



Beyond The Basics: Utilizing Your Foam Roller For Fascial Release

Presented by Elysia Tsai, M.Ed., ATC. Elysia is a NATA Certified Athletic Trainer with a Bachelor of Science in Athletic Training and a Master of Education in Developmental Kinesiology specializing in Sport Psychology. Working in the sports medicine industry for over 15 years she has utilized foam rollers with her athletes. Questions and comments- please contact her at elysia@si-boards.com or 714-809-5109.

Introduction

Fascial tissue is the strong and pliable connective tissue covering the muscles and bones and helps suspend the organs. Myofascia surrounding the muscle bundles together to create the tendons of the muscle. It is responsible for tissue gliding and fluid, ion, oxygen and toxin exchange. When this tissue becomes dehydrated and dense, it constricts the muscles.

Think of a plastic bag to store food. When the bag is simply sealed with some air in it, you can still move the food around and shape the bag. If you vacuum sealed the bag and deprive it of any oxygen and air space, the food inside becomes dense and hard to move. Tight fascia is like vacuum sealing your muscles.

Fascia is connected throughout the body in a dense network and spans over multi-joint structures. Tight and restricted neck fascia can cause pain down to the hand. This domino effect causing referred pain to other areas of the body can cause confusion in properly assessing and treating injury.

The fascia wants to be the superhighway of your body with all lanes open and free from traffic jams. One way to keep your body in great working order is to address fascial dysfunctions. There are several types of myofascial release techniques either done by the self or a practitioner.

Foam Roller Techniques

Body Scan:

First scan your body as you roll on the foam roller to assess any areas of tightness or pain. Areas that feel tight or extra painful can be trigger points and an area of dense restrictive tissue. Roll 5-10 times over an area for general warm-up and to mobilize the tissue.

Constant Pressure:

The second technique is to apply specific pressure on those trigger points/areas of tightness while staying in a constant position. Apply pressure for 30-90 seconds or until you feel at least 50% relief. This technique can be very painful for beginners. If you are extremely uncomfortable do not push past your limit. The tissue needs time to adapt to the pressure and slowly release over 90 seconds.



Constant Pressure With Muscle Movement:

The third movement is to apply constant pressure from the foam roller and move your body through range of motion. This essentially applies pressure to one area and requires the muscles to stretch and glide over that pressure. This active release technique can also be painful for beginners.

Active Rolling While Stretching:

The fourth movement is to actively roll on the foam roller as you strength and lengthen that body part. This elongates the muscle further and can open areas of tight restriction.

General Guidelines When Using The Foam Roller

First time users may be sore 24-72 hour later due to myofascial release, toxin release and new body positions. Imagine being stuck in one position for several hours then trying to move your body- it's stiff and painful to move. Your tissues will experience the same.

Drink plenty of water- add 1-2 extra liters to your daily regimen to flush out toxins you just released. Drinking water helps rehydrate your cells.

The more you foam roll- the easier it gets and with quicker results. If initially doing a lot of static moves and 90 second holds, you will need recovery days between sessions. Once you get to the point of tissue maintenance and you are not experiencing excessive trigger points, you can do a daily full body sequence in 15 minutes.

If a movement is too painful then alter your body weight position, do less repetition or do not do the movement. Either the position is incorrect (on bony structure), the foam roller is too dense or you need to ease into the movement.

For muscle spasm and trigger point release, hold the position for 10-15 seconds or until pain is 50% improved. Some positions may need up to 90 seconds.

Be careful in thoracic spine mobilizations. If you have disc issues or instability you should not do the movements unless approved by your doctor. Normal populations may experience some "popping" in the spine with the thoracic movements. The popping should not be painful. If any pain lasts longer than 3 days you should see your doctor.

