



MUSCLE RELEASE FOR CYCLISTS

Agenda

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- Why is Myofascial Release Necessary?
- A Deeper Look at the Fascia
- Myofascial Pain and Discomfort
- Myofascial Release Techniques
- Why Thera-Roll
- Foam Roll Techniques


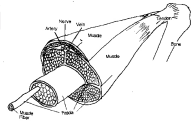


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What is Muscle Fascia

Fascia is a tough membrane of varying thickness which envelops and separates everything in the body from whole muscle groups and bones down to each individual cell, providing protection and communication. It is like a three-dimensional net, reaching right through the body, surrounding individual muscle fibers, tendons, ligaments, nerves, organs, lymph vessels, blood vessels and capillaries. Fascia is entirely continuous throughout the body and a restriction in one area can affect every other area.

Not only is each muscle and muscle group enveloped and separated by fascia, each muscle fiber has a fascial binding which functionally links muscle and fascia.



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Why is Myofascial Release Necessary?

In its normal, hydrated, healthy state, fascia has the ability to stretch and move without restriction. However, when injuries or imbalances exist in the muscles, the muscle fascia will tighten and dehydrate. Restrictions in fascia can result in muscle pain and may give rise to tendonitis.

In addition, nerves and circulatory vessels are wrapped in fascial membranes. Restrictions in these and surrounding fascia can greatly inhibit movement and circulation hindering muscle recovery. Furthermore, the restrictions, inhibited movement and decreased circulation will effect a rider's overall and peak performance.


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A "Deeper Look at Muscle Fascia

Fascia is composed mainly of collagen (40%) and lubricating ground substance. Both muscle with its fascial sheaths and ground substance are 70% water - fascia acts like a sponge. With physical and emotional trauma it dehydrates - water is pushed out - rendering it hard and gel-like, thus reducing the lubricant qualities of the ground substance between the collagen fibers, decreasing the distance between the fibers.

This leads to the collagen fibers shortening, thickening, and sticking together. This puts pressure on the adjacent structures (muscles, nerves, blood vessels). When this happens more collagen fibers are produced, to help take the strain, leading to more density of hard fascia in that area (fascial networking).



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Let's Roll! Foam Roll Techniques

About Thera-Roll®
Thera-Roll® is the product line created by Performance Solutions, LLC. Performance Solutions and the Thera-Roll® product line were created by Kipp Dye, MSPT. The Thera-Roll® foam rollers have been thoroughly tested in a clinical environment and used to facilitate rehabilitation, as well as, enhance athletic performance.

Kipp Dye, MSPT.
Performance Solutions, LLC / OrthoSportsMED™ Physical Therapy

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Foam Roll Techniques
Quadriceps



Targeted Muscle(s)
Rectus Femoris, Vastus Intermedius, Vastus Lateralis, Vastus Medialis

Release Technique
Lie in the plank position and place the foam roller under the quadriceps. Roll over foam roller, concentrating on the area from the top of your knee caps up to the front of your hips. You may also focus on the inner and outer aspects of the front thighs.

NOTE: Don't roll over your knee caps, as doing so will cause irritation.

Variations

Single Leg
For sore and tender muscles, place one leg on the roller to better control the amount of pressure.

Cross Leg
For a deeper release, place one leg over the other.



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Foam Roll Techniques
Hip Flexors



Targeted Muscle(s)
Sartorius, Iliopsoas, Pectineus, Rectus Femoris

Release Technique
Place the foam roller on one leg under the front of the upper thigh. Concentrate over the small area of tissue in the pelvic area.

NOTE: Don't roll over the bony point of the hip, as doing so will cause irritation.



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Foam Roll Techniques
Iliotibial Band (ITB)



Targeted Muscle(s)
Tensor Fasciae Latae, Iliotibial Tract, Vastus Lateralis

Release Technique
Place the foam roller under the upper thigh and lie on your side. Roll over the tissue on the outer thigh between the hip and side of the knee.

NOTE: Don't roll over the outer bony point of the hip or the bony aspects of the knee, as doing so will cause irritation. Taller individuals may find it easier to rest on the forearm instead of fully extending the arm.



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Foam Roll Techniques
Inner Thigh



Targeted Muscle(s)
Adductor (Brevi, Longus, Magnus), Vastus Medialis, Gracilis

Release Technique
Lie in the plank position on the floor and place your inner thigh over the foam roller. Roll over knotted or tight muscle tissue between the inner knee and just below the groin.

NOTE: Avoid rolling over your knee cap or any other bony prominence of your knee.



