

TRAINING TIP OF THE WEEK

Muscle Cramps

Exercise-associated muscle cramps (EAMC) are common in athletes, and they tend to occur in exercising muscles during or immediately after exercise. The exact cause of EAMC is not known. One theory is that cramping is due to premature muscle fatigue, leading to a decreased ability for the muscle to relax, which results in cramps. Cramps of this type are usually confined



to one muscle and don't progress in severity once activity is stopped. They are usually relieved by stretching of the effected muscle. Prevention of fatigue-type cramping is best accomplished by making sure conditioning mimics the energy demands of competition, getting adequate sleep, doing proper stretching, and eating enough carbohydrates so that the muscles have all the fuel necessary for activity. The other theory behind EAMC is that they result from dehydration and/or abnormalities in electrolytes, such as sodium. Good research has shown that poor

hydration status and low sodium levels can lead to cramping. With this type of cramping, an athlete first feels some muscle twitches that progress to excruciatingly painful and debilitating cramps in about 30 minutes if intervention is not taken. An average female will lose about 1.5 liters of sweat per hour, while the average male will lose about 2 liters in the same amount of time. Starting activity with good hydration is of utmost importance, and remaining hydrated during activity by drinking 32 oz. of sport drink mixed with $\frac{1}{4}$ teaspoon (tsp) of salt for every hour of activity can keep cramping away. If severe cramps do occur, immediately taking 16 oz. of a sport drink mixed with $\frac{1}{2}$ tsp of salt can help resolve them. After activity, drinking a mixture of $\frac{1}{2}$ tsp of salt added to 32 oz. of a sport drink for every kilogram of weight lost during exercise will help replenish any fluid losses.

Dr. Christopher Ranney, M.D.



Athleticare
Sports Medicine Specialists

128 E. Milltown Rd.
Suite 105

Wooster, OH 44691

www.athleticaresportsmed.com

330-345-8060