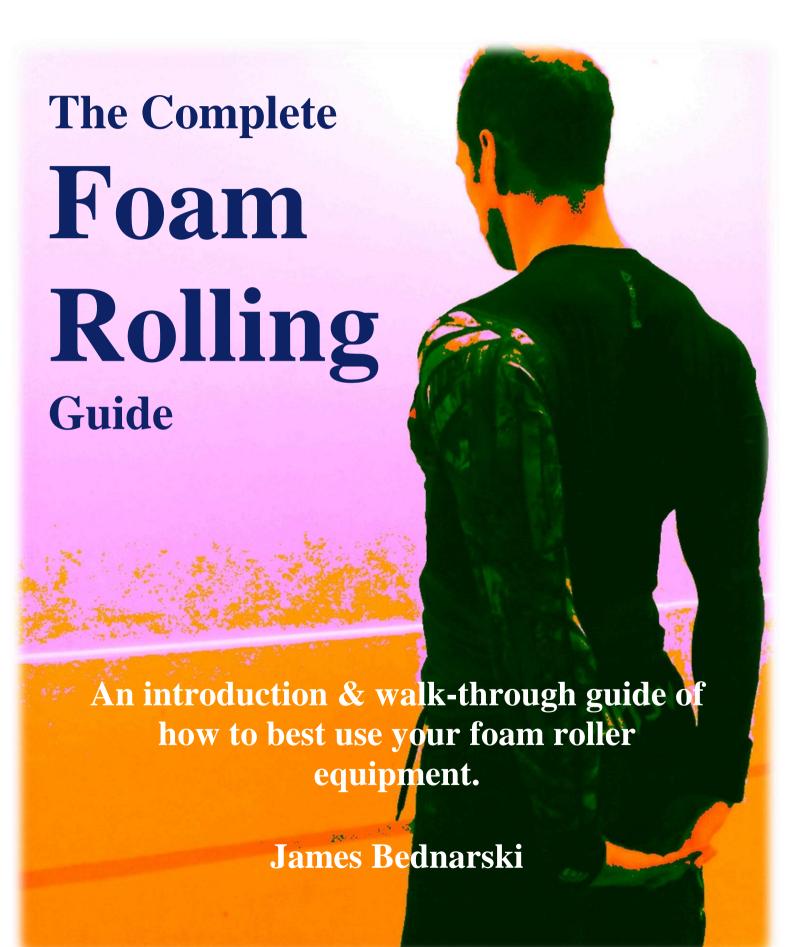
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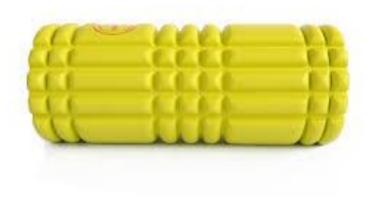
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CHAPTER ONE

What is foam rolling?

Foam rolling is a commonly used phrase for self-myofascial release. Basically, it's a type of massage treatment for your muscle tissues that you can do yourself, pretty much anywhere. I often recommend foam rolling to my sports massage clients & ask them to practice it between massage visits. It's not as good as a hands-on massage but it's the next best thing. There are different tools you can use depending on which muscle you want to target; the cylinder roller and ball are the perfect combination.

The principle is that by applying pressure to specific points within the muscles you can help them release tension and speed up recovery, enabling the body to return to full function.



Why should I use foam roller?

When our muscles function, they contract & relax. As they contract, the fascia (a type of connective tissue) that surrounds & groups them helps relay the force, transmitting it across our structure. This process is key for the body to move functionally (as one) & remain strong.

During awkward postures, exercise or other repetitive motions, our muscles are constantly under physical stress, therefore needing to recover and repair.



Over time the muscle fascia becomes shorter & thicker as it tries to protect the muscle from this stress, ultimately causing the muscle to become tight. Sometimes the muscle fibres & fascia become so tight that 'knots' (aka adhesions or trigger points) form within layers of the tissue. These then prevent the muscle functioning at its best & affect the body's overall functional movement patterns, this in turn raises the risk of strains and tears. It's also worth noting that our fascia also has the ability to contract independently of our muscles and typically happens subconsciously, tightening in moments of mental and emotional stress.

