

Feeling sore 24 hrs after a great race? You might have a case of DOMS

By Paula Shingler, BSc, MCSP

I'm sure you all know what this is but, just in case, DOMS is delayed onset of muscle soreness (or muscular pain) 24 to 28 hours post exercise. We have all suffered from this at some time in varying degrees, from slight discomfort to severe pain on any movement- with a slight incline seeming like Everest! We all know how we get it but why do we get it, and how do we prevent it or treat it if it does occur?

Speculative causes

There is still speculation on the physiological cause; one theory is a build-up of lactic acid, a by-product of exercise, but this has been disproven as lactic acid disperses within hours of exercise stopping and is not present 2 to 3 days after. The most popular theory (note theory, not proven or disproven either) is that extreme or abnormal exercise causes minor muscle tears which leads to muscle tiredness, suffering, swelling and reduced strength that we know as DOMS.

How to get rid of it

So now you have it, how do you get rid of it? Again treatment is varied. Many types have been tried - ice immediately post exercise and following days, heat packs, contrast baths i.e. hot

followed by cold, stretching, massage, ultrasound, anti-inflammatories, fish oil, gentle jogging, swimming... So you can see there are a huge variety of methods but no one treatment has proved to be effective for everyone. The only "treatment" is time! In my experience I find that swimming or gentle jogging can help; ice, heat and stretching can all ease DOMS to a degree but not cure them. Research has shown that each individual responds to different methods. Most people feel better at the time of treatment but the symptoms return once the treatment stops. Massage, which is tempting, to ease the stiffness can exacerbate the symptoms so should be avoided!

Still sore a week later?

Even so if symptoms have not eased significantly in seven days do get checked out as you may have any injury masked by DOMS. DOMS will have resolved, depending on the severity, by this time so if you're still suffering get it checked.

So not much joy from the cure but let's look at how you can prevent it happening or at least minimalize it.

Prevention and recovery

DOMS traditionally occurs at the start of the sport season with unaccustomed exercise,

increased training, change in terrain or change in focus i.e. starting lots of hill reps or intervals. To prevent it occurring the following will help:

1. A proper structured training programme with a gradual increase in intensity or change in surface.
2. Warm up and warm down. Whilst not completely preventing DOMS it has been shown to limit it as blood flow increases to muscles is gradual rather than sudden.
3. Know your limitations. None of us are Superman or Superwoman! Don't expect to run a Hard 1 course on no training and not have some adverse reaction.

So, as you can see, there is no magic solution. DOMS is a problem that is still not fully understood. My advice is if you do suffer, try a few of the suggested treatments- one, or a combination, might make you feel better but, if not, rest up and have a look at your training!

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