



FOAM ROLLING

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A decade ago strength and conditioning coaches, athletic trainers, and physical therapists would have looked quizzically at a round piece of foam and wondered "What is that for?" Today nearly every athletic training room and most strength conditioning facilities contain an array of foam rollers in different lengths and consistencies.

What happened? A major change in the attitude toward injury prevention and treatment has been evidenced by a huge increase in the awareness that hands on techniques like massage, Muscle Activation (MAT), and Active Release Therapy (ART) can work wonders for injured athletes. We appear to be moving away from the eighties injury care mode of isokinetics and electronics to a more European inspired process that focuses on hands-on soft tissue care. The success of physical therapists with soft tissue mobilization (the physical therapy term for massage) and MAT, and a number of chiropractors with ART has clearly put the focus back on the muscle. The message at the elite level is "if you want to get better (healthier) get a good manual therapist in your corner".

What does all this have to do with foam rollers you might ask? Well. Foam rollers are the poor mans massage therapist, soft tissue work for the masses. As strength and conditioning coaches and personal trainers watched elite level athletes tout their success and improvement from various soft tissue techniques the obvious question arose. How can I mass-produce "massage" or soft tissue work for large groups of athletes at a reasonable cost? Enter the foam roller. Physical Therapist Mike Clark is credited by many, the author included, with the initial exposure of the athletic and physical therapy communities to the foam roller and to what he termed "self myofascial release". Self myofascial release is simply another technical term for self-massage. In one of Clarke's early manuals published as a pre-cursor to his book Integrated Training for the New Millennium Clark included a few photos of self-myofascial release techniques using a foam roller. The technique illustrated was simple and nearly self-explanatory. Get a foam roller and use your bodyweight to apply pressure to sore spots. Kind of a self-accupressure technique. I believe these photos began a trend that is now probably a multi-million dollar business in the manufacture and sale of these simple tools.

What is a Foam Roller and How do You Use It?

A foam roller is simply a cylindrical piece of some type of extruded hard-celled foam. Think pool noodles but a little more dense and larger in diameter. The techniques are simple. Clarke's initial recommendation was not a self-massage technique but, more the accupressure concept described previously. Athletes or patients were simply instructed to use the roller to apply pressure to sensitive areas in the muscles. Depending on the orientation of the therapist, these points can alternately be described as trigger points, knots or simply areas of increased muscle density. Regardless of the name, those in the fields of athletics and rehab were familiar with the concepts of sore muscles and the need for massage.

Note: It is the authors' belief that massage fell out of favor during the physical therapy boom of the 1980's not because it was ineffective but, because it was not cost effective. With the increase in use of modalities like ultrasound and electrical stimulation athletic trainers and therapists could treat more athletes, more rapidly. In Europe and in elite athlete situations such as high-level track and field and swimming, a disdain for a modality based approach and an affinity for European inspired massage still existed. Slowly, the performance world caught on to the idea that manipulation of the soft tissue caused athletes to either stay healthier or, to get healthy faster. The use of foam rollers has progressed in many circles from an acupressure type approach to a self-massage approach. The roller is now used to apply longer more sweeping strokes to the long muscle groups like the calves, adductors and quadriceps and small directed force to areas like the TFL, hip rotators and glute medius.

Athletes are instructed to use the roller to search for tender areas or trigger point and to roll these areas to decrease density and over-activity. It is important to note that foam rolling can be hard work, particularly for weaker or overweight clients as the arms are heavily involved in moving the body. In addition, foam rolling can border on painful. Foam rollers are available in a number of densities from relatively soft foam, slightly harder than a pool noodle, to newer high-density rollers with a much more solid feel. The feel of the roller and the intensity of the self-massage work must be properly geared to the age, and fitness level of the client. Good massage work, and correspondingly good self-massage work, may be uncomfortable much like stretching. It is important that athletes or clients learn to distinguish between a moderate level of discomfort related to a trigger point and a potentially injurious situation. Foam rolling should be used with discretion in those clients with less muscle density. Foam rolling should never cause bruising. The reality is that the athlete or client should feel better, not worse after a brief session with a foam roller.

When to Roll

Coaches and therapists are not in universal agreement over when to roll, how often to roll, or how long to roll so only general guidelines can be provided.

Rolling can provide great benefit both before and after a workout. Foam rolling prior to a workout can help to decrease muscle density and allow for better warm-up. Rolling after a workout may help to aid in recovery from strenuous exercise. The nice thing about using the foam roller is that it appears it can be done on a daily basis. In fact, Clair and Amber Davies in

The Trigger Point Therapy Workbook actually recommend trigger point work up to 12 times a day in situations of acute pain.

How long an athlete or client rolls is also individual. In a personal training setting we allow 5-10 minutes for soft tissue work at the beginning of the session prior to warm-up. With our athletic clients we do the same.

Foam Rollers versus Massage

The question often arises "Which is better, massage therapy or a foam roller?" To me the answer is obvious. Hands work better than foam. Hands are directly connected to the brain and can feel. A foam roller cannot feel. If cost was not an issue I would have team of massage therapists on call for my athletes at all times. However, this is simply not realistic. Most athletes struggle to afford the services of a qualified coach or the cost of a facility membership. At the current state of health care, prevention is generally not a covered cost for healthy athletes. With no ability to get reimbursed the cost of massage therapy alone could approach or surpass the cost of training. The foam roller can provide unlimited self-massage for under twenty dollars? You do the math.

Conclusion

The use of foam rollers has exploded over the past ten years and will continue to increase. Athletic trainers in high school or small college situations can teach their athletes to perform hands on treatment that might not have been possible due to work schedules, while strength and conditioning coaches can provide a form of massage therapy to all of their athletes. Foam rollers are a small investment to make to see a potentially significant decrease in the number of soft tissue/ non-contact injuries.

References

Clark, M: Integrated Training for the New Millennium. National Academy of Sports Medicine, Thousand Oaks, CA. 2000