Bone Perimysium Blood vessel Muscle fiber Tendon Epimysium Endomysium Fascicle

(above: examples of fascia are at both the epimysium & fascicle)

Stretching is important but in tissues where a knot has formed, stretching alone won't help (imagine stretching a bungee cord with a knot in it). The good news is that these knots can be released, & when achieved, all of the associated discomfort usually clears up. Through deep compression, foam rolling not only breaks up knots and restores blood flow allowing the muscle to return to optimal function, but relaxes tight muscles so the surrounding structures can move freely again. Our body wants to be supple & strong enough to perform at a moment's notice but sometimes it just needs a helping hand.





(Above: the body is ready to react at a moment's notice)

Additional benefits:

In addition to those mentioned above, research shows foam rolling can also...

- Stimulate muscle fibres in preparation for exercise performance
- Improve blood circulation
- Improve lymphatic (toxin) drainage
- Reduce DOMS (post-exercise muscle soreness)
- Raise your skill level & technique through increased body awareness
- Improve posture
- Improve balance & gait
- Increase the joint range of motion through flexibility
- Decrease muscle & joint pain
- Decrease your risk of injury (tight muscles often lead to injury)
- Clear up scar tissue from previous soft tissue injury

Is it safe for **me** to use a foam roller?

Foam rolling is generally suitable for everyone from the intermediate exerciser up to athletes. However, because we are putting the body under a form of pressure, there are some instances when it would not be advised.

If you are not in good full health, are unsure, or have neck pain then please consult your GP before using this guide & any equipment.

DO NOT use a foam roller or these techniques if you have a blood disease, are on blood thinning medication, have varicose veins in that area, are receiving treatment for cancer or have any bone issues such as osteoporosis.

Even if you are in good full health & you attend a fitness facility, please ask a trainer to check your technique as many positions do require you to support much of your own bodyweight.

CHAPTER TWO

When should I use mine?

Most users / recreational gym-users' will use a foam roller at the end of their workout as part of their cool-down to help lengthen & maintain good muscle condition.

Those that compete in a sport often incorporate it in to their warm-up routine too to lengthen the fibres & increase blood flow, however some research also says it relaxes the muscle too much before exercise. If a muscle is particularly tight or injured, then trainers and physio's often recommend their clients foam roll at home or even at work to promote recovery. As you can see, they are so versatile and compact that they can be used anywhere, anytime.

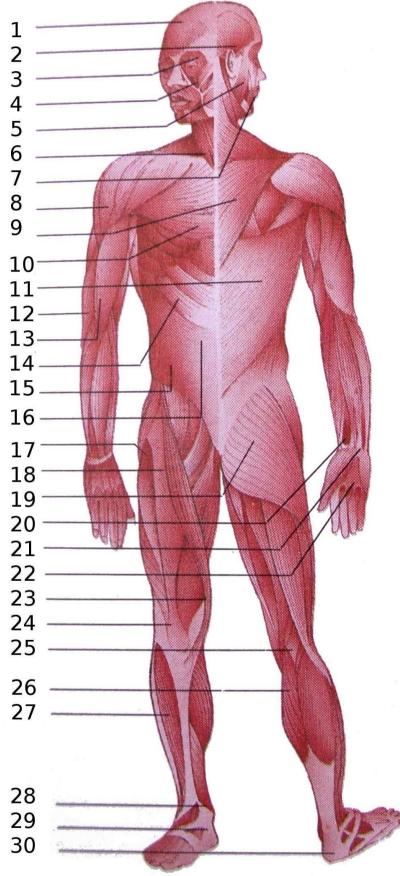
Now before we go any further, study the anatomy illustration on the next page so that you become familiar with the shape and layout of your body's muscles. This will massively help you feel & visualise the muscle you're working on, giving better results.

Preparation:

First of all, it's about getting your body in the right positions to enable you to target the right muscles; I've put a visual guide in chapter three for you. These positions often involve supporting your own bodyweight & depending on your strength levels can sometimes feel like a workout itself. Initially focus on the legs & the muscles that feel the tightest or take most stress. Never foam roll the abdominals or neck, these areas have vital nervous tissue / organs beneath them that could be damaged.



Skeletal muscles



Musculus ...

