MENEZES PILATESTM

The Menezes Fascia

Roller



www.fasciaroller.com

A Bit About Fascia and Collagen

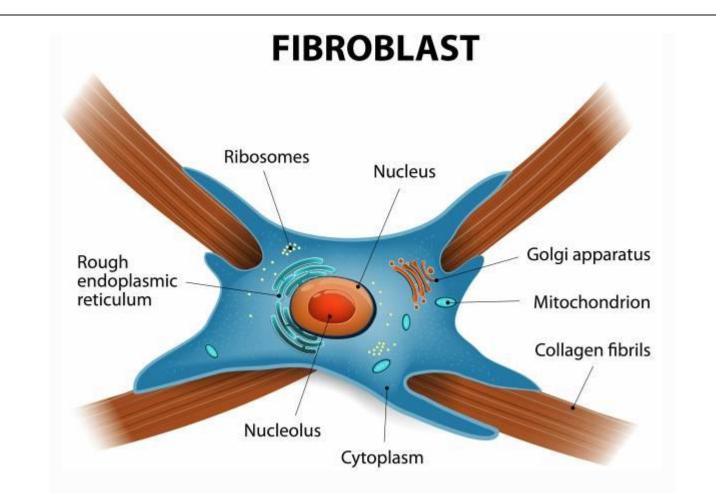
Before we get into the treatment aspect of myofascial release, we have to understand the tissue we are trying to target with these techniques and tools.

Fascia is the basic term used to describe the connective tissues of the body. It's the shiny stuff that covers and divides your new grass fed T-bone into those little compartments before you cook it. This tissue is an amazing creation of nature that fulfils many structural and chemical functions of mammals and is largely responsible for the huge freedom of movement possessed by human beings in particular.

"As light as it is, collagen is proportionally stronger than steel cable. This is part of the reason 'stretching' does not actually affect it."

Collagen is the primary structural component of fascia. This resilient and ubiquitous protein has many functions as it travels uninterrupted through the body. Collagen protein is designed to primarily resist tensile stress and is the stuff of skin, tendons, and ligaments, as well as the coverings of muscle tissues and their different constituent parts.

This amazing material changes fiber density and arrangement based on structural stress, genetic make up, and tissue memory. That's right, *memory*. Fibroblasts (cells that make collagen) actually exhibit the propensity to remember their function.



This dense tissue is arranged in a way that allows maximum distribution of load with minimal framework. As light as it is, collagen is proportionally stronger than steel cable. This is part of the reason "stretching" does not actually affect it.

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In a healthy musculoskeletal system the fascia supports free movement of our muscles and bones through the huge variety of shapes that we see in sport, performance art, and life. When this tissue becomes dysfunctional it is a force to be reckoned with and can be a great cause of movement restriction and pain.

How Do I Know My Fascia Is Broken?

Many times dysfunctional areas of fascia are referred to as knots, ropes, gristle, adhesions, and scar tissue. There aren't actually knots and ropes under your skin. Instead, what we have is mal-alignment of tissue due to trauma and injury, poor motor patterns, and emotional distress. Releasing these tissues is simply creating a biochemical and mechanical change that will give us an opportunity to create more efficient movement patterns in the future.

Here are some things to look for when trying to discover tissue that requires attention:

Pain

Defined as unpleasant sensation accompanied by the tendency to withdraw and/or a reactive regional tension. These tensions can sometimes express themselves as trigger points. Trigger points are defined as an area of dysfunction refers sensation to another area of the body. This often happens in predictable patterns, but not always. Drs. Janet Travell and David Simons were the first to map these patterns with accuracy in their now well-known manual <u>Myofascial</u> <u>Pain and Dysfunction</u>. Many trigger point therapies attempt to shut down these signals with sustained pressure to the areas, which can offer fast relief from pain. This can be valuable but is by no means the complete picture. It's kind of like cutting the wire to the check engine light. The annoying sound you hear while driving is gone but the engine problem still exists.

Inability of skin (epidermis) to slide over subcutaneous tissues

Not only can this cause a disruption of long-term chemical processes in the area, but restriction like this can contribute immensely to inefficient gross movement patterns and cause joints to move off axis and contractile tissues to work much harder to attain the ranges of motion crucial to sport. Many times this leads to inflammatory responses in tissues that are over stressed, and if left unchecked can result in excessive calcium and fat deposits.

