

Proper Hydration can Prevent Summertime Injuries

By Micah Simon

June 12, 2009, revised June 30, 2009

Staying hydrated during practices and games is especially important during hot, summer months.

- [Audio](#)
- [Video](#)
- [Image](#)



Having sports drinks and water available at practices and games is necessary to combat sweat loss, but plenty of fluids should be had throughout the day prior to physical activity as well.

Water makes up 60 to 65 percent of a person's body weight. When engaged in physical activity, football players should be mindful of the importance of staying hydrated because proper hydration means more energy and a decrease in health risks when playing.

JohnEric Smith, a member of USA Football's Health and Safety Committee and a Principal Scientist for the Gatorade Sports Science Institute, said it's very important for youth football players to drink plenty of fluids during the summer.

"Compared with adults, children may have a diminished ability to keep themselves cool," Smith said. "They have a greater surface area-to-body mass ratio than adults which results in greater heat gains from the environment in hot environments. They are also less efficient at performing tasks than adults resulting in the production of more metabolic heat per mass unit during physical activity."

Many children come to practice dehydrated, and the added pads and protective gear for football also prevent the body from cooling. Dehydration can increase core body temperature and even cause heat illness. A sign of dehydration is sweat loss.

"Sweat losses that result in body weight losses of 2 percent can hurt athletic performance by causing fatigue and affecting physical and mental skills. As little as 1 percent reduction in body weight can reduce endurance in children."

Despite these risks, several steps can be taken to stay hydrated for games and practices.

For athletes, fluids should be taken throughout the day no matter what the level of physical activity. Sports drinks and drinks from coolers and the cafeteria are ways of taking in these necessary fluids. Also, drinking the right fluids at home such as low fat milk will keep the body properly hydrated.

At least 16 ounces of fluid should be taken two to three hours before physical activity. About 10 to 20 minutes before a practice or game, 8 ounces of fluids should be taken.

During practice and game breaks, athletes should continue to drink fluids to help maintain their energy level. The amount of fluids athletes should drink depends on how much they sweat.

Gatorade is just one of the sports drinks available that can help prevent dehydration and muscle cramps. Sports drinks help the body refill sodium and potassium levels that are lost when sweating. Other sports drinks include Powerade and Capri Sun Sport. Checking nutrition information for sports drinks is important, as they do not all have the same levels of sodium and potassium.

For coaches, Smith suggests stressing the importance of being hydrated before practice.

"Have participants begin acclimating to the heat prior to beginning practice with shorter, less intense heat exposures."

Coaches should also make sure their players are getting plenty of fluids and rest frequently, and practices should be scheduled to avoid hotter times of the day.