

**Foam Roller Workout**

Irene Lewis-McCormick, M.S., C.S.C.S.  
E-mail: irenemccormick3@gmail.com

I. Introduction

Self Myofascial release is a form of bodywork and stretching/self-treatment that can improve posture, increase flexibility and reduce stress, tension and pain while boosting athletic performance, energy levels and body awareness (Earls & Myers 2010). By learning to perform self-massage, participants can improve blood flow to muscles, reduce stress, and possibly increase joint range of motion and soft tissue flexibility. Many exercises can lend themselves to core stability, decreased risk of certain injuries and relaxation.

II. The Functional Kinetic Chain

A. Works as an integrated, functional unit and consists of:

1. Articular system – joints
2. Soft tissue system - muscles
3. Neural system – nerves

B. Joint Mobility

1. Dictates that joints should be able to move through the ranges of motion they were designed to as opposed to ones they are not designed to

C. Joint Integrity

1. Dictates that joints need to be ‘lined up’ so moving bones use muscles, tendons and ligaments correctly due to imbalances, weakness, or tightness

D. Neural Efficiency

1. Dictates that the information that the body receives via the CNS is not altered due to any of the above mentioned

E. All components exist interdependently

F. If one segment is not functional, then the others must compensate leading to tissue overload, fatigue and the Cumulative Injury Cycle:

G. Cumulative Injury Cycle

1. Injury
2. Pain
3. Fatigue
4. De-conditioning
5. Depression/anger/loss of self esteem
6. Stress
7. Muscle Tension

III. The Benefits of Rolling

A. MANY exercise injuries are a result of overuse and faulty movement patterns that are often a result of compensations and lack of joint and soft tissue flexibility

B. Fascial restrictions can result in

1. Muscle tightness restricts joint range of motion
2. Restrictions create alterations in movements
3. This changes “normal” feedback to the central nervous system (CNS)

4. Movement efficiency is altered and compromised
5. This can lead to faulty movement patterns
6. Early fatigue
7. Injury

a. Example – Gluteal Muscles and Knee Pain

- C. Can help correct known muscle imbalances
- D. Can improve joint ROM particularly prior to exercise or training as well as post-exercise
- E. May reduce certain restrictions in typical areas (Iliotibial band, hip flexors, gluteal muscles, Achilles area, etc.)
- F. May decrease pre-workout muscle soreness due to DOMS
- G. Can increase neuromuscular efficiency
- H. Can assist with maintenance of normal functional muscular length
- I. Can relieve stress
- J. The Most Common Muscles Foam Rollers are Used For:
  1. IT Band
  2. Hip Flexors
  3. Gluteals
  4. Calf

#### IV. Selecting Foam Rollers

- A. When choosing a foam roll, product density is very important
  1. Different parts of the body respond to different pressures
    - a. Too soft, less than adequate tissue massage is applied
    - b. 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
- B. Start with 6"x36" round rollers to start (about 3 feet)
- C. Many companies offer color-coded rollers
  1. White rollers tend to be softest, while darker colors often indicate more density
- D. Frequent use with dented rollers will cause uneven rolling when using them for SMR

#### V. General Guidelines for Rolling

- A. The fitness professional should be proficient in these techniques prior to client instruction
  1. Position yourself on the foam roller for optimal benefits by lying or sitting in a position that will allow you to roll about 3 inches in either direction
  2. Hold the body on spots where tension is present
  4. Mild discomfort is expected
  5. Hold each challenging position 30-seconds to 1 minute
  6. If pain is reported, stop rolling
    - a. Continuing to roll when pain is present activates the muscle spindles, which may cause increased tightness and possibly injury
  7. REST on the painful areas
    - a. Resting 20-30 seconds on tight or painful areas will stimulate the Golgi Tendon and autogenically inhibit the muscle spindles
      - i. This should reduce muscular tension and pain

8. Maintain proper draw-in position or abdominal bracing
  - a. which provides stability to the Lumbo-pelvic-hip complex during rolling
9. Clients can perform SMR Program 1-2 x daily.
10. Stretch the worked muscles after each rolling session

#### Three Take-Away Messages

- a. Normal daily physical activities can lead to stress in the muscles and joints of the body. Using a foam roller can assist with relaxation and flexibility easily, in a sweat-less format (perfect for worksite wellness programs).
- b. When using a foam roller, the correct density is important to consider depending on the individual needs of the person using it. Dented and damaged foam rollers need to be replaced.
- c. Foam rollers can be used for increasing core stability as well as massage, spinal alignment and a fantastic cool-down with relaxation in any fitness setting.

#### Selected References

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