

Fisher-Titus Medical Center

SPORTS INJURY GUIDELINES

“The Winning Team for Your Athletic Health Care Needs”

Signs of Dehydration

When you become dehydrated, your cooling system shuts down, blood flow is decreased to the skin and sweat output drops, just the opposite of what has to happen to stay cool. This contributes to further increases in body temperature. Excessive heat build-up leads to early fatigue and increase s the risk of developing heat-related illnesses.

Indicators of Fluid Needs

Thirst Mechanism – Thirst is not a good indicator of fluid needs during exercise. Generally the thirst sensation doesn't occur until the athlete is slightly dehydrated. For this reason, athletes need to be encouraged to drink fluids before, during and after exercise. In addition, consuming plain water may remove the drive to drink before the body is full hydrated.

Body Weight – One of the fastest and easiest ways to track fluid needs is to weigh yourself before and after exercise. Weight loss during exercise is due primarily to body fluid loss. To treat or prevent dehydration before the next workout, you need to take in enough fluid to increase your body weight back to the pre-exercise level.

What Should Athletes Drink?

Criteria for Fluid Replacement Beverages

Research shows that fluid replacement beverages should meet the following:

- Tastes good to encourage you to drink:
- Absorbed quickly:
- Does not cause stomach cramps, nausea or bloating:
- Supplies energy (carbohydrates) to working muscles:
- Replaces electrolytes lost in sweat

What Not to Drink During Exercise

Drinks High in Carbohydrates – Beverages with higher levels of 8% carbohydrate are absorbed slower than water or properly formulated sports drinks.

Carbonated Beverages – They reduce the amount of fluid you can drink quickly: and can cause stomach cramps, nausea if consumed immediately before or during exercise.

Caffeinated Beverages – They increase fluid loss (diuretic effect) and make dehydration even worse.

Water

Plain water can be a good fluid replacement beverage, particularly if nothing else is available. But, keep in my mind that water has limitations. For example, water turns off the thirst mechanism and turns on the kidneys prematurely. This means you don't drink enough to start and you lose some of what you drink.

Sports Drinks

Research shows that you get a benefit simply by staying well-hydrated during exercise. The great thing is you can double that performance benefit by consuming a small amount of carbohydrate. And, that's exactly what a properly formulated sports drink like Gatorade/Powerade is designed to do. A 6-7% carbohydrate solution is optimal for a sports drink. It tastes great, stimulates more rapid fluid absorption than plain water and provides energy to working muscles.

Fluid Replacement Guidelines:

• Drink before, during and after

Before: Drink 8 ounces (1 cup)

During: Drink 4-8 ounces every 15 to 20 minutes

After: Drink 20 ounces of fluid
For every pound of weight-loss.

• Check the color of your urine

A clear, light-colored urine indicates you are well hydrated.

Choose properly formulated sports drinks that taste great, are absorbed quickly, and supply carbohydrates and electrolytes.