Muscle cramping affects many athletes during sport participation. Although not life-threatening, cramps can be debilitating and cause a significant time away from activity – often at the worst time, like at the end of a game. So what can be done to prevent cramping?

First, understand that cramps occur from a combination of muscle fatigue, dehydration and salt loss (in the form of sodium). There is no way to perform a physical activity at an optimal level and avoid muscle fatigue; therefore, to prevent and/or treat muscle cramps, the focus should be placed on the other factors.

Most fluid and salt loss occurs through sweating. The amount of sweat produced varies from individual to individual and is driven by environmental conditions. Individuals that have a high sweat rate can lose between one and three liters of sweat per hour, especially in hot or humid conditions. Depending on how concentrated an individual’s sweat is, he or she may lose as much as five grams of sodium per hour (known as a “salty sweater”). Other losses occur during sweat – including potassium, magnesium and calcium – but these are minor when compared to sodium loss.

Most individuals who have a balanced diet that includes some salty foods and a proper hydration strategy can avoid problems with cramping. However, there are individuals who will have problems regardless (as mentioned above – the “salty sweater”). Usually these players will report a history of severe muscle cramps, often prompting trips to emergency facilities for intravenous fluids. For those athletes, supplementing the diet with more sodium and adjusting their hydration strategy can help.

Here are some ways of supplementing salt (sodium) into the diet:

- Drink a beverage already containing electrolytes instead of plain water when rehydrating.
- Add an electrolyte packet to water for a suitable fluid replacement.
- Drink V8® juice – it’s high in sodium and can be consumed before or after games.
- Add more table salt to food.

As far as the amount of sodium that should be added to the athlete’s intake, keep in mind that one

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Tips for helping athletes recover from an illness

No athlete wants to miss a game because of illness. But at some point during the season, an athlete may feel under the weather, and parents or coaches may wonder whether he or she is okay to participate. The following are general guidelines for determining if athletes should practice when they don’t feel well.

Follow the “neck” rule. If an athlete is running a fever, no matter what the symptoms are, do not allow exercise until the fever is gone. However, if the athlete has no fever and all symptoms are above the neck – for example, a headache or clogged sinuses – it should be okay to practice or play. If the athlete has symptoms below the neck, such as deep chest cough, vomiting or diarrhea, he or she will need to rest or go see a doctor.

Moderate exercise can be an immune booster, even when an athlete is sick. Sometimes a light practice will help to unclog the sinuses or to counteract the run-down feeling. However, vigorous exercise can backfire and cause further fatigue, making an illness worse. Fatigue can also cause clumsiness, which raises the risk of injury during sports.

Keep it clean. When athletes come to practices and games with an illness, they run the risk of infecting their teammates. All athletes should wash their hands, sports clothes and equipment often. Any athlete who is participating in swimming should avoid the pool when they are sick. The water is an easy way to spread germs.

Drink more water than usual. Athletes cannot “sweat out” illness during physical activity. In fact, sweating may cause dehydration, which is also a common symptom of many sicknesses. Athletes who are not feeling well should drink more water than they normally do.

Get plenty of sleep. An athlete’s body needs rest to fight the illness and to recuperate. If the illness does not go away after a few days, or if the symptoms are causing concern, have the athlete see his or her doctor. If practices or games are missed because of illness, have the athlete return to activity slowly because he or she will have temporarily lost some strength.
Help prevent the spread of MRSA among athletes

What is MRSA?
Methicillin-resistant Staphylococcus aureus, commonly known as MRSA, is a staph bacterium that is resistant to common types of antibiotics. Staph bacteria are among the most common causes of skin infections, and they can cause pneumonia, surgical wound infections and bloodstream infections. These infections can become life-threatening if not treated properly.

The majority of MRSA infections occur among patients in hospitals or other health care settings. However, MRSA has recently become more common in the community setting.

What does a MRSA infection look like?
Staph infections often begin with an open wound, which allows the bacteria to enter the body and develop into an infection. Look for:

• Pimples, boils or blisters that become red, swollen, painful, or have pus or other drainage.

Is a MRSA infection treatable?
Most staph and MRSA infections are treatable with antibiotics. If you go to your physician with a possible infection, ask him or her to culture the infection so he or she knows what type of antibiotic to put you on. Take all doses of the antibiotic, even if the infection is getting better before you’re finished with treatment. Do not stop unless your physician tells you to. Do not share antibiotics with other people or save unfinished antibiotics to use at another time.

Only physicians should drain skin boils or abscesses. Do not attempt to squeeze or drain a boil yourself. This will only spread the infection.

Preventing MRSA
MRSA and other staph infections are spread through physical contact or by touching surfaces the infection has come in contact with – for example, sports equipment, weight equipment, tables and lockers. With that in mind, here are some tips for preventing a MRSA infection:

• Practice good hygiene! Keep your hands clean by washing them thoroughly with soap and water or by using an alcohol-based hand sanitizer.

• Clean all cuts and scrapes daily with soap and water. Put an over-the-counter triple-antibiotic ointment on the wound and cover it. This is especially important during physical activity when you are around other people. Keep the wound covered daily until it is completely healed.

• Avoid contact with other people’s wounds or discarded bandages.

• Avoid sharing personal items such as towels, clothing and razors.

• Do not share equipment if it has not been wiped down first with an alcohol-based sanitizer.

• Shower after practices or games.

• Take practice clothing home every night and wash it in hot water with detergent. Dry the clothes on a hot setting. Do not wear dirty clothing for practices or games.

• Wash any sheets, towels or clothing that have come in contact with an open wound.
UK Sports Medicine

UK Sports Medicine is staffed by sports medicine fellowship-trained physicians. Physical therapy and rehabilitation services are available. Our sports injury walk-in clinic requires no appointment – just walk in 7:30-8 a.m. Monday-Friday.

UK Sports Medicine is located at 601 Perimeter Drive, Suite 200, in Lexington (right off Alumni Drive).

Call 859-323-4433 or 859-218-3131 for more information or to make an appointment. Visit us on the web at ukhealthcare.uky.edu/sportsmedicine.