Dense areas of tissue

These prevent full expression of range of motion and keep neighboring tissues from sliding past one another. When dysfunctional these areas are often gristly, hard, and do not move well. But just because an area has dense tissue does not mean it's dysfunctional. Squat often? Guess what? Your IT bands will be dense and stiff from transmitting force from your hips into the ground. Are you an athlete who has big-ass bread loaves living next to your spine? Yeah, that's from doing work and it doesn't mean you're messed up.

Most athletes are going to find they have at least one of these issues if not more. Don't be discouraged if you find them yourself. Training and sport put our soft tissues under tremendous tension and stiffness is often part of the game. There are simple solutions that can alleviate most soft tissue restrictions with some diligence.

Fascia Release Tools and Techniques

Pressure Wave/Slow Burn

When we are trying to affect a local relationship between tissues one way to deal with the tissue stiffness is by applying pressure in the direction of restriction and waiting. This can sometimes take thirty seconds or more to begin releasing so be patient. If you're just rolling around you're not doing what you think you're doing. When change is actually being made there may be a burning sensation in the tissue. Don't quit at that point. This is a chemical change taking place and the beginning of release.

How Do I Know if It's Working?

Always do a test and retest. **Perform a movement prior to self-treating and then perform the exact same movement after.** This we way we have a comparison to see if we are making real change. Some things to look for are:

- Pain reduction
- Feeling of ease and smoothness in motion
- Increased range of motion
- Reduced inflammation

Due Diligence

Dealing with fascial dysfunction can be a long-term issue and requires diligence to correct. **However, the human body is incredibly adaptive and wants to move towards health.** Keep at it!

It is important whenever we are deciding to use self myofascial release tools that we always maintain context and ask the important question *why* did this tissue become this way? **Your body is a system of systems and there is no one cure-all answer to any problem.** So, we can best support any mobility work we do by optimizing movement patterns and preventing problems from occurring in the first place.

Adapted by Article on Foam Rolling by Rob Wilson.

Myofascial Release

Myofascial pain is due to what it is commonly called 'trigger points' which can be described as small, hyperirritable areas within a muscle. (Prentice, 2014)

This can then be expressed as referred pain, which means that the pain can occur away from the actual site of irritation.

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Myofascial Release

[my-o-FASH-e-ul]

Definition

1. 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.

Cite: Segen's Medical Dictionary. © 2012 Farlex, Inc. All rights reserved.

Fascia

[fash'ē·ə] pl. fasciae

Definition

1. The fibrous connective membrane of the body that may be separated from other specifically organized structures, such as the tendons, the aponeuroses, and the ligaments, and that covers, supports, and separates muscles. It varies in thickness and density and in the amounts of fat, collagenous fiber, elastic fiber, and tissue fluid it contains. Kinds of fasciae are deep fascia, subcutaneous fascia, and subserous fascia. fascial, adj.

Cite: Mosby's Medical Dictionary, 9th edition. © 2009, *Elsevier.*

During movement, the fascia must be able to move and stretch freely. If there is damage to the fascia due to injury, inflammation, or disease then issues will occur. Like mentioned earlier, myofascial pain tends to be referred, so it will not only affect the site of injury but also radiate to other structures.

Tightness must be released in all areas, and not only the area of injury. To utilize myofascial release to reduce tension, gentle pressure can be applied to the areas over a long period of time.

This pressure can be done using multiple techniques, such as:

- Graston technique
- Strain/counterstrain
- Foam or fascia roller
- Use of a ball to create pressure

The myofascial release exercises below show the use of the Menezes fascia roller. These techniques allow you to utilize this tool without the help of a partner/physiotherapist.

MENEZES PILATESTM

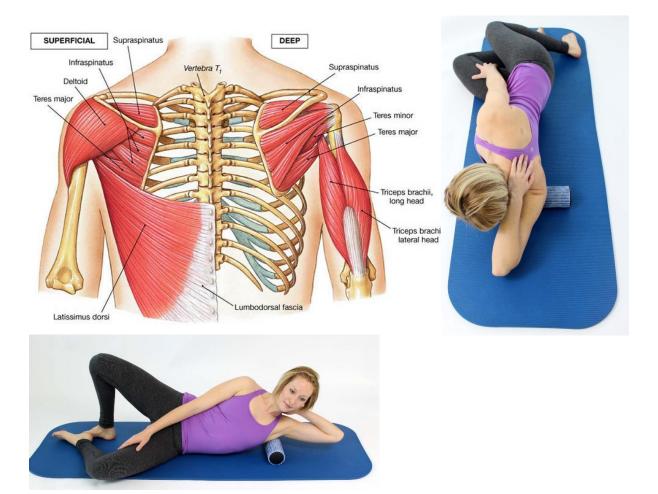
Myofascial Release With

Menezes Fascia Roller

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S-F = *Super-Fit* version, US-F = *Ultra Super-Fit* version

