



FOAM ROLLING 101

Rolling Out: The What, Why, and how to guide to foam rolling

Written by Thomas Bennett LAT/ATC

What is Foam Rolling?

Just what exactly is Foam Rolling? Do you ever go to the gym and see people rolling around on the floor, their faces grimacing and wincing in what appears to be discomfort, grunting as their legs or arms roll across something that appears to be PVC pipe or something fancier and more intimidating looking? Well, in a weird way, that is what foam rolling muscles looks and sounds like. But what is it, why do this to yourself if it looks so uncomfortable and awkward? In this post we will discuss why it is beneficial to foam roll and how it fits into your workout.

Why bother?

Why do we even bother with Foam Rolling? There are three main reasons that physically active people foam roll. One, it is a way to relieve sore muscle tissue by manipulating pain receptors both superficial and deep in the muscle and surrounding soft tissues (1,3). Two, we can increase the flexibility of muscle and surrounding soft tissues (thereby improving joint range of motion) by relaxing or calming down hyperactive pressure or length-tension receptors (2). Three, it can help jump start the body's recovery process after working out by positively influencing your body's vascular and lymphatic system (4,6).



This post will focus on these benefits as they relate to fitness, health and wellness. However, the benefits of myofascial release and selfmassage are still being researched as the anatomy of the soft tissue and physiology exercise continues to be explored and analyzed (8). There are more specific benefits and outcomes one can achieve when foam rolling and manipulating soft tissue so we have provided additional resources and articles below if you are interested in reading and researching more.

How does this fit into a workout?

How does Foam Rolling plug into a workout? There are two ways to address this question. The first of which is to create or establish a routine of foam rolling that happens both before and after the workout. When participating in foam rolling regularly the benefits (improved range of motion and decreased recovery time) can be more easily maintained than when only using foam rolling when things get stiff and sore. Noticed that we said “maintained,” the identified benefits still have to be targeted and planned for accordingly based on the goals/outcomes of the program and will take time to notice (4,5). The disadvantage to this option is, it is time consuming and boring so, patience is a virtue. The second approach is to utilize foam rolling when an individual is experiencing the first signs of soreness and plug techniques into recovery day(s). This is advantageous if you know the tips and tricks to get quick results or have a higher risk individual that needs careful monitoring (3,8). Experts like Athletic Trainers use this frequently when patients are rehabbing in the clinic from more specific injuries.

We use foam rolling to assist in releasing scar tissue or assist in the realignment of healthy fascial tissue after strains and sprains while manual improving joint range of motion (7). The disadvantage to this is to literally take a recovery day and only focus on recovery techniques, then progress back into the “normal” training/fitness program.



Professional Resources

Trial and Error

Foam rolling is not difficult to participate in. Honestly it takes a lot of personal trial and error or exploration. Below we have listed additional information and some basic foam rolling techniques to get you started. As always if you have any questions or even want to discuss this article and the information more you can contact us at thomasbennett@som.umaryland.edu or ahenderson@som.umaryland.edu we are always happy to help.

There are several types of rollers to choose from. We suggest starting smooth and progressing to a more intimidating one when you are comfortable



Foam Rolling: How To

You can perform each of the following for 2 minutes and up to 2 times a day or as recommended by a personal trainer and/or health care specialist.



Additional Resources

- [healthline.com/health/fitness-exercise/foam-rolling-how-to](https://www.healthline.com/health/fitness-exercise/foam-rolling-how-to)
- [shape.com/fitness/tips/common-foam-rolling-mistakes-how-foam-roll-correctly](https://www.shape.com/fitness/tips/common-foam-rolling-mistakes-how-foam-roll-correctly)
- blog.nasm.org/foam-rolling-and-self-myofascial-release
- [womenshealthmag.com/fitness/a19963985/foam-roller-exercises/](https://www.womenshealthmag.com/fitness/a19963985/foam-roller-exercises/)
- [runnersworld.com/health-injuries/a20812623/how-to-use-a-foam-roller-0/](https://www.runnersworld.com/health-injuries/a20812623/how-to-use-a-foam-roller-0/)
- [mensjournal.com/health-fitness/10-foam-roller-moves-your-entire-body/](https://www.mensjournal.com/health-fitness/10-foam-roller-moves-your-entire-body/)

