**Muscle Cramps**

The term ‘muscle cramp’ refers to a contraction of the muscle which is involuntary and can be very painful. Muscle cramp can also be referred to as muscle spasms. Cramp is an extremely common problem for athletes and those engaging in sports activity and can occur in any skeletal muscle. Most commonly an individual may suffer from cramp in the legs, feet, and in any muscles, which cross two joins (such as the calf muscle). While cramp may only affect one muscle, it can also arise in all the muscles in a group.

**Which muscles are most susceptible to cramp?**

The calf muscle – back of the lower leg
The hamstring – back of the thigh
Muscles in the feet, arms, abdomen or hands
The Quadriceps – front of the thigh

**What does cramp feel like?**

A muscle spasm or cramp can vary in degrees of intensity. The spasm may manifest itself as merely a twitch, but in other cases cramp can be extremely painful. The muscle may feel very hard for anything from a few seconds to several minutes and in some cases even longer, depending on the intensity of the spasm. The muscle itself may be painful or tender to the touch, and it is often impossible for the injured person to continue with exercise or sport due to the discomfort caused. It is not unusual for the muscle cramps to return after easing a number of times before eventually disappearing completely.

**What causes cramp?**

The exact cause of muscle cramp is, yet, unknown. Cramp can occur without warning, but ordinarily occur in the muscles in the legs and feet. Often, the spasms happen during or after exercise or while playing sports, and also when in bed (the calf muscle is the most common muscle to cramp at night).

Factors which can contribute to the onset of cramp include:

* Overexertion
* Muscle fatigue
* Dehydration
* Unstretched, tight muscles
* Low physical fitness
* Poor running technique (rolling to the outside of the foot, for instance)
* High-heeled shoes
* Exercising in extreme heat

**Are there any long-term effects?**

There are no long-term side effects to muscle spasms or cramp, the muscle may be sore after an intense cramp, but the muscle will soon return to normal.

**What is the treatment for cramp?**

As soon as cramp occurs, cease physical activity and stretch the muscle gently. It is also helpful to massage the muscle which is in spasm. In the event of a calf muscle cramp (a very common type of spasm) hold the calf muscle in one hand while pulling the toes up toward the knee at the same time. Walking may also help to relieve the spasm. In severe cases ice packs may be applied to the cramping muscle – these ice packs reduce the flow of blood to the muscle and can help them relax.

**How can cramp be prevented?**

* Improve overall fitness in order to prevent and avoid muscle fatigue
* Warm up before undertaking any strenuous exercises
* Stretch the muscles which are prone to cramp before exercising to reduce the likelihood of developing cramp (hamstring, calf, quadriceps).
* Stretch after exercise to prevent cramp after exertion
* Manage your hydration levels by drinking water while exercising

**How do I stretch the muscles that may cramp?**

**Hamstring Muscle** – While sitting, straighten one leg out in front of you and keep the foot upright with relaxed toes and ankle. Lean forward and touch the foot of the straightened leg. Repeat with the opposite leg.

**Calf Muscle** – With toes pointing forward in a standing lunge, straighten the rear leg until you feel a comfortable stretch in the calf muscle. Repeat with the other leg.

**Quadriceps Muscle** – While standing (using a wall or chair for support

**Quadriceps Muscle** – While standing (using a wall or chair for support if necessary) raise heel towards buttocks holding the top of the foot and pulling the heel gently in to the buttocks until you feel a comfortable stretch. Repeat with the other leg.