1:occipitofrontalis

2:temporoparientalis

3:orbicularis oculi

4:levator labii superior

5:masticatorii

6:sternocleidomastoideus

7:orbicularis oris

8:deltoideus

9:trapezius

10:pectoralis major

11:latissimus dorsi

12:triceps brachii

13:biceps brachii

14:serratus anterior

15:rectus abdominis

16:obliquus externus

abdominis

17:tensor fascia lata

18:rectus femoris

19:gluteus maximus

20:pronator quadratus

21:flexor retinaculum

22:flexor digitorum

communis

23:sartorius

24:quadriceps femoris

25:ischiocrurale

26:gastrocnemius

27:tibialis anterior

28:soleus

29:extensor retinaculum

30:triceps surae



You can sometimes get away with foam rolling a muscle straight away but I'd always recommend softening the muscle first with heat. This can either be by...

- Performing 20+ reps of a dynamic (moving) stretch on that muscle
- Doing a workout first or at least a 5+ minutes of low-medium intensity cardiovascular exercise.
- Putting a heat-pack in the microwave for up to 2min then placing it over the muscle for 5+ min. You can also use a hot-water bottle instead.



(Above: microwaveable wheat heat pack)

How do I use my foam roller?

The rolling itself:

The good thing is that YOU are in control of the intensity, which is useful as only you know exactly how it feels.

- 1) Start by lying or leaning one end of the muscle on to the roller / ball (usually the end furthest from the heart) & remember...never directly on a joint, just above it. Make sure that the joint that muscle controls, has a slight bend in it as this will help the muscle relax & it will feel more comfortable for you.
- 2) Shift your body so that the roller moves up the length of the muscle. Start steadily & gently, taking notice of any changes in texture & sensation. After several passes (approx. 30 seconds worth), use more of your body weight to work the muscle deeper, imagining the roller melting through the fascia & muscle. It should become gradually more comfortable but never painful work out your own threshold. It's also useful to breathe out slowly as you move along the muscle; this helps the muscle relax & often lowers the pain perception.
- 3) If you notice a particular sore spot or something that feels like a knot, hold the pressure directly on it for 5-10 seconds or until you feel the muscle relax, then continue. Repeat this 3 5 times. If this is just too painful, work on the surrounding area then try going

back to it again. Your goal is to help the muscles by working with them, not against them in a test of pain endurance.

Note: Some areas of the body will be better suited to the massage ball rather than the roller, such as the back & chest. However, use it exactly the same way.

4) To get the best results, research shows that you should immediately stretch the muscle that you've just rolled (I've put images of my recommended stretches next to the relevant foam rolling images in chapter three). This is especially true if you want to improve the flexibility of that muscle rather than just maintain it.



The fantastic thing is that it's common to feel the benefits straight away. If you feel sore (DOMS) the next day then don't worry, this won't happen once your muscles get used to it.

Sleeping well, eating 'clean' & drinking plenty of water will also help your body recover & repair. To make good improvements, wait a full 1-2 days before foam rolling the same muscle again = approximately 3x week.

Hold your horses!! ... Just be aware of these common mistakes:

- Going too deep too soon could damage the tissues, Start gently and work within your comfort zone.
- If a sore spot doesn't improve after a few weeks, then try working on the muscles around it as they may hold the key to helping it release. If there's still no joy, then contact myself or consult a physiotherapist.
- Take care to maintain good technique over the whole body otherwise you could end up hurting your shoulders or back. As mentioned earlier, foam rolling can break a sweat, especially after a workout so stay focussed.

Ok a folks, that's about it! The more you practice & make it part of your routine, the easier it will be, & then you will really notice the benefits. If you would like any one-to-one tuition or have any questions, please contact me through www.MassageHull.com or 'MassageInHull' on Facebook.



Thanks & have fun!



CHAPTER THREE

Rolling



Stretching



Rolling the Calf (above left): Place the roller under the lower leg just above the ankle. Distribute your weight as necessary between your other foot & hands then work the muscle up stopping just before the knee joint.

Stretching the Calf (above right): Adopt the position shown then steadily pull on the ball of the foot (or use a band / towel if you can't reach) & push the heel forward.





Rolling the Hamstring (above left): Similar body position as the calf but with the roller under the upper thigh starting just above the knee. Rock body weight back & forth taking the roller up to the bum. If the intensity is too much then try un-crossing the assisting leg.

Stretching the Hamstring (above right): Laying flat on your back, raise one leg with a very slight bend at the knee. If you can't reach the calf muscle, then hold the hamstring. Try to leave your other leg relaxed flat.







Rolling the Inner thigh (above left): Lay on your front, placing your knee up to the side with the roller at the underneath & slightly in from the knee joint. Shift your body weight so that the roller works up towards the groin area.