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Foam Roll Techniques
Shins



Targeted Muscle(s)
Tibialis Anterior

Release Technique
Rest the foam roller under your shins and place your hands on the floor. Roll up and down between the area just below the knees and above the ankles.

NOTE: Don't roll over the knee caps or any bony prominence of the knees. Use caution when using the firm 4 lb. density roller on the tibia.

Variation

One Leg
For sore and tender muscles, place one leg on the foam roller to better control the amount of pressure.



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Foam Roll Techniques
Calves



Targeted Muscle(s)
Gastrocnemius (Medial and Lateral Head), Soleus, Achilles Tendon

Release Technique
Place the foam roller under your calf and roll up and down the calf in a controlled fashion. Focus on knotted tissue and/or exceptionally sore areas.

NOTE: For a deeper calf massage, increase pressure by placing one leg over and onto the other. Avoid rolling over the bony process of the hind foot.

Variations

Single Leg
For sore and tender muscles, place one leg on the foam roller to better control the amount of pressure.

Cross Leg
For a deeper release, place one leg over the other.



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Foam Roll Techniques
Glutes



Targeted Muscle(s)
Gluteus (Maximus, Medius, Minimus)

Release Technique
To release tightness and knotted areas in your hips, sit on the foam roller, move side to side, and roll up and down. Focus on one hip at a time for a more intense muscle release. If needed, place a pillow or a foam pad under your hands.

NOTE: Don't roll over your Sacroiliac joints, located in the back of your hips, as doing so will cause irritation. Avoid rolling over bony prominences of the Sacroiliac joints.

Variation
Assisted Glute Stretch
A second person holds the feet above the floor while maintaining the same flexion (angle) of the hips.



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Foam Roll Techniques
Hip Rotators



Targeted Muscle(s)
Piriformis, Gemellus (Superior, Inferior), Obturator (Internus, Externus), Quadratus Femoris

Release Technique
Sit on the foam roller, crossing one leg over the opposite knee. Roll over the gluteal/hip rotator region with small, deliberate movements.

NOTE: Be careful to release the tissue slowly, as the Sciatic nerve is exposed in this bent hip and knee position and can become sore with overly aggressive rolling.



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Foam Roll Techniques
Lumbar Region



Targeted Muscle(s)
Internal / External Obliques, Erector Spinae, Latissimus Dorsi, Quadratus Lumborum, Transversus Abdominis

Release Technique
Lie on the foam roller at an angle with one leg crossed over the opposite knee. Allow the ridges of the roll to penetrate the muscle tissue running parallel to the spine. This muscle group becomes particularly tight due to lifting, twisting, and having to support the upper body.

NOTE: Exercise caution when rolling over the tips of the lower ribs, as aggressive pressure and friction can cause injury.



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Foam Roll Techniques
Rhomboids



Targeted Muscle(s)
Rhomboids, Lower Trapezius

Release Technique
Lie on the floor and place the foam roller under your shoulder blades. Open up the shoulder blades by folding your arms across your chest. Place your feet flat on the floor, bend your knees, and elevate your hips as needed. Move over the tight and sore spots of the muscles between the shoulder blades.

NOTE: Stabilize your neck in a comfortable position without allowing your head to fall backwards towards the floor.



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Foam Roll Techniques
Thoracic Extension



Targeted Muscle(s)
(Facilitated Stretch) Erector Spinae, Pectoralis (Major, Minor), Rectus Abdominis, Serratus Anterior, Internal / External Intercostals, Anterior Longitudinal Ligament


Release Technique
Lie perpendicular on the foam roller with the roller positioned just below the tips of your shoulder blades. Slowly lean backwards toward the floor and stretch your arms up and out to each side as high as you can.

NOTE: Those with Spinal Stenosis should avoid this exercise. Move slowly to increase the intensity of your stretch gradually. Avoid any bouncing when performing this stretch.



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Foam Roll Techniques
Arch of the Foot



Targeted Muscle(s)
Intrinsic Muscles of the Arch / Foot

Release Technique
Stand and place the foam roller on the floor in front of you. Roll the arch of your foot over the roller. This technique is excellent for loosening the heel, arch, and ball of the foot.

NOTE: Smaller fascial release devices, like the Thera-Roll® 3"x8" roller, is recommended for effective plantar fascial release.



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Foam Roll Techniques

Transverse Arch of the Foot



Targeted Muscle(s)
Intrinsic Muscles of the Foot

Release Technique
Stand and place the foam roller, parallel with your foot on the floor in front of you. Stand on the roller and position your foot with the second toe centered on top of one of the ridges to release tension in the muscles surrounding the metatarsal bones and restore the transverse arch

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Q & A

Questions, Concerns and Cries of Despair.

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Thank You!

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