1. LATS and TERES MAJOR



- Lie on your side with the roller placed slightly lower than your armpit, elbow off the ground.
- 1. Roll on the roller side to side from the front of the armpit to the back near the shoulder blade.
- 2. Roll on the roller from the armpit to the lower ribs using slow movement, stopping as recommended on the tight spots that are more uncomfortable.
- You want to be on the teres major and latissimus dorsi muscles, don't roll directly on your ribs.
- Don't roll over shoulder joint or on the armpit!
- Keep the point of the elbow in line with your spine and chin off the chest
- Elbow off the ground
- S-F: Lift the ribs higher off the ground

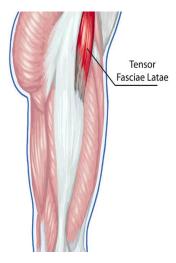
Tight Latissimus dorsi make it difficult to reach the arm directly above the head

Tight teres major limits horizontal adduction, arm elevation, and disassociation of the shoulder

and scapula.

2. TFL (Tensor Fascia Latae)





- Lie on your side with the roller placed between the iliac crest and the greater trochanter
- Roll side to side preferring to move more posteriorly on this movement with feet on the ground to start
- Progress to lifting the bottom leg off the ground to
- S-F: Both legs off the ground!

Because of its attachment to the IT band, TFL often contributes to knee pain, ITBS (Ilio tibial band syndrome),

PFPS (Patellofemoral Pain Syndrome) and even meniscus injuries.

3. OUTER THIGH (ITB)



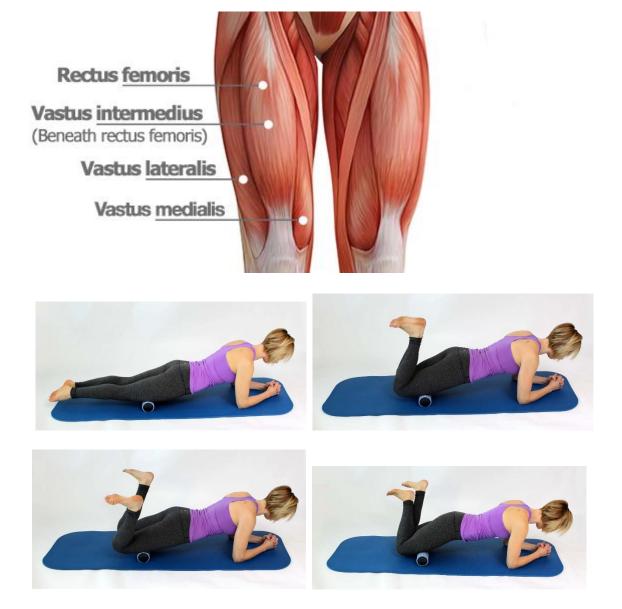
- Place your roller on the floor. Take a side plank position with the outside of one hip over the roller and your other leg in front for support.
- Roll the entire outside of your leg from your pelvis to your knee in an up and down motion keeping the bottom leg off the ground
- Pause at any spots that feel especially tender.
- Avoid the hip bone and knee joint.
- S-F: Can stack legs on top of each other for extra pressure, if needed.
- US-F: Flex at the knee of the rolling thigh

Tight IT band can lead to hip pain, pain right outside your knee.

It helps stabilize your upper legs and integrates them with the lumbar spine, hip, femur (thigh bone), and

knee

4. QUADS



Place the roller on the floor and lie on your elbows with the front of your thighs over the roller.

- Roll the entire front of the thighs from the top of the hips to the top of the knee caps in an up and down motion.
- You should pull yourself with your elbows and forearms keeping the chest elevated
- Pause at any spots that feel especially tender.
- Keep your quadriceps relaxed.
- Tighten abs and maintain proper low back posture during the exercise.
- S-F: Rotate both thighs to one side then the other to ensure you get the inside, outside, and mid thigh.
- Don't roll over the knee joint!
- US-F: Open the feet as wide as possible!

