Leg Cramps: Causes and Remedies

**Definition:** A muscle cramp is a sudden and involuntary contraction of one or more of your muscles. If you've ever been awakened in the night or stopped in your tracks by a sudden charley horse, you know that muscle cramps can cause excruciating pain. Though generally harmless, muscle cramps can make it temporarily impossible to use the affected muscle.

Long periods of exercise or physical labor, particularly in hot weather, may lead to muscle cramps. Some medications and certain medical conditions also may cause muscle cramps. Exercisers who become fatigued and dehydrated while participating in warm-weather activities may develop muscle cramps. Another common type of muscle cramp — nocturnal cramps — occurs in your calf muscles or toes during sleep.

**Causes:** Overuse of a muscle, dehydration, muscle strain or simply holding a position for a prolonged period of time may result in a muscle cramp. In many cases, however, the exact cause of a muscle cramp isn't known. Although most muscle cramps are harmless, some may be related to an underlying medical condition, such as:

- **Inadequate blood supply.** Narrowing of the arteries that deliver blood to your legs (arteriosclerosis of the extremities) can produce cramp-like pain in your legs and feet while you're exercising. These cramps usually go away soon after you stop exercising.

- **Nerve compression.** Compression of nerves in your spine (lumbar stenosis) also can produce cramp-like pain in your legs. The pain usually worsens the longer you walk. Walking in a slightly flexed position — as you would do when pushing a shopping cart ahead of you — may improve your symptoms.
Mineral depletion. Too little potassium, calcium or magnesium in your diet can contribute to leg cramps. Some diuretic medications prescribed for high blood pressure cause loss of potassium.

Muscle cramps are also part of certain conditions such as nerve, kidney, thyroid or hormone disorders; diabetes; hypoglycemia; and anemia.

**Treatment:** You can usually treat muscle cramps with self-care measures. Appropriate stretching exercises can help you reduce your chances of getting muscle cramps. Making sure you stay well hydrated also can help.

For recurrent cramps that disturb your sleep, your doctor may prescribe a medication to relax your muscles.

If you have a cramp, these actions may provide relief:

**Stretch and massage.** Stretch the cramped muscle and gently rub it to help it relax. For a calf cramp, put your weight on your cramped leg and bend your knee slightly. If you're unable to stand, try pulling the top of your foot on the affected side toward your head while your leg is in a straightened position. This will also help ease a back thigh (hamstring) cramp. For a front thigh (quadriceps) cramp, use a chair to steady yourself and try pulling your foot on the affected side up toward your buttock.

**Apply cold or heat.** Use a cold pack to relax tense muscles. Use a warm towel or heating pad later if you have pain or tenderness, or take a hot bath.

Source: http://www.mayoclinic.com/health/muscle-cramp/DS00311