

Muscle Hangovers

It's safe to say that most of us have experienced the unpleasant sensation of muscle pain and stiffness after a run. As a beginner, it may have struck you the day after your very first run, prompting fears of irreparable damage and second thoughts about taking up the sport. Even as an experienced runner, soreness can rear its head after pushing yourself to add more miles or pick up the pace. Regardless of the situation, the discomfort can be overwhelming, making you feel like a sluggish zombie weighed down by heavy armour.



So, what's it all about?

It's called **Delayed Onset Muscle Soreness**, or **DOMS**, and it's a side effect of the body's repair process following a bout of exercise overload - where muscles are asked to do a job they're not prepared for.

A 2-phase process

Damage:

Running endures a lot of eccentric muscle contractions (where muscles lengthen as they contract), particularly from the quads and calf muscles. These contractions decelerate the limbs against gravity to stabilise the joints and prevent them from buckling.

During this process, unprepared muscles become damaged and inflamed because the **muscle fibres are literally being pulled apart** with every stride.

Repair:

The damage triggers a response from the body to get to

work clearing out or 'digesting' the damaged tissue before repairing the area. It then regenerates stronger, more resilient muscle fibres.

These processes take a few hours to start working, which is why you only start to feel sore the next day.

The swelling and inflammation peak 24 to 48 hours after damage and the most severe pain tends to occur between 24 and 72 hours post exercise.

What can be done about it?

The consensus about managing DOMS is to just let the process happen.

Inflammation is very important for repair and recovery, so avoid taking anti-inflammatory drugs in the first couple of days as these interfere with the body's natural healing response.

You can restrict the severity of DOMS by making your exercise gains more gradual, and as you get stronger the soreness is less likely to return, even though you'll still be benefitting from the adaptations.

Never do any hard training when you have DOMS. Your muscles are weaker and adding extra stress will only hinder the repair process.

A couple of days of rest is best, but if you feel you must get a run in then make sure it's a dawdle!

"No pain, no gain"



For once, this old saying is quite appropriate here. Muscle damage is necessary if you want to get stronger, just as breathing heavier is necessary if you want to exercise. And accepting some degree of DOMS is part of the deal.

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Iain Denby