

**SIMPLE CALF EXERCISES FOR ENDURANCE**

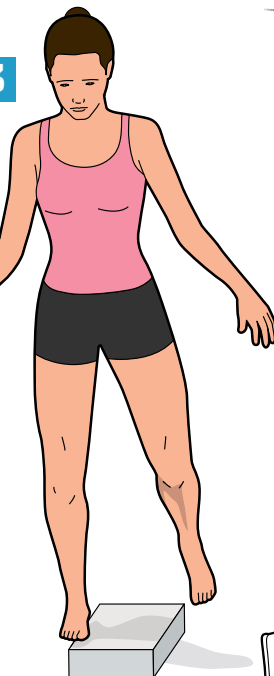
A tight calf or niggle in the muscle may be due to your running or landing biomechanics, but more often than not it's a loading issue. The calf complex is either unable to cope with the amount or type of load you're putting through the calf or it's having to work too hard to compensate for weaknesses in its surrounding musculature. Below are a number of exercises that are

helpful to build calf endurance, hopefully reduce post-training and racing DOMs and allow you to maintain the consistency in training that will help you perform at your very best, injury-free. Many of the simple exercises I've mentioned before (see issue 306, Muscle Conditioning), but it's the addition of the isometric holds that can make all the difference.

**1. STRAIGHT LEG CALF RAISE**

**MUSCLE TARGETED** GASTROCNEMIUS

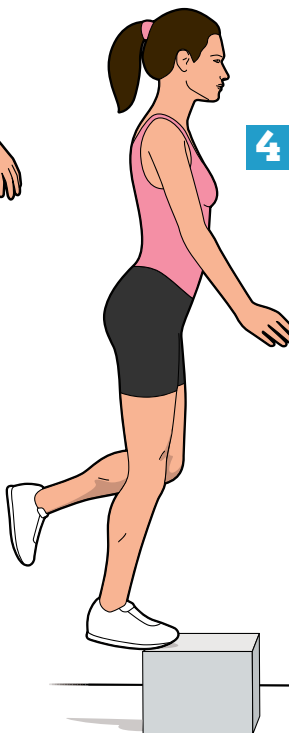
**METHOD** Stand on a step on one straight leg, holding on for support if needed. Rise up onto the tiptoes, hold for a few seconds then slowly lower. Try to use the full range of the muscle and keep the foot in a neutral alignment. These exercises are about endurance, so try to build up to 3 sets of 30 on each leg, then add some load.



**2. BENT LEG CALF RAISE**

**MUSCLE TARGETED** SOLEUS

**METHOD** As above, but maintain a bend in the knee. This exercise will primarily work the soleus, the postural muscle of the calf, which is important for endurance running and control around the ankle when running. Again aim for 3 x 30 reps on each leg.



**3. PRONATION CONTROL**

**MUSCLE TARGETED** TIBIALIS POSTERIOR

**METHOD** Stand on a step, with your big toe and arch resting at the edge. Slowly control your foot as you let the arch of your foot drop down. Work the tibialis posterior by pulling the arch of the foot back up into position. The strengthening of this muscle is important to help pronation control of the foot while running. Build up to 3 x 30 reps on each leg.

**4. ISOMETRIC CALF HOLDS**

**MUSCLE TARGETED** ACHILLES TENDON

**METHOD** Stand on one leg with your heel off a step. Then hold this neutral position for 6 x 45secs (build up to this). You should be able to maintain the exact position with no alteration or shaking through the leg. Once this can be achieved, add some load by popping on a weighted rucksack or moving the exercise to a leg press or calf machine if you're a regular gym user. Another progression would be to change the angle at the ankle, making it specific to the foot angle where you land during your foot strike. This can also be done pre-running to activate the muscle and Achilles tendon.

**READER SOS**

I appear to have set my clip-on tri-bars too close together as I get a pull on my shoulder when using them. I now have weakness in my left shoulder and pain when lifting or reaching behind me. It doesn't affect swimming, cycling or running, but it limits my stretching efforts. I haven't used the bars since June, but my shoulder hasn't improved. Is it best to stretch and exercise the area, or to rest it?  
**ANDREW SANDS, VIA EMAIL**

It sounds like you've got a shoulder impingement from a sustained poor postural position on the tri-bars. An impingement syndrome is normally felt in the front/side of your shoulder and can radiate down the arm. It's caused by one of the tendons of the rotator cuff getting caught and irritated on the bony arch of the shoulder. The typical symptoms include difficulty reaching up behind the back, pain with overhead use of the arm and weakness of the shoulder muscles.

In terms of treatment, there are lots of things that you can do. You'll be pleased to know there's no need to rest the area completely; if training is symptom-free, then you're fine to carry on. Just avoid any activities or movements that aggravate the pain. Rehab-wise, there are three easy components:

- Stretch out the front/anterior muscle of the shoulder, specifically the pectorals. Stretch the pecs at various angles to target all the muscle fibres. You can also trigger point massage this area with a tennis ball, or use a foam roller to release off the pecs.
- Strengthen the muscles that stabilise the shoulder blade at the back of the shoulder. The serratus anterior and lower traps in particular help control the position and movement of the shoulder blade.
- Concentrate on your posture, with the shoulders back and down.

It may also be worth having a professional bike fit, not only to avoid any more injuries but also to optimise your racing and training.

**?** **DO YOU HAVE A QUESTION FOR EMMA?**  
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