Tight Quads can lead to: Tight lower back, weak hamstrings, knee pain

5. CALVES





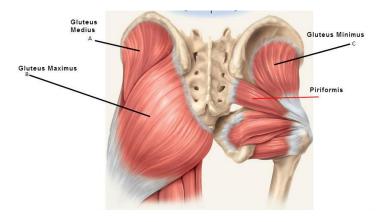
- Place the foam roller between the Achilles tendon (near the heel) and calf muscle.
- S-F: Cross the other leg over the leg being treated to increase the pressure if needed.
- Roll the entire calf in an up and down motion.
- Pause at any spots that feel especially tender.
- Keep your calf relaxed by keeping the feet pointed
- Rotate the leg to get the inside, outside, and mid calf.
- Don't roll over the knee joint!
- •

Kneeling upright, place the roller behind the knees and sit on the roller keeping the body upright

- Place as much weight as possible on the roller and slowly swing your hips from side to side, keeping the shoulders still
- 1. Shins parallel
- 2. Knees together feet wide open
- 3. Toes together, knees wide open

Tightness in your **calf** muscles may be the cause of plantar fasciitis, ankle sprains, or other conditions that affect your foot and ankle. Your **calf** muscles may also become **tight** if you have foot drop or weakness in your anterior tibialis muscle

6. GLUTES – PIRIFORMIS



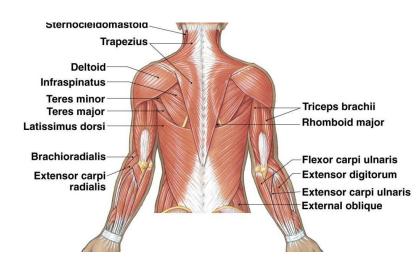




- Sit on the roller with knees at a right angle.
- Place your hands on the floor behind you and cross left ankle over the right knee
- Tilt the pelvis all the way over so all your weight is on your left cheek
- Roll up and down as well as back and forward
- S-F: Wrap the right arm around the left knee
- US-F: Place the left elbow on the floor and roll all the way to the top of the iliac crest

Tight Gluteals can lead to: soreness or tightness in the buttocks, pain or soreness in the hips, tight hip flexors, low-back pain, tight hamstrings, knee pain, pelvic pain or instability

7. THORACIC - UPPER BACK

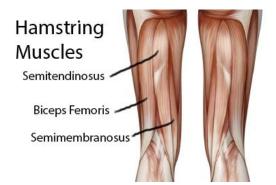




- Lie on your back with your knees bent and the roller just below the shoulder blades.
- Place your hands in TOP position and lower your head as close as you can to the floor until you feel a stretch behind your back.
- Pause for a few seconds, curl the head up by drawing the ribs to the hips. Press the head into the hands 5%. Release and repeat several times.
- Straighten out back and move the roller up or down the back a few inches and repeat. Do not move into the lower back
- S-F: Roll the spine up and down the roller from the top of the shoulders to just below the lower ribs (NOT into the lower back). hands supporting the back of the head and backside just scraping the floor, using your legs to move you
- US-F: Keeping the lower core activated, with the roller just below the shoulder blades, roll from side to side and the low back curled, and the chin tucked throughout the exercise.
- USB-F: Wrap the arms around the front of your torso and roll from side to side.

Tight thoracic para spinal muscles can be caused from sitting at a desk or working at a computer, driving, sitting in a lounge

8. HAMSTRINGS



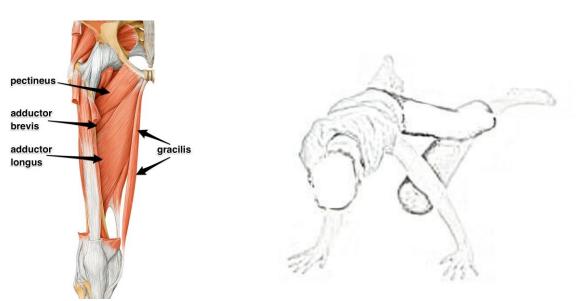


- Place a foam roller on the floor and sit on the floor supporting yourself with your hands. Place the back of one thigh over the foam roller and the other leg on the floor for support or sit on a box (photo)
- Roll the entire back of your thigh from the bottom of the buttock to your knee in an up and down and side to side motion.
- Tighten abs and maintain proper low back posture during the exercise.
- Pause at any spots that feel especially tender.
- Don't roll over the knee joint!
- S-F: Place supporting leg on top of the other leg to increase pressure.

