

Hydration: The Importance of Replacing Sweat Losses

Dehydration occurs when your body isn't getting fluids. For athletes and active people not hydrating properly can impact your performance and cause physical symptoms.

During hard exercise your muscles can generate up to 20 times more heat than when you are at rest. This means you lose more water and increase your risk of dehydration during activity.

How much do you need to replace your sweat losses?



Find your Sweat Rate

- Weigh yourself nude before and after exercise. For every pound (16oz, or .5kg) you lose, drink 80 to 100 percent of that loss (13 to 16oz or 400 to 480ml) while exercising to stay in optimal fluid balance.
- By figuring out your sweat rate you can practice programmed drinking during exercise to minimize sweat losses

General Tips

- Try figuring out how many gulps of water equate to 16oz
- 2 percent loss of bodyweight fits the definition of dehydrated
- 3 percent loss can significantly impair aerobic performance

How do you know if you're adequately replacing the fluid lost?

- Check the color of your urine
 - > Hydrated: Lemonade
 - > Dehydrated: Apple Juice
- Check the quantity of your urine
- How you feel
 - > Possible Dehydration: Chronically fatigued, headachy, or lethargic



What to Look for in a Sports Beverage

Proper hydration allows our bodies to perform at our highest levels. In most cases, water is sufficient for hydration. However, sports drinks can also play an important role.

The Basics

Keep these three tips in mind when selecting your sports drink:

Good Taste: If you like the flavor, you'll drink more

Carbohydrates: Your beverage should have about 50 to 70 calories of carbohydrates (13 to 18g per 8 ounces)

Sodium: Important for maintaining fluid balance and enhancing fluid retention

When selecting a sports drink, avoid:

Carbonation: Bubbles can make you bloated and fill up sooner

Alcohol: Slows your reaction time, has a diuretic effect (more you drink more fluids you lose)

New Features with Questionable Value

- **Vitamins:** Typically the absorption rate is not quick enough to be of much to any benefit during exercise.
- **Ginseng, guarana, and other herbs:** The amounts of these ingredients are usually too small to make a real impact on your performance and currently there are not proven benefits.

- **Caffeine:** Pre-workout caffeine may help in preventing the body from depleting stored glycogen for energy. However, caffeine during workouts may cause side effects such as anxiety, jitters, and irritability.
- **Protein:** Protein can alter the taste and slow gastric emptying, the rate at which beverage leaves the stomach.
- **Potassium, calcium, magnesium, and other minerals:** The amounts of these minerals lost when you sweat is very minimal and can be replaced through a good dietary intake instead of through your sports drink.

Fact or Fiction

The best way to prevent dehydration is to drink when you feel thirsty.

Fiction: The best way to determine hydration status is by weighing yourself nude each morning, after emptying bladder and bowels. Weight should remain stable.

For more information on sports nutrition, visit UPMCSportsMedicine.com/Nutrition.

To schedule a sports nutrition appointment, call **724-720-3077**, or email SportsNutrition@upmc.edu.