

Ouch – Cramping.... when your muscle won't let go

By James Bone

Muscle Cramps are very common and almost everyone experiences a cramp at some time. I'm sure you can remember a painful cramp experience!!! A cramp is a sudden uncontrolled muscle spasm. It can range in severity from a minor muscle twitch to a severe painful disabling spasm, and it can last from a few seconds to 15 minutes or more. The muscle may also have a hard spot in it.

Any muscle of the body can be affected by cramp; however generally the most common muscles affected are the muscles which cross 2 joints, such as the calf, hamstrings (on the back of the thigh) and thigh muscles. Cramps can also affect the feet and hands, such as with writer's cramp. Sometimes the slightest movement that shortens a muscle can trigger a cramp.

People who exercise are more likely to get cramps in the preseason or when they are new to the exercise, as their body is not conditioned and therefore more subject to fatigue. Cramps often develop near the end of intense or prolonged exercise, or the night after. People sometimes cramp in yoga class, especially if they are new to yoga, and are trying too hard or are unfit. (Though in the long term Yoga can help prevent cramps.)

Cramps can also come about if a muscle is held tense for a while doing a sustained action, such as holding a tool or pen.

Older people are more susceptible to muscle cramps due to normal muscle loss that begins in the mid- 40s and accelerates with inactivity. As you age, your muscles cannot work as hard or as quickly as they used to.

Some people can get cramps at rest; this most commonly occurs at night, waking with a painful cramp in the foot or leg.

No one knows exactly what causes a cramp; however muscles are bundles of fibres that contract and relax to produce movement. A regular program of stretching lengthens muscle fibres so they can contract and tighten more vigorously when you exercise. When your body is poorly conditioned, you are more likely to experience muscle fatigue, which can alter spinal neural reflex activity. Overexertion depletes a muscle's oxygen supply, leading to build up of waste product and spasm. When a cramp begins, the spinal cord stimulates the muscle to keep contracting. Muscle cramps are more likely when you exercise in hot weather because sweat drains your body's fluids, salt and minerals (ie potassium, magnesium and calcium). Loss of these nutrients may also cause a muscle to spasm.

There are a number of known risk factors leading to cramp. These include:

- Poor General Fitness
- Muscle Tightness
- Muscle Fatigue
- Over Exerting Oneself
- Dehydration
- Imbalances in the levels of electrolytes (sodium, potassium, chloride, calcium and phosphate) in the blood can also lead to muscle cramps
- Holding a muscle tense for a sustained time
- Inadequate diet
- Physical exertion of cold muscles
- Muscle injury

- Muscle fatigue
- Reduced blood supply (ischaemia)
- Wearing high-heeled shoes for lengthy periods.

There is a special form of cramping called Tetany – it can be brought on by over breathing, which results in a low level of carbon dioxide in the blood. This is often caused by anxiety or panic. To help this you need to change how you breathe – slow and gentle, and relax more....

Generally cramps are not serious or harmful and can be best treated with SELF- HELP strategies. These may include:

- If you get a muscle cramp while exercising, stop your activity and hold the cramped muscle in a gently stretched position until the cramp resolves. Light massage may also help relieve the pain. (See Radhika's Self Massage below)
- If a cramp occurs when you are lying down, you may want to do just the opposite -- put weight and walk on the cramping leg.
- If the spasm is severe then Icing or heat may also help.

For long term prevention YOU can try:

- Building your fitness, and muscle condition – exercise regularly.
- Incorporate regular stretching into your fitness routine – YOGA can be a great way to do this.
- Warm up and cool down thoroughly whenever you exercise.
- Avoid holding your muscles fixed or tensed in one position for too long. For example relax your grip when holding tools or a pen, don't push so hard with the exercise or yoga posture.
- Keep yourself well Hydrated - Drink plenty of water before, during and after exercise.
- Make sure your diet is nutritionally adequate - Consider your electrolyte balance – perhaps see a Naturopath or Nutritionist about this if necessary.
- Have a regular MASSAGE or BOWEN Treatment to help reduce muscle tension. There are specific moves in Bowen and Massage which may help relieve cramps.
- Wear properly fitted shoes and avoid high heels.
- A Traditional Non Scientific Remedy called Schuessler Tissue Salts may help. This is a type of Homeopathic remedy that some people say has really helped them. The Tissue Salt “Mag Phos” is especially useful for cramps.

Cramps can occasionally be a symptom for a more serious condition, such as problems with circulation, nerves, metabolism, hormones, and medication. For example, narrowed arteries in the legs due to Atherosclerosis may restrict blood flow and lead to cramp, pressure on the sciatic nerve may cause leg muscle spasm, and fluid Pills may alter mineral balance and lead to cramps.

If you get cramps regularly or they are extremely severe, it may be worth getting a medical check from your doctor.

References

American Academy of Orthopaedic Surgeons www.aaos.org

Mayo Clinic - www.mayoclinic.com/

Better Health Channel www.betterhealth.vic.gov.au

MedicineNet www.medicinenet.com

Radhika's Special Self Massage for Cramp in the Feet

1. Turn the left sole of your foot towards you, and gently massage the middle point of the sole in a circular manner.

2. Using your thumbs (together or 1 at a time) press firmly up and down the centre line of your foot a few times – from heel to toes and toes to heels). Support the top of your foot with your other fingers.
3. Do the same thing up and down the arch of your foot, stopping to circle or press any points that feel like they need a little extra attention.
4. Massage the heel, even if you can't feel it.
5. Massage the ball of the foot, then the toes.
6. Knead the sole of your foot all over with your fist, like you are making chapatti bread or pastry dough.
7. Move the small bones at the top your foot sideways between your fingers or palms in a rolling out action.
8. Press the foot, ankles, calves and up and down the lower legs, with both hands.
9. Shake out the calves, and stroke the entire leg and foot outwards and downwards.
10. Relax and notice the difference between your feet. Then repeat everything on the right side.

