What causes leg cramps and is there anything you can do to prevent them?

Cramps often occur in the calf muscle and in the foot, but you can also get them in the hand — there’s a thing called writer’s or musician’s cramp. About 95 per cent of people will have a cramp at some time. They’re a bit more prevalent in older adults and quite common in pregnancy, especially in the third trimester.

People aren’t sure what causes them is the bottom line, but there are two main sources that could be the cause of cramps: one is in the muscle, and one is in the nervous system. One form of cramp is the kind you get after exercise or during exercise and those kinds of cramps are thought to be due to an imbalance of ions that are usually involved in performing a normal voluntary contraction. That’s why you might drink sport drinks or eat salty foods, drink lots of water and eat bananas because they have sodium, potassium and calcium in them.

The cramps you get while you’re sitting and move your leg or in the middle of the night, they think might come from within the nerve. It’s kind of like a hyperexcitability of the nerve fibre and it’s not exactly clear why that might be.

One thing for sure is that if the muscle is at a very short length, so for example, in the calf muscle, if you point your toes and then do a fairly strong contraction you can get a cramp just like that.

Frequent stretching, especially in the evening before you go to bed if you’re prone to night cramps, is one thing they think will alleviate this. The reason they think it works is because when your muscle contracts it forms these little bonds between the filaments within the muscle fibres and stretching the muscle breaks those bonds.

There are also splints you can wear that hold your ankle at 90 degrees. I don’t think I’d be too keen on that, but I guess it beats waking up in great pain. Sleeping on your side or stomach with your feet hanging off the end of the bed would probably be the same idea.

Flexing your toes or massaging your calf during a cramp can help reduce it and turn on a reflex that might help to turn it off too. Heat packs can help if you still have pain after the cramp. The pain can last sometimes days afterwards, depending on how wide spread the cramp is. If you do have cramps that are particularly severe or persistent — three times a week — especially if they’re associated with a muscle weakness, go see the doctor.

Dave Collins holds a model of a leg showing the calf muscles.

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