

# Easing leg cramp agony

The agonising pain of leg cramps has to be experienced to be believed, writes **Judy Hobson**

**L**EG CRAMPS often strike suddenly in the middle of the night, not only jolting the sufferer awake but his or her partner too. At first the excruciating pain takes your breath away, then it forces you to shout out, rudely rousing your partner from their slumbers too.

It is not known for sure how common leg cramps are because most people do not bother to discuss them with their doctor, but incidence is associated with the ageing process, with 33 per cent of the over-60s and more than half of the over-80s affected.

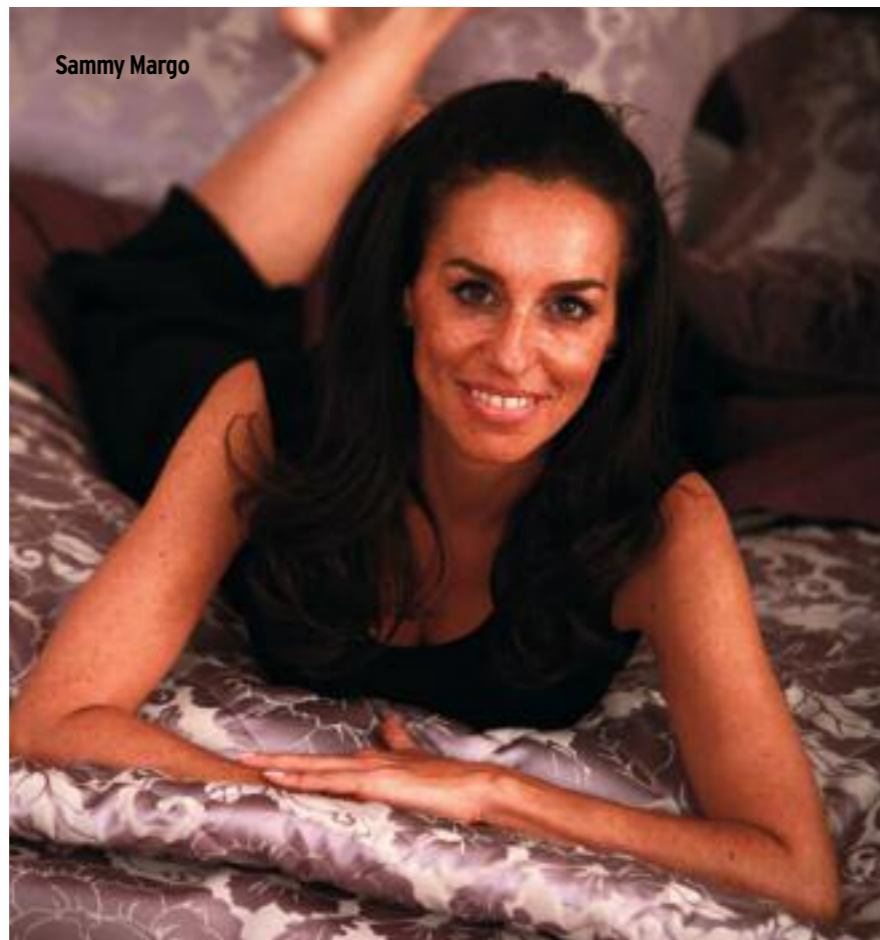
The painful spasms, which can last from a few seconds to ten minutes, usually occur in the calf muscles but can also strike in the toes, feet and thighs. The subsequent pain and tenderness can last an hour or more.

A survey of 1000 people, aged 30 to 65, carried out last April for RealMag Legs, a new magnesium food supplement from Bausch+Lomb, revealed that my husband is not alone. Like him, 60 per cent of the participants were woken by leg cramps and 97 per cent reported having them at some point.

While most (69 per cent) got cramps in their calves, almost half (47 per cent) had them in their feet and 31 per cent in their toes.

Sammy Margo, a chartered physiotherapist and sleep expert with clinics in north London, says: "There are many hypotheses as to the cause of night-time leg cramps but no-one as yet has discovered the true cause. What we do know is that this is a common problem, particularly in older people.

"As we age, the collagen fibres in our legs get shorter and tighter and therefore become less springy. Night-time leg cramps come on very suddenly and can go on for half an hour to an hour. They are a major disruption to sleep, but are



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Chartered physiotherapist and sleep expert **Sammy Margo**

something that is beyond our control. They occur well into sleep and are brought on by an involuntary contraction of our calf muscles. Our tendons stretch, nerve receptors come alive, over-react and send pain messages to the brain and we wake up."