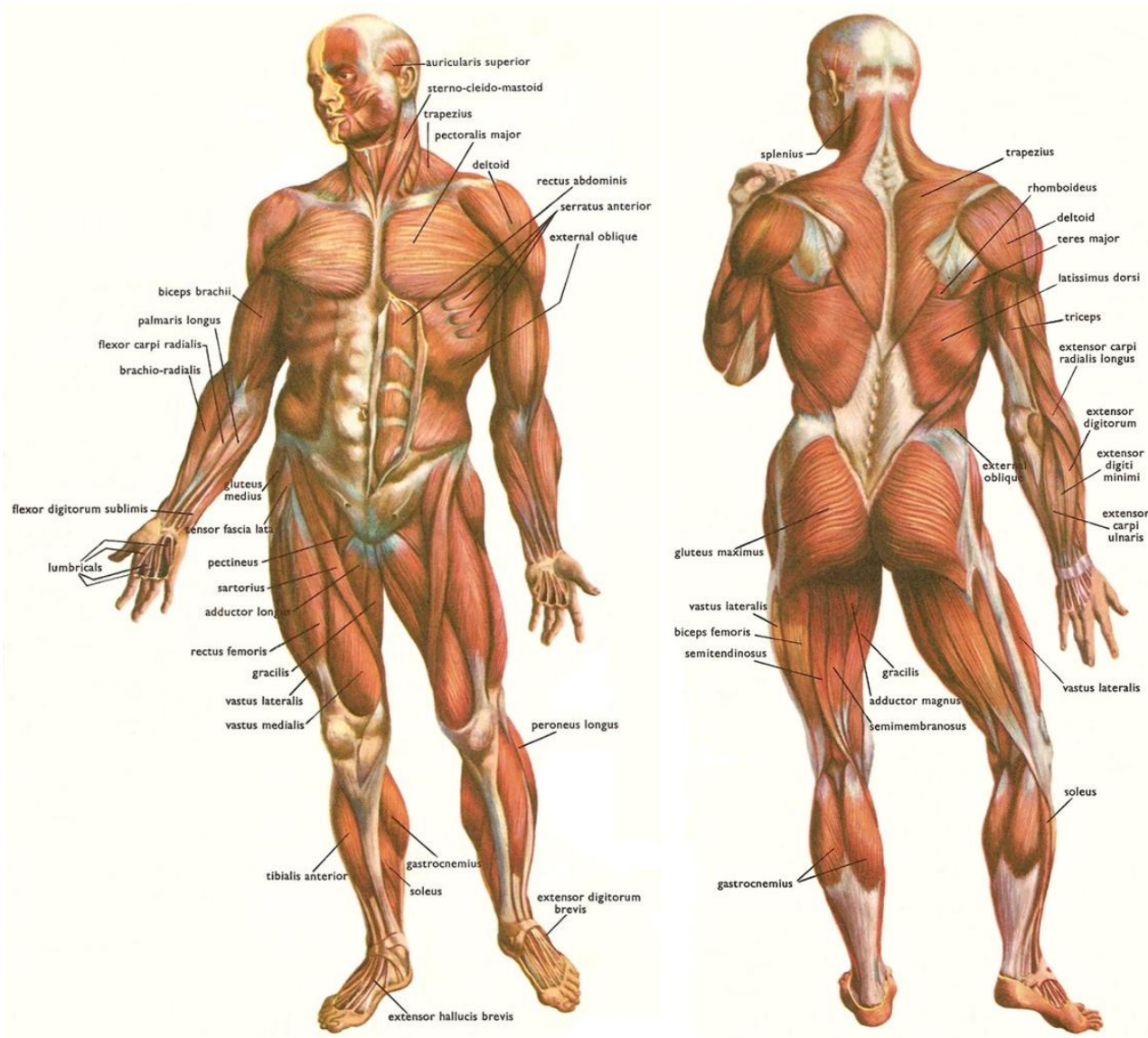
Practice deep breathing for better results. As you inhale visualize a healing energizing light and visualize exhaling stress and toxins. Cleansing breaths help increase the oxygen that has been deprived to your muscles.

Gently roll on the foam roller and change positions. This is a refinement of movement and gentle stretching. The idea of "more is better" does not apply.



Do not push past your pain tolerance. If you cannot relax your body because the pain is too great, you need a softer foam roller or padding. Being tense only further increases tissue restriction.

