

Massage flush!

How can you not afford it?

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Nowadays exercising forms a crucial part of everyone's life. Be it for elite sport, recreational sport or just to keep fit, healthy and stay in shape. Unfortunately there are by products that are caused by exercise, namely lactate, DOMS and inflammation. Microscopic tears occur causing DOMS and inflammation, these microscopic tears are necessary in order for your muscles to grow and adapt to the strain of the exercise and in that sense to get stronger. Each one of the above mentioned by products serve a specific purpose in our bodies and with the recovery cycle. It is important as a Sport Therapist and an athlete to recognize the different outcomes and what their impact are on the muscles. Here are some of the definitions in order to assist us in understanding the by products of exercise.



Definition of lactic acid:

Lactic acid is a chemical that is formed when sugars are broken down for energy in the absence of adequate oxygen. Lactate causes the muscle pain athletes experience after engaging in strenuous physical activity for long periods of time. When too much lactate forms the ability to burn foods using aerobic respiration is impaired. Thus less energy is formed.

Definition of DOMS:

DOMS is muscle soreness that is usually felt within 12-72 hours of exercise and often happens when you're first beginning a workout program or when you significantly change your program. Experts believe we get sore because of microscopic tears in the muscle fibres. Some symptoms of DOMS include:

- Stiff or tight muscles
- Fatigue
- Weakness
- Muscle pain

Definition of Acute muscle soreness:

AMS is a term to describe muscle soreness felt during the muscle's use in an activity or shortly after its use (generally no longer than an hour). It is not connected to its longer counterpart, delayed onset muscle soreness, which can last up to 72 hours after muscle activity. It is generally known to be caused by tears in the muscle fibres or fascia. Soreness can occur after trying a new muscle activity or exercise, exercising during or after a prolonged period of being sedentary or a large change in your current exercise routine.



Definition of Muscle Inflammation:

Inflammation is the body's initial reaction to injury and is necessary for normal healing. The injured area becomes red and swollen due to changes in vascularity, blood flow and capillary permeability. After the damage of tissue a hypoxic environment causes the death of tissues which in turn causes the release of chemical mediators. Two of these chemical mediators are histamine and bradykinin, they cause increase of blood flow and capillary permeability this in turn causes edema.

Now that we know what each term means it is easier to understand the necessary treatment. In this issue we will discuss muscle flush with the help of massage.

What does it mean to have a muscle flush? It is the process of increasing blood flow to your muscle to flush out toxins, stretch the muscle and increase relaxation. A typical flush consists out of effleurage (gliding or sliding movement over the skin with a smooth continues motion), you get a light effleurage and a deep effleurage depending on the amount of pressure; petrissage (wringing, rolling, lifting and kneading of the muscles) and sometimes even tapotement (various parts of the hands striking the tissue at a rapid rate) and vibrations (to shake the muscle).

A study done by the Auckland University of Technology have shown the benefits of effleurage, petrissage and tapotement.



Effleurage:

Stimulates the parasympathetic nervous system and evoke the relaxation response. Enhances venous return.

Petrissage:

Mobilize deep muscle tissue and subcutaneous tissue. Increase local circulation. Assists in venous return.

Tapoment:

Stimulate the tissue either by direct mechanical force or by the reflex action.

So now when you take into consideration the different phases of the healing process you will be able to see when it is necessary to do a massage flush.

When a person is busy training or busy to compete, you will be able to do tapotement or vibration just to relax the muscles a bit, when you do a flush during strenuous activity you will increase blood flow and cause edema. You don't want swollen muscles while competing, that will just constrict your range of motion, and leave your muscles feeling tired.

Lactate will return to normal levels in just an hour or so after

exercise. So some stretching or a cool down run can assist in the removal of lactate. Whereas when DOMS forms it can really limit the training sessions and one can struggle to train as hard or as efficient. This is when a massage flush really plays a big role. Anything from within a few hours of the activity to a few days; this will also determine the amount of pressure that is used, the longer time after or before the activity will be equal to more pressure. The idea of a flush will be a day after an activity or a day before an activity.

How will it be done? You will start with effleurage, where your strokes will be towards the heart, going over the tight and sore muscle, it will be more rapid strokes than a normal sport massage; it will start of light and then go slightly deeper. One then can use petrissage, more kneading and rolling; some tapotement and then finish off with another effleurage. A flush is usually quite short in time and a full leg flush will take anything from 10 to 20min depending on the severity. Your muscles will feel relaxed but a bit drained after a flush. It should recover in a few hours; after the flush you should feel good already and a day after you will be able to perform your very best at the training session.

Working with top athletes around the world I know the importance of hard training sets with little rest, if you want to keep up with the best or become the best you must understand how important every training session is. So if you want to train hard and efficient every session make sure you get your rub downs. Success is in the hands of the go-getter 🌈

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