Athletes who have overdone it during the day, she says, often get leg cramps, as do dehydrated marathon runners. The

bad news for older people like my husband is that if they have taken exercise they are not used to, such as dancing the night away at a wedding along with consuming a few alcoholic drinks, they may well be woken by leg cramps in the early hours the next day.

Dehydration is one of the suggested causes of this condition. Others include

doing strenuous exercise, hormone fluctuations, peripheral arterial disease (PAD), diabetes, a trapped nerve, muscle injury, taking medications such as diuretics and statins, and liver disease.

There is, Ms Margo adds, some suggestion that hypomagnesaemia – magnesium deficiency – can bring on leg cramps.

She says: "We already know that magnesium acts as a muscle relaxant and supplements of it can aid restful sleep and reduce anxiety."

When people experience leg cramps two or three times a week or find their cramps affect their quality of life, they should see their GP to discover the underlying cause. Blood and urine tests can be done to check for liver disease; the amount of magnesium in their blood and in their red blood cells can also be measured and the doctor can decide whether to adjust any medication they are taking.

Only 14 per cent of the participants in the RealMag Legs survey were aware that magnesium was associated with muscular health. In fact, magnesium is one of the most important minerals in the body. As well as maintaining normal muscle function, it keeps blood vessels healthy. Low levels lead to impaired muscle co-ordination, difficulty in swallowing and tremors. They can also be a predictor of heart disease and diabetes.

Leading nutritionist Dr Emma Derbyshire says: "Lack of magnesium and leg cramps have long been linked. While this essential mineral can be obtained from some foods such as dark leafy greens, fish, lentils, nuts, seeds and quinoa, most people with a western diet don't get enough and 50 per cent have low levels of it in their bodies.

"The recommended daily intake is 375 milligrams but in Europe the average intake is only between 200 and 300mg a day. Intake appears to have declined since 1900 when it was 410mg daily. This is put down to the excessive use of fertilisers, the depletion of magnesium from soils and the refining of cereals." There are, she adds, carefully devised screening programmes which, along with blood tests, can diagnose whether someone has low levels of magnesium in their blood, hypomagnesaemia.

Dr Derbyshire says that as the levels



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Nutritionist **Dr Emma Derbyshire**

magnesium needed to help ease muscle cramps cannot generally be achieved through diet, it makes good sense to top levels up with a supplement.

She adds: "For individuals who experience cramps, taking a supplement has the advantage of them knowing they are getting the right amount of magnesium. Given that most of it is found inside the cells in our body, it is important to ensure that the supplement contains magnesium oxide, the form of magnesium that can get into these cells. Research has shown that magnesium oxide can do this and that it helps to alleviate leg cramps."

A study by Israeli researchers, reported in the *Magnesium Research Journal*, found that 82 per cent of 32 participants who took a magnesium oxide supplement that also contained vitamins B6 and E reported their leg cramps stopped after taking it for two weeks. A further six per cent said their cramps were reduced.

## When cramps strike

If you wake up with leg cramps, Ms Margo says, take your hand down to the big toe of the affected leg and flex it up towards you. Alternatively, get out of bed, stand, straighten your affected leg, massage it and then walk on it, keeping your leg straight.

NHS Choices advises getting up and walking around on your heels.

Massaging the painful area with Deep Heat or Fisiocrem can provide some relief, and taking paracetamol or ibuprofen can curb the pain.

When cramps are frequent and interfere with the sufferer's quality of life, doctors sometimes prescribe a four-week course of quinine, the malaria medication. However, this can have unpleasant side-effects such as tinnitus, headache, nausea and disturbed vision and can, in rare instances, cause excessive bleeding. Report any side-effects immediately.

## How to prevent night-time cramps

Adopting a good bedtime routine can help keep them at bay, says physiotherapist Sammy Margo.

"Have a warm bath because this will open up your circulation, and before you climb into bed, massage and stretch the area of your leg where you experience cramps. This will exhaust the involuntary reflex that brings them on.

"As they can be the result of sluggish circulation, I suggest sufferers try wearing bed socks."

In addition to staying hydrated throughout the day, Ms Margo advises taking regular exercise.

"You don't have to join a gym. I suggest older people do around 30 minutes of exercise a day, which, if they wish, they can break down into three ten-minute chunks. Instead of going to the shops just once a week they could go every day. If they take a bus they could get off at a stop before their destination and walk the rest of the way. What I advocate is little but often. It could be gardening or housework."

Taking the food supplement RealMag Legs at bedtime may help because it contains the same magnesium oxide formulation used in the Israeli study. It is available at pharmacies and health food stores and costs £8.99.