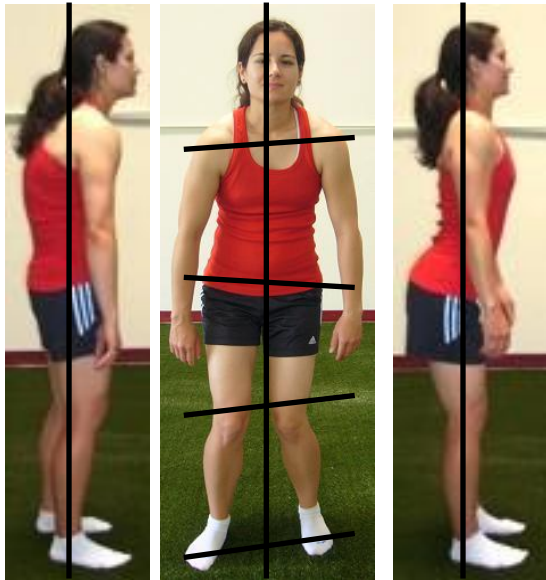
An anatomy chart is useful to see the body structures. I encourage you to become more familiar with anatomy, trigger points and fascia.





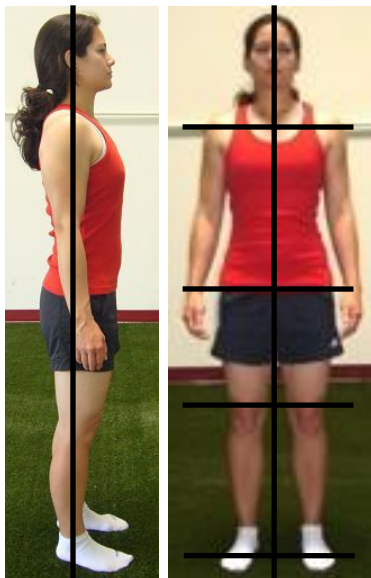
Getting Started- Before You Begin

Body Assessment: Look at yourself in the mirror from the front and side. You can use a ruler or plumb line to see alignment. Being aware of your body position will help you target areas of tightness, weakness and overall health.



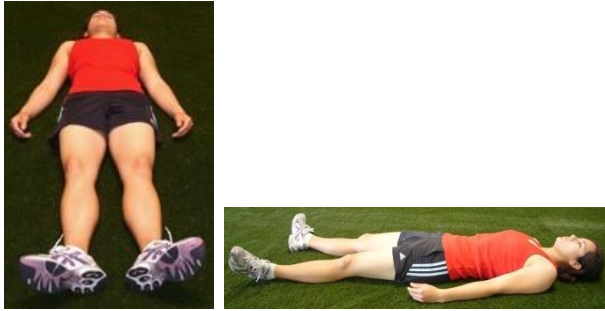
Standing Posture: Assess from the front, side and back

- Start at feet and work up to your head
- Foot arch and Achilles tendon position
- Rotation and forward stance of foot vs. foot
- Lower leg rotation, knee angle and patella height
- Hip ASIS (anterior superior iliac spine) height and rotations
- Pelvic tilt- forward, backward or neutral
- Spine curvature- lordosis, kyphosis and scoliosis
- Shoulder height, rotation and distance from chest
- Shoulder blade protraction, retraction and spine distance
- Rotation of hands and contraction of biceps
- Position of head and earlobes forward, to the side or tilted
- Breathing style



Proper Posture: Requires less energy and is the basis for good movement

- Arch keeps curvature upon standing/stepping pressure
- Feet are in alignment both forward and rotation
- Knees have equal gap between them and in line with hips
- Knees do not knock or bow outward
- Neutral pelvic position in line with shoulders and ankles
- Hands and thumbs face forward without bicep contraction
- Arms are relaxed and have good carry angle
- Chest is not sunken in and 2-3 inches past shoulders
- Shoulder blades suck in and do not curve outward
- Stomach is flat and ribs do not meet or extend from pelvis
- Head is level and not tilted to one side
- Head and earlobes in line with shoulders, hips and ankles
- Ankles, knees, hips, hands, elbows, and shoulders are level



