

Exercise cramps

For athletes and coaches

The problems of cramps or "almost cramps" are common in trail running races and involves mostly active muscle groups. Cramps are muscle disorders that come in the form of involuntary contractions that can happen from time to time and that can cause temporary disability or functional immobility.

The muscles most likely to experience cramps are the calves and muscles of the feet. The duration of contractions can vary between a few seconds and a few minutes and the intensity of these can produce pain ranging from mild discomfort to very severe pain. However, cramps are not considered as a serious pathology.

There are several theories but you should know that cramps affect almost 25% of runners in ultra endurance. Some strategies that are often adopted by runners, like behavior in racing, especially based on clothing, eating strategies and / or hydration try to prevent or treat cramps related to physical exercise, have no scientific basis.

Also, runners hear many divergent advice like:

- "if I drink a lot of water and eat salt: I will not have cramps": FALSE
- "cramps are a magnesium deficiency" FALSE
- "Against cramps you have to eat bananas": FALSE

In fact none of these factors have been proven by large scientific studies or if these studies have been done, it does not show any benefit.

The 2 theories generally proposed to explain the appearance of cramps are :

The theory of hydration and electrolytes

The first theory, which is the most classic, identifies the dehydration and depletion of electrolytes - the salts minerals in the form of ions present in the blood - as the main sources of muscle cramps. Although this theory is supported mainly by case studies and observational research, no research has been able to demonstrate a causal effect.

The theory of impaired neuromuscular control

The second and more recent theory, born in the late 1990s, is related to impaired neuromuscular control. Two pathologies seem to be able to explain this phenomenon: an abnormal excitation of the axonal termination or the hyperexcitability of nerve endings and this increased during a hydroelectric imbalance. These factors seem to be more likely to cause cramps than dehydration alone.

In fact it is above all the muscular fatigue and the individual predisposition of each runner which would allow to explain the appearance of cramps in some people.

Tips:

- be rested before the race
- Leave slowly because overspeed cramps are more frequent and especially in the first half of the race.
- The most stressed muscles are those most sensitive to cramps.
- The use of sticks can help distribute the workload

- In the event of cramps, adopt an economical stride, possibly interrupted by the walking period and short stretching of the painful area.

TRUE

Is pickle juice a solution? Maybe but in the short term only, as cramps have been shown to recur very quickly thereafter. It seems that consuming pickles or even juice pickle juice would reduce cramps by 50% temporarily.

The cramp is a symptom in a syndrome Soon more ...