References

- <https://www.healthline.com/health/fitness-exercise/foam-rolling-how-to> <https://www.shape.com/fitness/tips/common-foam-rolling-mistakes-how-foam-roll-correctly> <https://blog.nasm.org/foam-rolling-and-self-myofascial-release> <https://www.womenshealthmag.com/fitness/a19963985/foam-roller-exercises/> <https://www.runnersworld.com/health-injuries/a20812623/how-to-use-a-foam-roller-0/> <https://www.mensjournal.com/health-fitness/10-foam-roller-moves-your-entire-body/> Cheatham, S. W., & Baker, R. (2017). Differences in pressure pain threshold among men and women after foam rolling. *Journal of Bodywork and Movement Therapies*, 978-982. Retrieved from [https://www.sciencedirect.com/science/article/abs/pii/S1360859217301304?](https://www.sciencedirect.com/science/article/abs/pii/S1360859217301304?casa_token=fyFQjQDBToEAAAAA:uMMduknUPKjVawYVlo-chupoIGD5gpLPrAFPo8_iHL7SApL3E9IHkjpSZcvN0g6o-FzOxktidA)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4637917/> Freiwald, J., Baumgart, C., Kuhnemann, M., & Hoppe, M. W. (2016). Foam-Rolling in sport and therapy – Potential benefits and risks: Part 1 – Definitions, anatomy, physiology, and biomechanics. *Sports Orhtopaedics and Traumatology*, 258-266. Retrieved from [https://www.sciencedirect.com/science/article/abs/pii/S0949328X16300412?](https://www.sciencedirect.com/science/article/abs/pii/S0949328X16300412?casa_token=IAzB50NiaicAAAAA:squt9nnXAcnCjMHoG6MNVJW4IU5ONqVXCd1w-t8HbMsRvJFdo1j_Ua8rvQn9LdreHkhgbLoXtw)
- MacDonald, G. Z. (2013). Foam rolling as a recovery tool following an intense bout of physical activity. Memorial University of Newfoundland, School of Human Kinetics and Recreation. Newfoundland : School of Graduate Studies Memorial University of Newfoundland. Retrieved from <https://research.library.mun.ca/10942/> Peacock, C. A., Krein, D. D., Silver, T. A., Sanders, G. J., & Von Carlowitz, K.-P. A. (2014). An Acute Bout of Self-Myofascial Release in the Form of Foam Rolling Improves Performance Testing. *International Journal of Exercise Science*, 202-211. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4831860/> Pearcey, G. E., Bradbury-Squires, D. J., Kawamoto, J.-E. M., Drinkwater, E. J., Behm, D. G., & Button, D. C. (2015). Foam Rolling for Delayed-Onset Muscle Soreness and Recovery of Dynamic Performance Measures. *Journal of Athletic Training*, 05-13. Retrieved from <https://meridian.allenpress.com/jat/article/50/1/5/112406/Foam-Rolling-for-Delayed-Onset-Muscle-Soreness> Romero-Moraleda B, L. T.-L.-P.-G. (2017, May 26). Neurodynamic mobilization and foam rolling improved delayed-onset muscle soreness in a healthy adult population: a randomized controlled clinical trial. (J. Keogh, Ed.) doi:10.77717/peerj.3980 Wiewelhove, T., Doweling, A., Schneider, C., Hottenrott, L., Meyer, T., Kellmann, M., . . . Ferrauti, A. (2019, April 09). A Meta-Analysis of the Effects of Foam Rolling on Performance and Recovery. doi:10.3389/fphys.2019.00376

