**Why does calf strain occur?**

As you are running, you feel a tightness in your leg. You think ‘I maybe just haven’t warmed up enough, it will loosen as I go’. You feel a twinge at that back of your leg. You think ‘I just keep going for a few more minutes’. You feel a pain shoot from your heel up the back of your leg to your knee. You think ‘I should maybe just rest it for a bit’. You take a quick break and start jogging again. All too soon your leg has become too painful to even hobble along.

Calf strain among runners is extremely common, and often occurs as a result of over-exertion when running or from not warming up muscles properly before a run. In particular, starting to run too soon after an injury causes the most severe and lasting injuries. Knowing when it is safe to start running after calf strain, and how to build up to full power again helps you get your shoes back on as quickly and safely as possible.

**When can I start running again?**

Much as I’d love to be able to give a black and white answer to this, it really depends on the type and severity of your [calf strain](https://www.avogel.co.uk/health/muscles-joints/muscle-strain/calf/), and also on the amount of running that you do. This is why it is often best to speak to a medical professional, such as a physiotherapist, when you injure your calf, to help you to understand the severity of your injury. This will help you plan your return to running.

In very minor cases, such as when the muscle is slightly inflamed but no muscle fibres have been torn, resting for a few days and applying heat treatments should be enough to ensure that you do not worsen the strain. Only return to running when you feel no pain or twinges in the muscle, and rather than trying to run the same distances you were running before the injury, break in gently, running a shorter distance at a slower pace.

More severe cases of [muscle strain](https://www.avogel.co.uk/health/muscles-joints/muscle-strain/) will require more care and attention. It can take 4-12 weeks before you are fit to run again. As with minor strains, you should only begin to run once your leg is completely pain free. This may take some time, but it is important to allow your leg to fully heal before starting to run, otherwise you will exacerbate the injury and delay recovery. With severe injuries, it is sometimes best to accept the guidance of a physiotherapist to ensure a safe return to running.

A good rule of thumb, however, is to begin by walking for 30-60 minutes to test the calf. If all seems well then try a hilly walk, which works the calf muscles harder, and only if this feels strong and pain-free should you contemplate running. Warm up by walking for at least 5 minutes, then start by running half the distance you normally would, at a gentle pace and see how your leg feels. Your body is the best indicator about how strong it is, so if you feel characteristic twinges you will need to cut back and rest more. If your leg is feeling fine, then increase the distance you are running by about 10% each week, only if you are not encountering any problems. **It can take 12 weeks for soft tissue to fully recover**, so increasing slowly in this way helps to protect and strengthen the new tissue, helping it withstand the stress of running.

**What can I do to ease pain and speed up recovery?**

While taking a break from running may be the best way to minimise risk of further damage to your calf muscle, you may still feel that your calf muscle is sensitive and painful. There are several tips you can try to ease the pain and help to speed recovery from your injury.

* **Hot and cold therapies** – as discussed in the previous blog, [applying heat packs and ice packs to your injured muscles](http://www.avogel.co.uk/health/muscles-joints/blog/2015/07/heat-or-ice-which-is-best-for-your-pain/) at the appropriate times can do wonders for your muscles. Ice packs just after injury reduces blood flow to the area, minimising swelling, whereas heat packs much later help the muscle fibres to relax and regenerate, soothing pain and aiding recovery.
* **Stretch** – for mild calf strain, stretches can help to promote recovery. This stimulates blood flow, releasing tension and preventing the build up of scar tissue. Sitting or lying down, tuck a towel or compression bandage under your toes and extend your heel downwards, feeling the calf muscle stretch. Hold for 20 seconds before releasing, and do this 3 times daily, as long as it does not exacerbate the pain.
* **Atrogel Arnica Gel** – the herb [arnica is well known as a treatment for bruising](https://www.avogel.co.uk/herbal-remedies/arnica-gel-atrogel/), and in the same way that it can reduce symptoms of bruising, it can also help to relieve symptoms of calf strain. Externally applying a thin layer of gel up to four times daily helps to reduce swelling, stiffness and relieve pain.

**How can I maintain fitness while recovering?**

* **Waiting** for your strained calf to be completely pain free before returning to running can be a frustrating wait, and many people fear that they will lose fitness from not running. This is often what tempts people to return to running earlier than they should, but this usually causes more problems in the long run (no pun intended!). Instead of pounding on the pavements and risking further injury, there are exercises that you can do to keep you fit and help the waiting period to fly by.
* **Weight training** – take the opportunity to work on building upper body strength with weight training. Many upper body exercises can be performed whilst sitting down to alleviate any pressure on your injured calf.
* **Swimming or water exercises** – the buoyancy of the water helps to support your weight allowing you to exercise without putting as much strain or pressure on your muscles and joints as you do when running. If you find that swimming is still causing you calf pain, try some stretching exercises underwater, such as slow-motion walking or jogging.
* **Rowing** – whether you are using a machine in the gym, or out in the water, rowing is a great cardiovascular exercise which is also good for upper body strength. It might be worth checking you have the right technique, so you don’t put excess strain on your calf.

**What can I do to prevent recurrence?**

Assuming that you haven’t given in to the temptation of going back to training too early, and you have indeed allowed your calf to properly recover, the last thing you want is for the injury to recur a few miles down the road. Understanding what caused your calf strain in the first place is often the best way of finding a way in which to prevent recurrence.

* **Warm up and cool down**– calf strain is often caused by inadequate warming up before exercise. Warming up helps to stimulate blood flow to the muscles, relaxing them and making them more tolerant of the stresses of exercise. Cooling down after exercise is important for keeping muscles flexible, which in turn reduces susceptibility to exercise. Also, exercise causes blood vessels to expand, bringing more blood to the legs and feet. Abruptly stopping exercise without gently lowering your heart rate can cause blood and lactic acid to pool in your legs, resulting in muscle stiffness and soreness.
* **Supports** – Many people over-rotate their feet when walking and running, and aside from putting stress on your feet and ankles, this can also affect your legs and back. Wearing insoles with arch supports can correct the posture of your feet and make you less likely to strain your calf muscles. Many insoles also have shock absorbers in the heel to prevent stress being transmitted up your legs. If necessary, arch supports can be custom made.
* **Massage** – many people find that regular massages help to keep their muscles flexible and relaxed, thus less prone to injury. If you have injured your calf muscle, then the chances are that you will have developed some scar tissue, which is less flexible than normal tissue – hence the tendency for injuries to recur. Massages help to break down this scar tissue which may just help you to run injury free.