned in, out, and pointing straight ahead to completely work the entire hamstring complex. Balance on your hands with your hamstrings resting on the roller, then roll from the base of the glutes to the knee. To increase loading, you can stack one leg on top of the other.

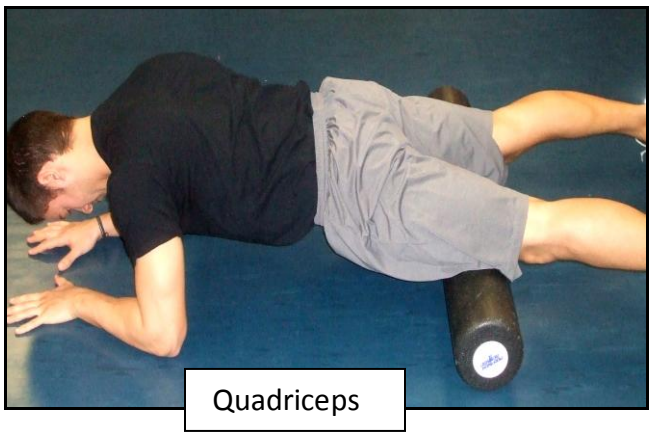
Hip Flexors

Balance on your forearms with the top of one thigh on the roller. Roll from the upper thigh into the hip. Try this with the femur both internally and externally rotated by shifting position of the opposite pelvis.



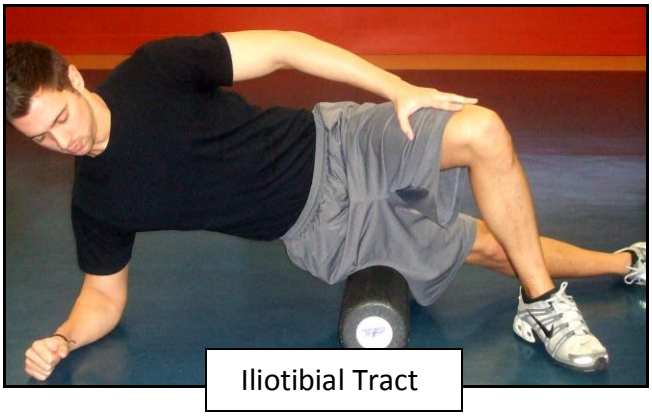
Adductors

Balance on your forearms with the top of one of your inner thighs resting on the roller. Roll from the hip complex to the medial knee. Shift weight towards roller for more emphasis.



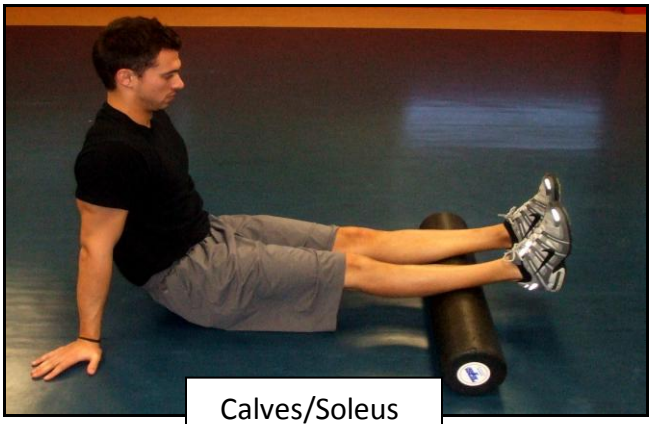
Quadriceps

Balance on elbows face down with quads on roller. Work your way up or down the roller. Turn your feet out to isolate the inner muscle. Shift bodyweight to one side to add more emphasis. You may cross legs to increase pressure even more.



Iliotibial Tract

In the starting position, you'll be lying on your side with the roller positioned just below your pelvis. From here, you'll want to roll all the way down the lateral aspect of your thigh until you reach the knee. Stack the opposite leg on top to increase loading.

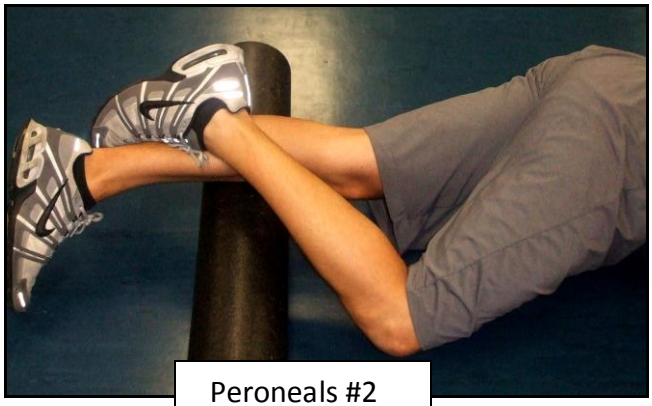


Calves/Soleus

Balance on your hands and roll from knee to ankle. Try this with the toes up (dorsiflexion) and down (plantarflexion). Stack one leg on top of the other to increase loading. Lean towards the outer and inner calf to add emphasis.

Peroneals #1

Kneeling on the roller, balance your body with hands on the floor. Roll from the knee to the ankle, leaning more to one side for emphasis and avoiding direct pressure to the shin bone.



Peroneals #2

Resting on your elbows, place your shins on the roller. Cross over one leg and rest the ankle on top of the calf for emphasis. Roll from the knee to ankle. This takes a lot of core strength so start slow.

Highlights

If you have pain/discomfort which does not resolve or worsens with exercise and foam rolling consult your physician immediately. You receive a Complimentary Consultation and Evaluation with Dr. Perry of the *Pain Laser Center, LLC* as part of your membership package. Office is located here at the Edge. www.painlasercenter.com

Visit the Edge Fitness website for additional information on training/fitness programs. www.edgeworkout.com

Ask any Edge Fitness Trainer or Dr. Perry for additional hands on instruction with foam rolling. We are here to help you.

Full body roller routines should take approximately 10-minutes to complete. You may do body regions depending on the type of training you are undertaking.

It is recommended to foam roll a minimum of 3-times per week and maximum of 5.

Remember to breathe when performing these techniques. Do not hold your breath.