

A common problem we get asked about are muscle cramps, especially in the calf muscles. What causes cramp and how can it be avoided or relieved ?

Some explanation is given in the below..



MUSCLE CRAMPS

Muscle cramps are a common problem for people who exercise, involving sudden, involuntary contraction of muscle fibres. These may be minor cramps, involving only part of the fibres within the muscle, or sever cramps, affecting most of the fibres. When cramp happens it can temporarily incapacitate the dancer. A cramp can involve any muscle within the body; however, the muscles of the leg and foot are most frequently affected. The muscle cramps develop during or after activity and can sometimes occur when the dancer is in a relaxed position or asleep in bed.

The cause of muscle cramps is not readily understood. There are apparently several contributing factors. When the muscle begins to tire and is placed under stress, such as a sudden stretch or a rise onto the ball of the foot, the muscle can contract and cramp. There are both chemical and mechanical causes contributing to muscle cramps. If the muscle is at a biomechanical disadvantage because of misalignment of the lower extremity such as foot or knee, or if the muscle is too tight through overuse, a cramp may result. Deficiencies of certain minerals within the body are also felt to contribute to muscle cramping. These include a lack of sodium (salt), potassium, calcium, magnesium and phosphorus. In some cases there may also be a limitation of blood supply to the muscle which results in cramp during movement. Dehydration may also be a factor.

The immediate treatment for muscle cramps is to gently stretch the muscle and to massage it. One's instinct is to keep the limb bent to ease the pain as the stretching can appear to increase it, but stretching and massage is the best method of alleviating the muscle pain. It may be easier for a partner to help with the stretching and massage of the muscle to work out the cramps. Such local treatment may be all that's necessary, if cramp occurs only rarely.

If cramps occur frequently, an attempt should be made to identify and treat any of the contributing factors. These can include such biomechanical problems as tight calf muscles (sometimes cause by wearing high heel shoes) dancing for prolonged periods on the balls of the feet, a leg length discrepancy, or rolling onto the inside of the instep (known as fallen arches). Nutritional deficiencies should also be investigated; an increase of fruits and vegetables in the diet may help to restore any depletion in minerals. In the past salt tablets were frequently recommended for helping to prevent muscles cramps especially in the warmer weather when the body loses more moisture. However, recent studies have shown that salt tablets do not help and can, in fact be detrimental especially if you have heart problems.

Prevention of muscle cramps requires treatment of any biomechanical problems; maintaining a diet which includes fruit and vegetables in order to maintain mineral levels and drinking plenty of fluids, especially in warm weather.

If frequent muscle cramps persist, then an assessment by a physician may be necessary to determine whether there is any underlying disease or illness causing the muscle cramps.

Almost every active person sustains a muscle cramp at one time or another. A cramp is usually a normal physical response by the body when it is under stress, but it may indicate that other undesired mechanical or chemical changes are present.