Hydration Tips for Athletes Contributor: Sarah Eby, MD, PhD Jun 5, 2023

Every athlete at every age and skill level needs to stay hydrated. Proper fluid intake is essential to your health—and your performance. Research shows that even a small amount of water loss can hinder your performance. But how do you know how much to drink and whether you're getting enough?

"Your body is 60% water, and you lose some of that during exercise, from perspiring and breathing moisture out," says Sarah Eby, MD, PhD, a sports medicine specialist with Mass General Brigham and Spaulding Rehabilitation Network. "When you don't have enough water in your system, it essentially thickens the blood and affects the blood's oxygen-carrying capacity. This lowers the amount of oxygen that your muscles get. Water also helps lubricate your joints. When you're dehydrated, you're also less able to flush toxins out of your system, and you can't cool yourself as efficiently. This can put you at risk for heat-related illness."

Dr. Eby offers several easy strategies and formulas to ensure you get enough water before, during, and after exercise.

How much water should I drink when I exercise?

There are no exact measurements for how much water an athlete should drink. Generally, adult women should consume about 91 ounces (11 cups) of fluid a day. Adult men require about 125 ounces (15 cups), according to the Institute of Medicine of the National Academies of Sciences, Engineering, and Medicine. This includes water as well as fluids you get from foods and other beverages.

Athletes need even more fluids to replace water lost through sweating. The amount of fluid you need depends on how much you sweat, the climate, exercise intensity, and how long you are active.

How much water to drink before a workout?

To start exercise adequately hydrated, the American Council on Exercise suggests:

17 to 20 ounces of water a few hours prior to exercise.

8 ounces of water 20 to 30 minutes before exercise or during your warm-up

How much water to drink during a workout?

"You should try to consume 4 to 8 ounces of fluid every 15 to 20 minutes during exercise," Dr. Eby says. "If you are participating in moderate activity in a climate that isn't very warm, you may be able to consume the lower end of that spectrum — 4 ounces every 20 minutes. High-intensity exercise in the heat might require the higher end of that spectrum — 8 ounces every 15 minutes."

How much water to drink after a workout?

To understand how much water you need to replace after a workout, weigh yourself. "One thing you can do to get a better sense of how much fluid you actually need is to weigh yourself before and after your workout," Dr. Eby says. "For every pound that you lose during a workout, you should drink about 3 cups of water to replace the loss of fluids. Ideally, you'll keep this number in mind as a hydration goal the next time you exercise so you don't have to play catch-up after your workout is over."

Signs you are dehydrated.

Your body sends you signals that you are dehydrated. “If you’re thirsty, it’s too late — you’re already dehydrated,” Dr. Eby says. You also may experience:

Dark yellow urine (it should look like pale lemonade instead)

Fatigue

Less coordination or concentration

Lower intensity level than usual

Lower performance than expected.

Muscle fatigue or cramps

Tips for staying hydrated.

Dr. Eby recommends several hydration tips for athletes:

Follow a hydration plan every day. For example, if you want to consume 120 ounces of fluid per day, break that down into smaller servings. If you are awake 15 hours each day, drink eight ounces every 2 hours.

Set a timer throughout the day — and during your training sessions or games — so you drink something every 15 to 20 minutes.

Carry a water bottle so fluids are always accessible and you remember to drink. This will also help you track how many ounces you’ve consumed.

Eat foods with high water content. Watermelon, grapefruit, strawberries, and cantaloupe are great options. Not all fluid intake needs to be in pure liquid form.

Depending on the intensity and duration of your workouts, it may be wise to supplement with electrolytes. Research shows that having a little bit of sodium in your hydration can help you absorb that fluid better while you’re exercising.

What should I drink during exercise?

Water is the go-to drink throughout the day and during workouts. But if you’re sweating a lot, you’re losing sodium. Dr. Eby suggests you consider a sports drink when you exercise at high intensity for longer than 45 minutes. They contain electrolytes (essential minerals such as sodium, calcium, and potassium), which are vital to bodily function.

“Depending on the intensity and duration of your workouts, it may be wise to supplement with electrolytes. Research shows that having a little bit of sodium in your hydration can help you absorb that fluid better while you’re exercising,” Dr. Eby says.

There is no “best” sports drink for athletes. “Simply pick one that tastes good to you and that you can tolerate. If it’s too strong or sweet, cut it with water,” Dr. Eby says. “If you’ve never had a sports drink, don’t drink one for the first time on a competition day. Trial these fluids while training to discover which work well for you.” Both water and sodium need to be replaced to re-establish "normal" total body water (euhydration). This replacement can be by normal eating and drinking practices if there is no urgency for recovery. But if rapid recovery (less than 24 hours) is desired or severe hypohydration (greater than 5% body mass) is

encountered, aggressive drinking of fluids and consuming electrolytes should be encouraged to facilitate recovery for subsequent competition.

Dr. Eby also recommends that athletes limit certain beverages:

Alcohol: Alcohol is a diuretic, which makes your body remove fluids at a faster rate.

Caffeine: Caffeine also has diuretic effects, but not as much as alcohol. Generally, the fluid in a caffeinated beverage offsets any dehydrating effects.

Carbonated beverages: Carbonated drinks can cause gastrointestinal distress, and your body may not absorb carbonated fluids as well as flat liquids.

Heightened hydration for athletes in special populations

Dr. Eby recommends certain populations keep an even closer eye on hydration and drink additional fluids.

As we age, our bodies contain less fluid overall, our sense of thirst diminishes, and kidney function tends to decline. Therefore, older athletes are more prone to both dehydration and heat-related illness.

Finally, she says, athletes who participate in twice-a-day training, such as football programs or multiple athletic games in the same day, need to be extra mindful. It can be especially challenging to maintain hydration if you work out more than once a day.