Body Stamp: Lie on your back, close your eyes and breathe gently. Feel and compare the following:

- Heaviness of head, shoulders and butt
- Contraction of fingers, wrists and biceps
- Contact of low back and hips on ground
- Rotation of feet and hips
- Heaviness/flatness vs. contraction and tightness
- Breathing ease

Opening the Chest: These require shoulder movement while the foam roller requires the rib cage to expand. Concentrate on smooth movements and take note of any sticking points. Do not force yourself past a sticking point, instead gradually work into the motion. As your arm is extended to stretch the chest take a big inhale to expand the diaphragm, ribs and chest. When your chest and anterior structure are restricted it will alter your posture and shoulder mechanics.



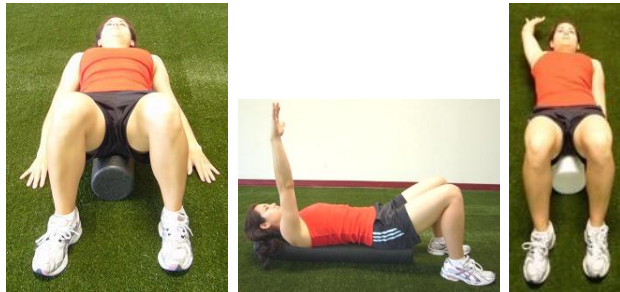
Starting Position: Lie on foam roller from head to sacrum

- Head must be supported by foam roller
- Pelvic tilt to comfort, feet wide for stability and hands at hips with palms facing up
- If the foam roller is too painful you can use a rolled up bath towel or perform on the ground.



One Armed Snow Angel: 3x each side

- Palms face ceiling and back of hands remain on floor. With right arm straight and in sweeping arc movement, drag fingers to overhead position
- Reach up with right hand and down toward heel with left hand to create a right side elongation and left side scrunch
- Big breath in and return hand during exhale



Back Stroke: 3x each side

- Palms facing ground at start and with straight arm
- Backstroke right hand to overhead position with fingers sweeping the ceiling and the palm ends facing ceiling
- Slightly push your hands into ground
- Big breath in and return hand during exhale



Chest Fly: x2 and hold each side for 10-15 seconds

- Open up arms to below shoulder height with palms facing ceiling. You may adjust arm height higher or lower
- Slightly rotate body and foam roller to the left to stretch right chest and shoulder
- Repeat each side and take 3 breaths each side



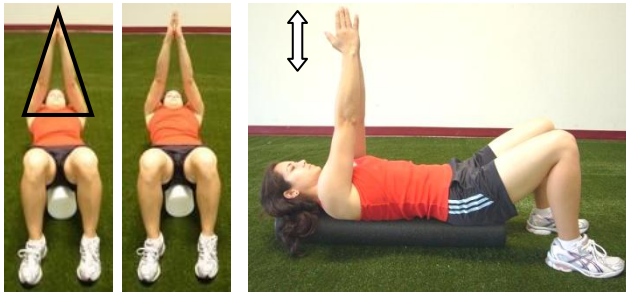
Arm Circles: 3x each rotation with cleansing breaths

- With hands in prayer position drive hands through top of head, inhale, rotate palms outward and sweep hands toward hips
- At hips bring hands together, exhale and return to prayer
- Repeat 3 times sweeping cleansing breaths up from abdomen and head
- Reverse direction and start in prayer position, move hands toward pelvis and inhale as hands open and face the head
- Sweep arms above the head, hands together and exhale back to prayer position
- Repeat 3 times sweeping cleansing breaths from head to abdomen and back into body
- Squeeze the shoulder blades during these motions to open the chest



