# A GUIDE TO THE FOAM ROLLER

Presented By:



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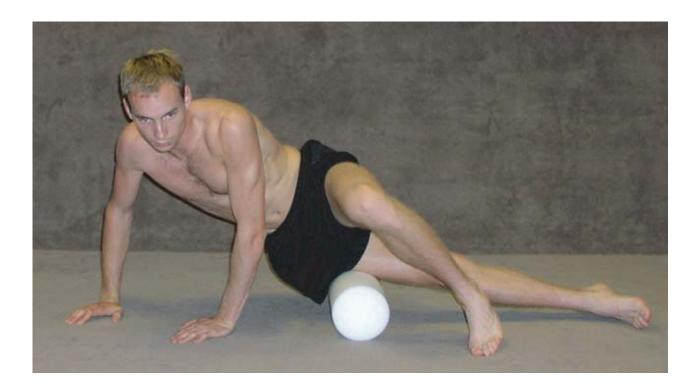
Sports Medicine Institute International

# Why Use the Roller?

We at SMI have found that the foam roller should be an integral part of every athlete's daily routine. Regular use of the roller can be beneficial for enhancing performance, preventing injuries, and expediting injury recovery. It is a great way to warm up cold muscles for deep, specific stretching, as well as a way to warm up muscles before activity. The roller is also an effective way to loosen up muscles, such as the IT Band and shin muscles, that may be difficult to access with conventional stretches, as well as focusing on tight knots or bands within a muscle. Furthermore, the roller helps to act as an early indicator of when muscles are beginning to tighten up even though you may not feel any tightness when performing an activity. In order to get the most effective results, use the roller prior to stretching. We have included a list of areas that may benefit from the use of the roller as well as effective positions for accessing these areas. (There are certain areas where it is important to simply place the roller and apply pressure rather than rolling over the tissus. These areas have been pointed out under the individual descriptions.

# How to Use the Roller.

Always stay on the muscle tissue and do not roll on tendons, joints, or bony structures. Do not roll over areas that are too painful or that don't roll smoothly. It is more effective to start by placing the roller on the sensitive or knotted spot and gradually increasing the amount of pressure. Remain on the tight spot until the muscle releases but no longer than one minute. Always roll before stretching. (Use of the roller is only recommended under the supervision and/or guidance of an athletic trainer or health care professional.)



# **Back and Neck**

(If you have a history of disc problems, consult your physician before using the roller on your back or neck.)

#### Neck (Be careful not to over treat.)

To focus on the right side, turn your head to the right and place the roller at the base of your neck. To move higher, lift your neck off the roller and place it back down just above the previous spot. DO NOT ROLL ON THE NECK!





#### Back

Position the roller longitudinally along your spine. To focus on the right side, roll to the right and stop on the muscles that run along the length of the spine.

#### Back

Start with the roller positioned appropriately as shown in the picture. Slowly move your body over the roller by "walking" with your feet.





Low Back (Be careful not to over treat.)

Position the roller as shown, between your ribs and pelvis. Slowly roll backwards just enough to feel the stretch and pressure on the muscles of the low back.

# **Gluteal Muscles, IT Band and Lateral Quadriceps**



**Gluteal Muscles (posterior) and External Rotators** 

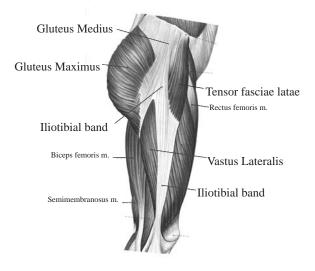
Treatment is shown for right leg. Place roller as shown. Use your left leg to move your body. Adjust the rotation of your body to find tight areas.

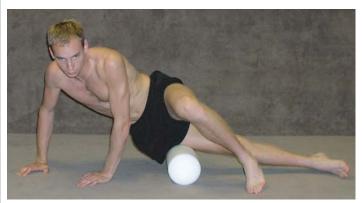
#### **Gluteal Muscles (anterior) and Tensor Fasciae Latae**

Treatment is similar to that for the posterior gluteal muscles except your left leg is now in front of your right. The pressure is applied more to the side and front of the hip.



# **Right Hip and Upper Leg**





Iliotibial Band (less pressure)

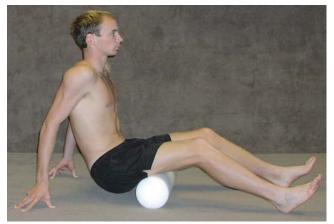
Roll from the pelvis down the outside of the leg. DO NOT roll onto the knee itself. Use your left leg to control the amount of pressure.

#### **Iliotibial Band (more pressure)**

This time place the left leg on top of the right so that your feet do not touch the ground at all. Progress to this particular version only after being able to handle the previous position without a problem.

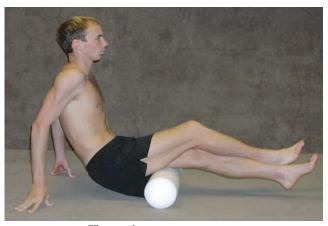


# Upper Leg Muscles



Hamstrings

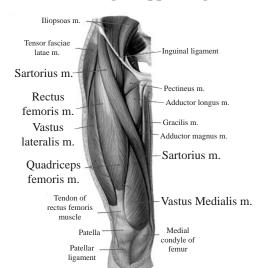
Start with the roller right below the bony protrusion at the top of your legs. Turn slightly to the right or left to focus more on the inside or outside of the hamstrings. Roll down your leg until right above the back of your knee. DO NOT roll over the back of your knee.



