

# 15 Hydration Facts for Athletes

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[Water](#) is a wonderful performance enhancer. When a star U Conn basketball player took the advice of his sports nutritionist Nancy Rodriguez, RD and started drinking enough to consistently void a light-colored urine, he was amazed at how much better he felt all day.

Unfortunately, too many athletes overlook the power of this essential nutrient. Perhaps it's your turn to give water a try? This article offers droplets of information to enhance your water I.Q., optimize your water balance, and help you feel and perform better.

## 1. You don't have to drink plain water to hydrate.

All fluids count, as do foods that have high water content. For example:

- Oatmeal is 84 percent water.
- Low-fat milk is 90 percent water.
- [Coffee](#) is 99.5 percent water.
- Lettuce is 96 percent water.
- Tomato is 95 percent water.
- Broccoli is 89 percent water.
- Low-fat vanilla yogurt is 79 percent water.
- Ice cream is 60 percent water.

## 2. You cannot function without water.

Your body cannot survive without sufficient water, as noted by the fact that athletes die from dehydration. Water is the solvent for your biochemical reactions.

## 3. You need water for digestion.

Water is required to moisten food (saliva), [digest food](#) (gastric secretions), transport nutrients to and from cells (blood), discard waste (urine), and dissipate heat (sweat). Water is a major component of the muscles and organs; about 60 percent of a male's body weight and 50 percent of a woman's body weight is water.

## 4. Your body parts have different water contents.

Water constantly moves through your cells. About 4 percent to 10 percent of your body-water gets replaced every day with "fresh" water. For example:

- [Blood](#) is approximately 93 percent water.
- Muscle is about 73 percent water.
- Body fat is about 10 percent water.

**5. Bioelectrical impedance (BIA) methods of measuring body fat actually measure body water.**

This formula estimates the ratio of water to muscle and fat. Hence, if you use a Tanita Scale or Omron device, be sure to maintain adequate hydration. If you are dehydrated, you'll end up with an inaccurate (higher) estimate of body fat.

**6. Your body produces 8 to 16 oz. (250 to 500 ml) water per day.**

This occurs during normal metabolic processes. [During a marathon](#), a runner's muscles can produce that much water over two to three hours. When muscles burn glycogen, they simultaneously release about 2.5 units water for every 1 unit of muscle glycogen; this helps protect against dehydration.

**7. Your coffee is a source of water.**

Although once thought to have a diuretic effect, current research indicates coffee (in amounts normally consumed) hydrates as well as water over a 24-hour period. That is, after drinking coffee, you may urinate sooner, but you will not urinate more than you consume.

Army research on caffeine and [dehydration](#) confirms coffee is an acceptable source of fluids for athletes, even during exercise in the heat. Hence, coffee and other caffeinated beverages such as tea or cola count towards your water intake.

**8. An increased concentration of particles in your blood triggers the sensation of thirst.**

If you are a 150-pound athlete, you'll start to feel thirsty once you've lost about 1.5 to 3 pounds of sweat (1 percent to 2 percent of your body weight). You are seriously dehydrated when you have lost 5 percent of your body weight.

**9. Body water absorbs heat from your muscles and sweat dissipates heat.**

The evaporation of 1 liter (about 36 oz.) of [sweat](#) from the skin represents a loss of about 580 calories. Sweat keeps you from overheating during exercise and in hot environments.

**10. You can measure your water losses after a workout.**

To determine how much water you lose when you sweat, weigh yourself (with little or no clothing) before and after one hour of hard exercise with no fluid intake. The change in body weight reflects sweat loss. A one-pound drop in weight equates to loss of 16 oz. of sweat. A two-pound drop equates to 32 oz.—that's 1 quart. Drink accordingly during your workouts to prevent that loss.

**11. When you sweat, you lose water from both inside and outside your cells.**

The water outside the cells is rich in sodium, an electrolyte that works in balance with potassium. Potassium is an electrolyte inside the cells. Sweat contains about seven times more sodium than potassium, hence sodium is the most important electrolyte to replace during extended exercise.

## **12. Dehydration can hinder athletic performance.**

Athletes who lose more than 2 percent of their body weight (3 pounds for a 150-pound athlete) lose both their mental edge and their ability to perform optimally in hot weather. Yet, during cold weather, you are less likely to experience reduced performance, even at 3 percent dehydration.

Three to 5 percent dehydration does not seem to affect muscle strength or performance during short intense bouts of anaerobic exercise, such as weight lifting. But [distance runners](#) slow their pace by 2 percent for each percent of body weight lost through dehydration. Sweat loss of more than 10 percent body weight is life threatening.

## **13. Water can reduce constipation and help with urinary tract infections.**

There is also no scientific validation of theories that excessive water intake will [improve weight loss](#), remove toxins, or improve skin tone.

## **14. You don't need eight glasses of water per day.**

No scientific evidence supports the “eight glasses per day” rule, so you can simply drink in response to thirst. You can also monitor the volume of your urine. If your urine is scanty, dark, and smelly, you should drink more. If you have not urinated during your work or school day (8 a.m. to 3 p.m.), you are severely under-hydrated.

## **15. Bottled water is not always better than tap water.**

According to the Center for Science in the Public Interest, nearly half of bottled waters come from municipal water supplies—not from the mountain streams pictured on the labels. This suggests standard municipal tap water is high quality.

Rather than spend money on bottled water, turn on your tap. This will help stop the flood of 95 million plastic water bottles that get discarded each day, of which only 20 percent get recycled. Drink plenty of water—but think “green.”