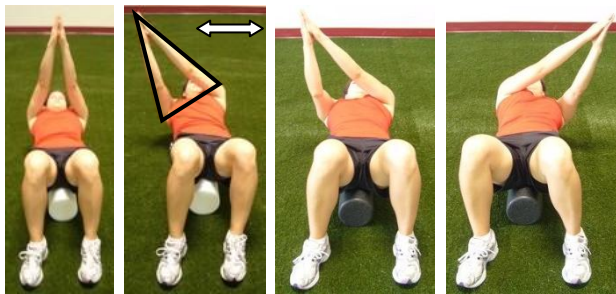


Scapular Rhythm: Place palms together with arms straight and extended at shoulder height. This creates an isosceles triangle with equal side length. Maintain this form by moving shoulders and shoulder blades in opposite directions. You should always be able to see the triangle. Complete repetitions until motions are smooth and equal. If you lack good scapular motion or have restrictions this will alter proper shoulder mechanics.



Ceiling Push: x10 or until motion is smooth and equal

- Bring shoulder blades off foam roller and push fingertips toward ceiling. Return and let shoulder blades contact roller
- You may notice one shoulder drops down faster or is “jerky” when moving upward or downward



Side to Side Sweep: x 10 total or until motion is smooth and equal

- Move both arms to the right without breaking form. Right shoulder sucks backward as left shoulder comes forward
- Move both arms to the left without breaking form
- You may have to work into greater range of motion



Corkscrew: x10 total or until motion is smooth and equal

- Rotate arms and hands into ceiling without breaking form. Palms will slightly rotate as arms rotate
- Right shoulder raises as left shoulder depresses to complete the movement
- Do not break form at the wrist or collapse the forearms together

Body Stamp Check: Gently roll your body on the foam roller left and right on each side of the spine. Then slowly roll off and lie flat on the floor. You may feel as if you don’t have a spine. Body stamp again and reassess for areas of tightness.



Back Massage, Thoracic Extension and Trigger Point Release: Lie horizontal on the foam roller with your upper back supported. Bridge your butt off the ground and push with your feet. Only roll from the base of the neck to the diaphragm area of the mid spine. **DO NOT** roll on the lower lumbar spine. Relax your head and support it with your hands. Do not pull on your neck or head with your hands. The purpose of these moves is to find areas of tension/pain and release them with constant pressure. Thoracic/mid back opening is also important to overcome tight structures on the front side of the body.



Latissimus dorsi and trapezius roll with thoracic mobilization: x10 roll and position hold for 10 seconds

- Keep your elbows out and wide and roll from base of neck to diaphragm area with controlled exhales as you move toward the neck



Rhomboid roll with thoracic mobilization: x10 roll and position hold for 10 seconds

- Keep elbows in toward ceiling and roll from base of neck to diaphragm area with controlled exhales as you move toward the neck. Bringing the elbows together exposes the rhomboids



Latissimus dorsi stretch and side bend: x10 roll and position hold for 10 seconds

- Keep elbows wide and side bend to one side bringing your elbow close to your knee
- Maintain thoracic extension and relax your neck. Avoid pulling up on your head. Roll 10 times on each side



Latissimus dorsi and teres side rotation: x10 roll and position hold for 10 seconds

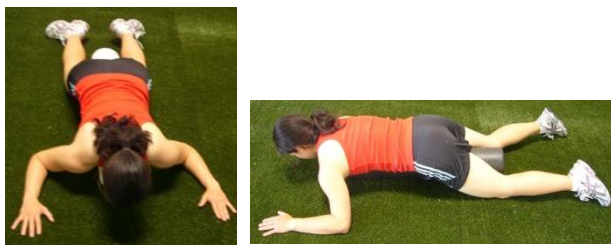
- Keep elbows wide and rotate onto the edge of your shoulder blade
- Maintain constant pressure on this sensitive area and then roll 10 times on each side



Latissimus dorsi and teres stretching: x10 roll and position hold for 10 seconds

- While on your right side extend your right arm over your head and rest on the foam roller just under your armpit
- Take caution to not lie on your armpit. Your lymphatic nodes are located within this region

Additional Front Opening Positions: These alternative positions will open the chest and stretch the back. Breathe gently and take note of the stretch with subtle rotational movements in each position.



