

“Injury Prevention with the Foam Roller”

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The use of various foam roller devices is gaining popularity in the fitness and rehabilitation world. The rollers vary in size and density, but the 6-inch x 36-inch roller pictured below is the most common. They are produced in different colors which can indicate different densities (black is typically a high-density roller), but not always. Typically the rollers are quite firm and do not compress, making them effective for self-massage or myofascial release, postural exercises, and core stability workouts (common in Pilates). Skin, muscles, and other underlying tissues are separated by layers of fascia which can become adhered with injury, strain, or normal “wear and tear” associated with training. These adhesions, along with regular tightness in the muscle, can impede performance and lead to further soft tissue or joint injuries. “Knots” or “trigger points” are created in the muscle, which often have inadequate blood supply and don’t respond well to pulling or stretching. They require more indirect release methods such as those described below. Additionally, “rolling out” tight muscles such as the IT Band, piriformis, calf, and quadriceps on the roller can be an effective way to improve flexibility. Some of these techniques were highlighted in last month’s article on hip pain. There is no set protocol for repetitions, sets, or duration with self massage on the roller. But once a tender point is identified, we recommend maintaining direct pressure on the point for 30-60 seconds, and repeat 2-3 times on each point. For general massage or myofascial release, roll over the muscle 10 times or for a maximum of 1-2 minutes. With these techniques, you can spend a total of 5-10 minutes on the roller, twice daily and achieve results. Using the roller once after workouts and one other time the same day is recommended. If soreness increases, allow 1-2 days between for recovery. In general the tenderness should decrease after the first few sessions.



Quadriceps



Piriformis



IT Band



Calf (gastroc-soleus)

For postural conditions, there are many effective foam roller exercises. The pictures below illustrate 3 basic versions we use in the clinic. With aging, most individuals adopt a slouched posture, forward head, and rounded shoulders. Many neck, shoulder, and back conditions are related to posture and the amount of sitting, driving, reading, and computer work we all do on a daily basis. The foam roller is a great tool to treat postural dysfunctions and the adverse effects of these activities. Lying supine with the roller along the spine and the head supported as shown, put the arms straight out to the side and let the hands rest on the floor. Relax completely and take nice deep breaths for 1-2 minutes in this position, and also with the arms bent 90 degrees, and with the arms overhead. For the last 2 exercises, the hands may or may not touch the floor. As with the myofascial release exercises, spend a total of 5-10 minutes in each session, especially at the end of the day. ENJOY!