Stretching the Inner thigh (above right): From all-fours, sit the hip back toward the heel & take the leg out to the side – keeping it straight.





Rolling the Quadriceps (above left): Adopt a similar position as with the 'inner thigh' above, but place the roller under the other leg on the front of your upper thigh. Shift your body weight rolling from above the knee up to the hip.

Stretching the Quadriceps (above right): Lay on your side holding the foot of the leg that you want to stretch. Push your hips forward & your foot in to the hand, you should feel the stretch on the front of your thigh.







Rolling the Hip Flexor (above left): Adopt the same position as with 'rolling the quads' but place the roller higher up on the front of the hips (approx. where your trouser pockets would be) then work down a few inches to the quad.

Stretching the Hip Flexors (above right): Kneel on one knee, then imagine you're trying to pull the front heel and your rear knee towards each other.





Rolling the Gluteals (above left): Sit down & place one ankle on the other knee, bridging the hips place the roller on the butt muscles (back of the hips next to the sacrum). Use your arms & supporting leg to shift your weight rolling towards the outer thigh.

Stretching the Gluteals (above right): Remove the roller then with the leg still crossed, lay back & reach either side of your relaxed leg. Now pull that leg inwards using arms but relax the neck / shoulders. Feel the stretch in the outside of the butt muscle.







Rolling the Iliotibial Band (ITB) (above left): Stand trapping the roller just above your bent knee & the wall. Squat slowly letting the roller move up & down the outside of your thigh. This can also be done on the floor but often involves too much pressure.

Stretching the ITB (above right): This area is often hard to target but try this one. Sit on the floor, step one foot over the knee then hug the bent knee towards the opposite shoulder.





Rolling the Back Muscles (above left): Sit in front of the roller then turn your torso slightly to focus on the muscles running up one side of the spine. Lean back on to the roller controlling your weight between your feet & roller. Bend & straighten the legs to work up & down the back.

Note: This should only be done if you have a strong healthy spine & good muscle mass along the spinal muscles, otherwise use a massage ball against the wall in the same fashion (as in the upper back illustrations to follow).

Stretching the Back Muscles (above right): From all-fours, take the knees wide & push through the hands to drive the hips back. Sit down to the heels then drop your chest low.







Rolling the Latissimus Dorsi (above left): Place the roller between the side of your lower ribs & the wall. Bend your knees in a lunging action so that the roller works up towards your armpit.

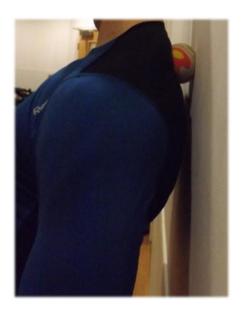
Stretching the Latissimus Dorsi (above right): With one hand overhead, lean the torso over to the side. Make sure that the arm stays overhead & doesn't come forwards.





Rolling the Pectorals (above left): Using the massage ball, place it on the outside edge of the sternum (where the pec muscle starts) then turn your torso so it rolls across that side of the chest, finishing just before the shoulder.

Stretching the Pectorals (above right): Lift the elbow level with your shoulder then pull it back to open up the pectoral muscle. Alternatively, you can place your forearm on a doorframe & turn the body away.





Rolling the Upper Trapezius (above left): Start with the ball between the inside edge of the shoulder blade & the spine. Squat down to work the ball up towards the neck & around over the top of the shoulder blade towards the shoulder.

Stretching the Upper Trapezius: Clasp the hands together behind the hips & push downwards, allowing the shoulders to roll back & down. Next bow your head to feel the stretch from the neck to shoulders.







Rolling the Rhomboids (above left): With one arm behind your lower back, place the ball between the inside edge of the shoulder blade & the spine. Squat down slightly to work the ball the full height of the shoulder blade.

Stretching the Rhomboids: Lace your fingers with your arms out in front of your chest. Maintain a slight bend in the elbows and focus on pushing them forward to protract the shoulders.





Rolling the Deltoids: Place one hand across the chest and trap the ball between the wall and your shoulder. As with the Latissimus Dorsi and the ITB, use your legs in a squatting motion to roll the ball up and down. Work from just below the shoulder joint down to just where the bicep muscle starts to widen.

Stretching the Deltoids: Hold one arm out rigid, then hook it with your other arm pulling across your chest. Push the forearms together to deepen the stretch. You should feel this in the shoulder and perhaps behind the shoulder blade (rhomboids).

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