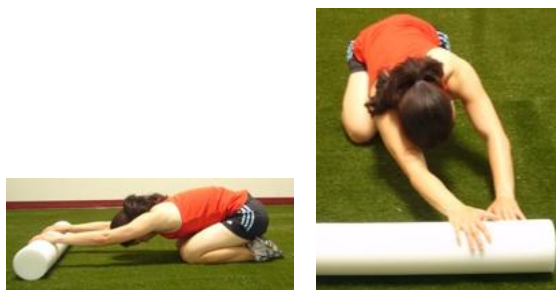
Sternum mobilization: hold position and gently rock side to side

- Caution with this movement over the breast area
- Lie on your stomach with the top of your sternum and top of your pubic bone supported by the foam roller



Pectoralis stretch: position hold for 15 seconds each side

- Place your right shoulder and elbow at 90° angles with your forearm and elbow on the foam roller
- With the left hand gently push-up and rotate left shoulder away from the ground. Look away and past your left hand



Child's Pose latissimus and pectoralis stretch: position hold for 15 seconds. This pose has 3 positions- left, center and right

- Sit back on your heels and place your hands overhead supported by the foam roller. Relax your head to the ground
- Take your hands to the left side and relax your right hand. Gently push the foam roller forward with your left hand and dip your right shoulder down. Repeat on other side

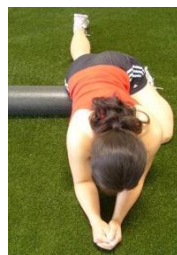


Posterior shoulder and latissimus with axilla stretch: position hold for 15 seconds. This can be done with 2 foam rollers

- Position foam roller to the left side of your body while in Child's Pose. Place left hand above head and on the foam roller
- Place the back of your right hand on the foam roller. Arm should be positioned under your left armpit. Gently roll your right hand away from the body and sit back



Upper Leg Massage, Active Release and Trigger Point Release: Use both legs on the foam roller for less pressure. When more pressure is desired only use one leg on the roller. Your body weight is supported by your hands in push-up position then to elbows in plank position. Caution with one leg positions if you have pelvic alignment issues. Push and pull using your hands to roll. Keep your upper body strong and stable to avoid dipping your chest between your shoulders.



Psoas and hip Flexor muscles: position hold for 10 seconds

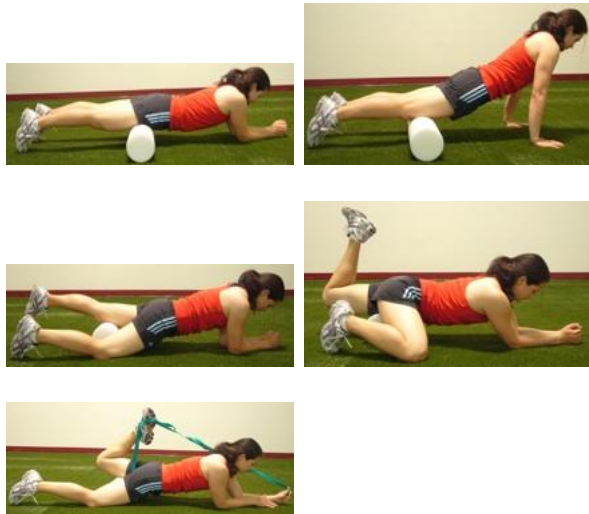
- Place foam roller perpendicular to right side of body
- Position right front pelvis on the foam roller just under ASIS and next to pubic bone
- Leave left leg long or you can bend at the knee and tuck under body. Repeat on other side



Adductors and inner thigh: gentle rolling and position hold for 10 seconds

- Place foam roller at 45° angle to right side of body
- Position right inner thigh on foam roller next to pubic bone. Bending at the knee will stretch the muscles. Gently roll to the inside of the knee
- Leave left leg long and gently move your pelvis to help rolling





Quadriceps, sartorius and quadriceps tendon: x10 roll with position hold for 10 seconds