Hamstrings (more pressure)

The positioning is the same as before except the left leg is now crossed over the right. For added pressure push down with the top leg.

**Back of Right Upper Leg** 



## Iliotibial tract Gluteus maximus m Inferior cluneal nerves Posterior femoral Gracilis m. cutaneous nerve Semimembranosus m. astus lateralis m. Semitendinosus m Biceps femoris m. Semimembranosus m. Tendon of Biceps Gastrocnemius m femoris m.



Quadriceps

focus more on the inside or outside of the leg.

#### Quadriceps (more pressure)

Roll from the bottom of the pelvis to above the knee joint. DO To increase the amount of pressure, cross the left leg over the NOT roll over the knee. Turn your body to the right or left to right. For even more pressure push down with the top leg.

### **Front of Right Upper Leg**

# **Lower Leg Muscles**



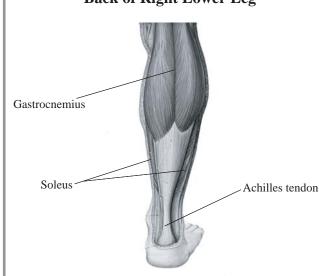
#### Calf Muscles

Support body weight with hands and calves only. Do not sit on the floor. Roll from the heel to the top of the muscle belly, using your upper body to move over the roller. To increase pressure cross one leg over the other and press down with the top leg

### Medial Calf

This variation can be very effective at accessing the medial (inside) calf muscles along the tibia. For the left leg turn onto your left side and apply pressure along the side of the shin bone. Pressure should not be applied onto the bone itself.





#### Back of Right Lower Leg

#### Patella Medial condyle of tibia Patella Fuberosity of tibia Gastrocnemius m Peroneus longus m. Tibialis anterior m. Soleus m. Extensor digitorum longus Medial surface of tibia Peroneus brevis m. Tendon of tibialis anterior Extensor digitorum longus m. Extensor hallicus longus m. Extensor retinaculum. Medial malleolus Tendon of peroneus tertius m, Tendon of extensor Tendons of extensor digitorum longus m hallicus longus m.



#### Shin Muscles

Position the roller as shown. Support body weight on shins and hands. Roll from below the knee to the ankle. DO NOT roll directly on the shin bone.



**Peroneal Muscles** 

Place the roller as shown in the picture. Keep your hips off of the ground. Roll from below the knee to right above the ankle. Do not roll over bony protrusions. To increase the pressure put your opposite leg on top of the leg being treated.

### Front of Right Lower Leg



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**SMI** is a non-profit public benefit corporation dedicated to the prevention and treatment of overuse injuries, optimization of human function and enhancement of athletic performance. Through education, research and the operation of a charitable therapy clinic and human performance lab we help active individuals and athletes of all abilities maximize their potential and function at the highest level possible.

### FACILITIES

SMI provides the highest level of care in the best possible environment. Our facility boasts nine private rooms for advanced manual therapy and a Physical Therapy clinic specializing in performance enhancement and the treatment and prevention of overuse injuries. Our newly constructed Human Performance Lab allows physiologists to conduct sophisticated exercise testing that complements our therapy services and provides our clients with the most advanced level of care available in the Bay Area. Our community center acts as a locale for athletes of all levels to stretch, strengthen, use cold hydrotherapy tanks, discuss training and just get together after hard workouts; all of which are free of charge to SMI clients, athletes and patients.

### DONATIONS

SMI is a Public Benefit Nonprofit Corporation 501(c)(3) organized exclusively for education and charitable purposes. We are an institute, clinic and community center whose mission is to promote research, clinical development and delivery to the public of functional health services and advanced manual therapy treatments, particularly in the fields of injury prevention, injury rehabilitation and athletic performance. It is a further purpose of this corporation to support under-funded competitive amateur athletes from the youth level through the collegiate and post-collegiate levels, by offering affordable services and financial assistance. Our donation programs are designed to help subsidize the reduced rates that we offer our beneficiaries. If you have any questions regarding donations please contact our Development Manager Rachael Holloway at 650-322-2809 x329. Please keep in mind that donations made to SMI are tax deductible. Our federal tax ID # is 94-3256879.

### LEUKEMIA AND LYMPHOMA SOCIETY/ TEAM FRIENDS

SMI has developed a partnership with the Leukemia and Lymphoma Society's **Team In Training** (TnT). We provide TnT with injury prevention, stretching, strengthening and injury rehabilitation services. SMI staff provides support for TnT with coaching, injury prevention and rehabilitation, strengthening and stretching. SMI has also developed partnerships with other Bay Area Teams and organizations. These include **Team Sheeper**, **TRIbe Triathlon**, **Team Diabetes**, **Asha** and **Joints in Motion**. All Team in Training members and Team Friends receive a discount on SMI services.

