

# G4 Physiotherapy & Fitness



## What is Muscle Soreness??

So we've definitely all been there, got back into the gym routine or gone for a run after a break away on holiday ... and the next day you suddenly can't walk down the stairs without feeling like you've aged 20 years overnight. This exercise related pain and stiffness is known as Delayed Onset Muscle Soreness, or more commonly as DOMs.

The symptoms of DOMs develop within a 24-48 hour period after exercise, and include:

- Muscle aches and stiffness (worse after periods of inactivity)
- Localised tenderness
- Reduced range of movement
- Short term loss in muscle strength



## What actually causes DOMs?

Research has established that DOMs is linked particularly with eccentric exercise, which can be defined as movement where muscles are contracting whilst elongating, for example downhill running, plyometric exercise and weight training. During eccentric movements, if the load on the muscle is greater than they can resist then cross bridges in the Actin and Myosin (fibres that create muscle contraction) are forced to separate. This mechanical insult to the muscle fibres can therefore explain why DOMs is defined as a grade 1 muscle strain, and technically a short lasting injury! A number of theories have looked into the physiological response causing this pain and stiffness to the muscles. Current research largely supports increased oedema and occurrence of the inflammatory process to repair and regenerate these separated fibres as explanation for the symptoms experienced. The common perception of muscle pain being present due to an accumulation of lactic acid during exercise, has however been rejected as a cause of muscle soreness.

## Why don't I get DOMs every time I train?

Although muscle soreness is a result of temporary damage and disruption to muscle fibres, it is most commonly present after *unaccustomed* exercise. Fortunately, a repeated bout of the same exercise is proven to be better tolerated, so the next time you do the same session symptoms should be less acute. It is still however unclear as to whether the body gets better at repairing after the damage, or if it gets better at tolerating exercise so there is reduced damage.

## How can I alleviate my DOMs?

The best thing you can do with any injury or pain, is to listen to your body! With an onset of DOMs, rest the area of soreness and don't hurry back to training until you feel ready, or modify the session you have planned to avoid major use of the muscle group. Gentle passive stretching can help increase the range of movement of the muscles, as long as further pain isn't induced. Gentle soft tissue massage can reduce the severity and longevity of DOMs by alleviating the symptoms and promoting healing to the tissues.

Ultimately, the presence of DOMs is very common in training and exercise (particularly those with an eccentric focus), resolves within a 1-3 day period and has less of an occurrence over time due to the repeated bout effect.

If you feel your symptoms aren't alleviating, [book in](#) at the G4 clinic with one of our Physiotherapist's or Sports Rehabilitators. To help speed up your recovery book in for one of our [Sports Massage](#) sessions, or book on to one of our popular [flexibility](#) and [yoga](#) classes in our onsite gym for some gentle flexibility and recovery work!



## Class Timetables

### G4 Yoga

Monday 9.30-10.30am

Wednesday 9.30am-10.30am

Thursday 8pm-9pm

Friday 9.30am-10.30am

Sunday 9.30am-10.30am &  
10.30am-11.30am

### G4 Pilates

Monday AM: 6.30am - 7.30am

Monday PM: 6pm - 7pm

Tuesday AM: 7am - 8am, 10am - 11am & 11am -12pm

Wednesday PM: 6pm - 7pm, 7pm - 8pm & 8pm - 9pm

Thursday AM: 11am -12pm

Thursday PM: 7pm - 8pm

Saturday AM: 9.30am -10.30am & 10.30am -11.30am

### G4 Strength

Tuesday 6.15am-7am

Tuesday 12.15pm-1pm

Thursday 12.15pm-1pm

### G4 Circuits

Wednesday 6.15am - 7am &  
12.15pm -1pm

Friday 6.30am -7.30am &  
12.15-1pm