

# Heat and Hydration

Heat cramps, heat exhaustion, and heat stroke are all serious (in some cases fatal) heat-induced conditions. It is imperative for the safety of your players and volunteers that you and your coaches know how to identify and treat them.

## Heat Cramps

When a body loses too much water and salt through sweat, muscles tend to cramp (particularly in the abdomen and legs). Players suffering from these painful "heat cramps" should

Rest in a shady spot.

Sip one glass of cool water every 15 minutes until the pain relents.

If the player's parents are on hand, have them help by

Massaging the affected muscles.

Applying cool, wet cloths to help relax the muscles.

## Heat Exhaustion

Players with cool, moist, or flushed skin, heavy sweating, headache, nausea, dizziness, or muscle cramps may be experiencing heat exhaustion. This condition occurs when, because of high humidity or restrictive clothing, sweat is not properly evaporated and the body cannot cool down. To assist a player experiencing heat exhaustion

Have the player lie down in a shady spot and elevate his or her feet.

Remove the child's shoes, shin guards, and socks.

Apply cold packs to the armpit and scalp areas.

Have the player drink water or an electrolyte solution.

Dampen the player's skin with cool cloths.

Fan the player to help evaporate excess sweat.

If the player's parents are on hand, have them

Remove the player's shirt.

Apply cold packs to the groin area.

## Heat Stroke

When a body completely loses the ability to cool itself, the internal

temperature continues to rise resulting in heat stroke. If a player's temperature rises too quickly, brain damage and/or death may result. Players suffering from heat stroke may have hot, dry skin -- those with fair complexions may appear red, while darker-skinned individuals may appear gray. Victims may also experience a very rapid pulse and extremely high body temperature. In some cases, victims of heat stroke may seem confused, unresponsive, or even suffer from seizures. Recovery from heatstroke depends on the amount of time it takes to return the body temperature to normal, so immediate medical attention is imperative.

If you suspect that a player is suffering from heat stroke

- Call 911 immediately.

- Follow the recommended treatment for heat exhaustion.

- DO NOT attempt to give any liquids.

- Contact the player's parents.

Professional soccer players lose seven and a half pounds of sweat during a game. In order to avoid serious heat-induced conditions, players must drink enough fluids to replace that sweat. Every player should carry his or her own sports bottle to practice, and coaches need to stop for drink breaks every 15 minutes during the summer. Symptoms of dehydration may include

- Dry lips and tongue.

- Sunken eyes.

- Dizziness or a loss of energy.

In addition to staying hydrated, wearing loose-fitting, lightweight clothing in light colors will help keep the body cool. Coaches must remember to conduct shorter, easier practices in the summer.

## **Making Hydration A Goal**

### **Tips On Preventing Heat Illnesses**

When you are watching sports, have you noticed that the first thing that the players do when they have a break is get something to drink? They drink every chance they get throughout the game. That's how important proper hydration is to safety and athletic performance. Proper hydration

is as important to athletic safety as any protective equipment. In fact, heat illnesses are among the most dangerous sports injuries, and some of the most preventable. AYSO has some tips on how to make sure your soccer player remains adequately hydrated. While proper hydration is always important, it is something to pay particular attention to as we roll into the summer months, especially in areas of increased humidity.

**Did you know that when you are thirsty, you are already dehydrated?** "Your body can't keep up with the loss of fluids," according to Herbalife's Vice President of Medical Affairs and Education, Dr. Luigi Gratton. Your body has thirst indicators, and when you are thirsty-your body is telling you that you are already dehydrated.

**Did you know there are two types of fluid loss?** One type of fluid loss is "sensible" fluid loss. That is losing fluids through sweat and urine. A second type of fluid loss is "insensible" fluid loss, which is losing fluids through breathing. "The water gets broken down into CO<sub>2</sub>, and you breathe it out, so during exercise your lungs blow out a lot of fluid you don't see. Parents will say their kid isn't sweating a lot and she hasn't had to use the bathroom, so she isn't losing any fluids. Not true. She is actually losing a tremendous amount of fluids," Dr. Luigi explains.

**Did you know that 20 to 25 percent of fluid intake is through foods?** Take an apple and compare it to a dry piece of fruit. That dry piece of fruit is flat. Now look at that apple-the difference is that fresh apple has water in it. It's generally easier to absorb water in food.

**Did you know that a consistent, healthy diet is the best way to prevent dehydration?** Having a healthy diet is very important because if kids are just eating chips and sodas, there is not enough water there. So the best thing is always to have a good, and balanced diet. To ensure your child is eating well, include fruits, vegetables and healthy protein sources such as chicken and fish. Dr. Luigi recommends that an active child should drink six to eight glasses of fluid per day. Remember, if your child likes juice or lemonade-that counts as water, but caffeinated drinks count against the six to eight glasses. It takes more than a full day to hydrate, so if your child has a Saturday game-make sure they're getting enough fluids on Friday. That means lots of fruits, vegetables and healthy protein, and of course, six to eight glasses of water. On game day, start out with a healthy breakfast. Some ideas are cereal and fruit or oatmeal and fruit. Just remember, don't give your child too much fiber. While fiber does have water in it, it breaks down slowly and can cause bloating. Also make sure

to have a low-fat protein such as eggs or turkey sausage. A glass of milk will be fine, but water or juice is much better for game days. They are easier on the stomach. Too much juice can cause bloating and cramping, so if your child wants more than one glass of juice-dilute it with water.

Make sure your child snacks and drinks water throughout the day. Dr. Luigi suggests snacking every two to three hours. Give her a protein or carbohydrate snack such as an energy bar or banana. She should be having on average eight ounces of water every 15 to 20 minutes. With the summer slowly creeping up on us, make sure you keep your child fully hydrated to prevent heat illnesses. By keeping your soccer player hydrated, you not only protect her from heat illness, but also will help her play at the best of his abilities.