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## LET'S ROLL !

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In a perfect world, we would do away with injuries and muscle tension forever. Unfortunately, we can't make that happen (at least not yet!) and insist on abusing our bodies with countless hours of training and work. However, a device that can be purchased for under \$20 can help. For less than the price of a single massage, you can have something that you can use everyday, at your leisure, to enable you to do self-myofascial release. It's like having your own physical therapist, chiropractor, and massage therapist in your home, at your beck and call. No, that doesn't mean you still don't need to visit those people. It's just another way to compliment their services between visits and keep injuries at bay.

**What is it?** It's a lightweight, cylindrical, foam roll designed to improve balance, flexibility, strength, and muscle awareness and serves as a good insurance policy against injury when used properly in combination with a sound stretching program (yes, the dreaded "S" word again). Using your own body weight, the foam roller is used to massage away restrictions to normal soft tissue extensibility.

**How does it work?** Optimal performance depends on our soft tissue system (muscles, tendons, ligaments, and fascia), neural system, and articular system (joints) all functioning efficiently. If one segment is not functioning efficiently, then the other components must compensate, leading to tissue overload, fatigue, faulty movement patterns and finally injury. Skeletal muscles contain two types of receptors to control tension, muscle spindles and golgi tendon organs (GTO's). The muscle spindles record changes in fiber length and trigger a stretch reflex which shortens muscle tissue and often induces pain. GTO's are sensitive to change in tension and rate of tension change. Stimulation of GTO's past a certain threshold inhibits the muscle spindle activity and gives the desired decrease in muscle tension. This reduction in soft tissue tension decreases pain, restores normal muscle length-tension relationships, and improves function.

**How do I use the roller?** Work on each area one to two times daily for 1-2 minutes by moving the roll slowly and stopping on any areas that cause discomfort for 30-45 seconds. Continuing to roll over an area when pain is present activates the muscle spindles, causing undesirable increased tightness and pain. Resting (okay, it's not really resting as it's a little uncomfortable...) 30-45 seconds on the painful areas will stimulate the GTO's and inhibit the muscle spindles, giving the desired reduction in muscle tension. The areas that may be treated with a roller are endless and it is best to seek professional guidance to ensure proper form but a few specific techniques for common problem areas are (assuming left leg is being treated):

- Iliotibial Band (IT Band): Position yourself side lying on the foam roll with left leg raised slightly off the floor and your right leg bent at the knee with your foot positioned on the floor in front of left knee. Roll from your pelvis down the outside of your leg to just above your knee. Do not roll onto your knee joint.
- Piriformis: Begin sitting on the roll with your left foot placed on top of your right thigh. Shift your weight slightly to the left, placing your left hand on the floor behind you for

- support. Roll on the posterior hip area. You may increase the stretch by pulling your left knee towards the right shoulder with your right hand.
- Hamstring: Cross your right leg over your left and place the roll under your left hamstring just above the knee joint. Place your hands underneath your shoulders on the floor to lift your hips off the floor and move the roll up the length of your hamstrings to the buttocks region. Only your hands and the roller should be in contact with the floor
  - Calf muscle: Place the roll under your left lower leg by your ankle and cross your right leg over your left. Supporting your body weight with your hands, roll from your heel to the top of your calf, using your upper body to move your calf over the roller. Only your hands and the roller should be in contact with the floor.

**Where do I get the foam rolls?** Before running out to your local Walmart to buy just any piece of foam, it's important to understand that product density and size is very important. If the foam is too soft, less than adequate tissue pressure is applied. On the other hand, if the foam is too hard, bruising and more advanced soft-tissue trauma may occur, leading to further restriction, initiation of the inflammatory process, decreased range of motion, pain, and decreased performance. Foam rollers and proper instruction in their use can be obtained from most Physical Therapy clinics as well as online at various fitness and wellness companies such as <http://www.fwonline.com/foamrolls.htm>. The most functional roll is six inches in diameter and one to three foot in length. Smaller diameter rolls may be more beneficial for the neck and back regions.

In summary, using foam rollers can help you reach your health and fitness goals. By simply using your own body weight on the rolls, you can reduce pain and tension, and restore normal muscle length and balance. Optimum muscle balance helps to provide optimum joint motion, leading to optimum performance. Try it yourself to reach your fitness goals. You will be AMAZED!