5 Reasons for tight hamstrings:

- Protective tension major anterior pelvic tilt
- Neural Tension -tingling? Possible sciatic tension
- Truly tight hamstrings loss of neutral spin on one hip flexion
- Previous hamstring strain
- Acute hamstring strain or tendinosis injury
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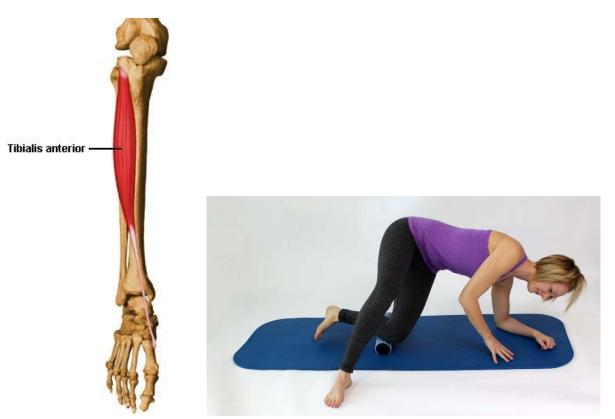
9. ADDUCTORS



- Place the roller on the floor and lie on your stomach with the inside of one thigh over the roller and your other leg straight on the floor for support.
- Roll the entire inside of your thigh from your groin to your knee in a side to side motion.
- Tighten abs and maintain proper low back posture during the exercise.
- Pause at any spots that feel especially tender.
- Don't roll over the knee joint!
- Sit upright and bend one knee up and drop it open.
- Place the roller against the inner thigh and, pressing with both hands or forearms, roll the roller up and down the inner thigh

Tight adductor muscles can cause knee, groin, and hip pain

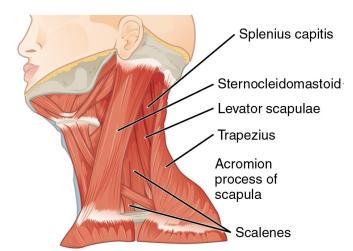
10. TIBIALIS ANTERIOR



- Kneel on the roller to the outside of one shin.
- Use the other leg for support as well as the elbows or hands on the ground
- Placing as much weight as you can bear, roll up and down the outside of the tibia, pointing and flexing the foot in the process
- S-F: Place both shins on the roller! There will be minimal pressure on the medial side of the nonperforming shin, but because of this position, more weight will be placed on the working side
- Requires balance!

Between tibialis anterior and the peroneals all acting on the foot in opposing ways, the fascia can get clogged, tight, dehydrated or stuck...ANY of these actions of the foot could become confused leading to dysfunction (or pain) anywhere downstream of the knee – the ankle and retinaculum, the tops of the feet and toes, the plantar fascia, pain with eversion or inversion...and possibly pain upstream as well, due to gait changes or how the ankle affects the knee which affects the hip, etc

11. NECK

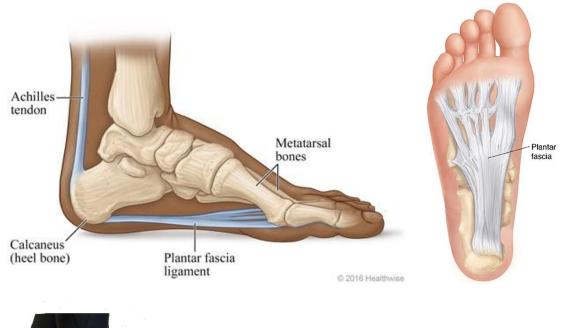




- Place the roller under the neck butted up against the cranium (use the hands to hold it there if it slides towards the mid part of the neck).
- Roll the head from side to side against the cranial wall and occiput
- This may be uncomfortable, but bear with it and move SLOWLY!
 - Allow the roller to roll lower down mid neck and roll side to side there.
 - If there is more muscle 'bulk' (tightness) on one side there may be a 'bump' as you roll over the muscle. Move slowly
 - S-F: Keep your head vertical and place the right hand against the right temple and apply more pressure as you roll the head to the LEFT ONLY and back to the centre and then to the left again. Repeat several times before switching hands and switching sides.

Tight neck muscles can lead to headache, neck pain, shoulder pain and/or arm pain.

12. PLANTAR FASCIA





- Place the roller under the arch of the foot and, holding onto a wall or similar, for balance, STEP with all your weight onto the roller, so minimal weight is on the foot on the ground.
- Keep stepping on and off the roller with the same leg, gradually moving up and down the arch of the foot towards the calcaneus and the metatarsals.
- Do this several times before repeating on the other foot.
- DO NOT place both feet on the roller at the same time to avoid it rolling from under you and landing on your butt!!

S-F: Stand on the outside of the foot and the inside arch of the foot as well.

This can be quite painful, so bear with it as much as you can.

For those with plantar fasciitis, avoid the painful part of the foot and work around it.

Plantar fasciitis is most often associated with impact and running sports, especially those that involve toe running rather than heel running styles.

It is also commonly diagnosed in individuals with poor foot biomechanics that stress the plantar fascia. Flat feet or weak foot arch control muscles are two common causes of plantar fasciitis.