- Position foam roller at 90° to body and start at the top of the thigh. Roll to the top of the knee. Beginners should start with both legs on roller then progress to one leg
- Rotate your legs and feet to get specific sections of your upper thighs
- Advance this movement with knee flexion of heel to butt as you move the roller from the knee to the hip. Slowly lower your leg straight as you move back toward the knee.
- A second alternative is to pull the heel with a stretching strap
- You may also hold a position on a spasm and gently flex your knee and move your heel to butt



Modified Cobra stretch: position hold for 15 seconds

- Same position as above with bottom of thighs on the foam roller
- Advance this position by squeezing the glutes together, bending the knees and lifting the chest



Tensor fasciae latae (TFL): position hold for 10 seconds

- Lie on your right side and position right hip on foam roller just under iliac crest. Careful not to roll on the hip bone
- Support your upper body with your hand or elbow in plank positions
- Bend left leg at the hip and knee and place foot on the floor in front of right knee



Iliotibial Band (IT Band): x10 roll and position hold for 10 seconds

- In same position as previous exercise except, lie on foam roller just under greater trochanter with your right leg. Careful not to roll on the thigh bone
- Push against the ground with your left foot to roll on your right side. Roll to the top of the knee keeping the lower leg straight
- Slightly rotate your lower leg to get different sections of the IT band



Gluteus muscles and piriformis: position hold for 10 seconds

- In same position as the TFL, move the top leg behind the straight leg. Place the foot behind the leg next to the knee. This positions the body slightly backward. Roll or hold
- Sit on the foam roller with good posture and bend at the hips. Cross your right leg and place your right heel on your left thigh. This position stretches the piriformis muscle
- Slightly rotate from side to side and find a position. You can gently roll or hold the position



Hamstrings: x10 roll and position hold for 10 seconds

- Position yourself face up with your hands supporting your body from behind
- Place the back of your thighs on the foam roller near the back of your knee. Push yourself forward and roll to the top of your butt just below the ischial tuberosity. Careful not to roll on the butt bone
- Rotate your legs and feet to the sides to get different sections of the hamstrings
- Advance this movement by bending at the waist as you roll toward your butt
- A second option is to use a stretching strap around the foot and stretch the toes and foot back as you roll toward the butt



Lower Leg Massage, Active Release and Trigger Point Release Use both legs on the foam roller for less pressure. When more pressure is desired only use one leg on the roller. Your body weight should be supported by your hands behind the body.



Gastrocnemius, soleus, peroneals, posterior tibialis and achilles tendon: x10 roll with position hold for 10 seconds

- Start with the tops of your heels on the foam roller and push yourself to the top of the calf
- Rotate your legs and feet to the sides to get different sections of the calf
- Advance this movement by dorsiflexion of the toes towards your head as you roll up to the top of the calf
- A second option is to use a stretching strap around the foot and stretch the toes and foot back as you roll upward





Anterior tibialis and peroneals: x10 roll with position hold for 10 seconds

- Place the front of your lower legs on the foam roller as you tuck your legs under your body. Your heels should be under your butt and your body weight supported by your hands in front of you
- Curl your knees into your chest and roll to the tops of your ankles. Push backward and extend your legs and roll to the bottom of your knee
- Rotate your feet to each side and roll to the outsides of your legs to get the different sections of the lower leg
- Advance this exercise by pointing your toes as you roll toward the bottom of your knee



Plantar fascia and arch of foot: x10 roll

- Best done with wooden foot roller or hard ball
- Either stand or sit with your foot resting on a roller
- Roll the sole of your foot from the heel to the base of the toes
- Advance this movement by pulling your toes upward

Presented by Elysia Tsai, M.Ed., ATC. Elysia is a NATA Certified Athletic Trainer with a Bachelor of Science in Athletic Training and a Master of Education in Developmental Kinesiology specializing in Sport Psychology. Working in the sports medicine industry for over 15 years she has utilized foam rollers with her athletes.

Elysia is also the creator of Si Boards balance boards. For detailed information on balance boards, medicine balls, rope balls and balance training systems go to www.si-boards.com

For detailed information on sports medicine, sports performance training tips and product buyer guides go to www.siboarder.com

Questions and comments please contact Elysia at elysia@si-boards.com or 714-809-5109.

Have a great day!