

# Hydration: Too Little, Too Much?

## Drink In These Water Facts

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We all know the importance of water for life. After all, our thirst instinct evolved to make sure we pay attention to our need for this precious fluid. Consider the following fluid facts:

- The brain is 75 percent water, so even moderate dehydration can cause headaches and dizziness.
- Blood is 92 percent water, so dehydration can have a serious effect on your cardiovascular system.
- Water regulates body temperature, playing a vital function in keeping us safe during exercise, particularly in the heat.
- Water helps absorb food and convert it into energy.
- Water is needed for breathing, carrying nutrients and oxygen to cells, and shuttling away junk that needs to be excreted from the body.

Because of these important functions – and the fact that water makes up over half our body weight – you can't live more than about a week without water.

### How Much Do I Need?

According to the National Academy of Sciences, the average female needs about 91 ounces of water, and the average male about 125 ounces a day. About 80 percent of this comes from fluids you drink, and 20 percent from foods (fruits and vegetables being the biggest contributors). The amount of water any individual needs to stay hydrated depends on the temperature, their weight, and the intensity and duration of exercise, among other factors. Remember that during heavy exercise, sometimes the thirst mechanism does not keep up with need, meaning that you should drink plenty of water, even if you don't feel thirsty.

### How does exercise affect hydration?

Drinking too little during exercise can affect your performance in many ways:

- Exercising in the heat causes excessive fluid loss. Every 2 pounds of water sweated out during exercise will cause your heart rate to increase 8 beats per minute, decreasing the amount of blood your heart is able to pump by 1 liter (about 1 quart) per minute. This reduces your muscle's ability to access oxygen and nutrients from the blood.
- Water is critical to keeping your core temperature cool, so dehydration can lead to heat exhaustion and possible heat stroke, which can be very serious – even fatal. Symptoms of

heat illness generally start with muscle cramping in the hands, feet or calves and as it worsens move on to nausea, headache, confusion, anxiety, decreased sweating, hot flushed dry skin and loss of consciousness.



**Flex That Bottle:** Muscles are 75 percent water.

### **How do I stay hydrated?**

For active teens, to prevent dehydration, you need to drink before, during and after exercise. “Many active kids don’t drink enough fluids before and during the school day because they don’t want to hassle with bathrooms,” says Boston-based sports nutritionist Nancy Clark, MS, RD, “so they start practice dehydrated and end up more dehydrated, needlessly fatigued and headachy.”

- Try to replace your fluid at about the same rate that you’re losing it. Drink 8 ounces of fluids 10-20 minutes prior to activity and at least 4-8 ounces of fluids every 15 minutes during activity. For long events drink carb-containing sports beverages to keep muscles fueled.
- Drink at least 8 ounces of water within 30 minutes of finishing activity. Every pound of body weight lost during a tough workout corresponds to about 2 cups of fluid loss, so weigh yourself before and after exercise to figure out how much fluid you should be replacing. Down 2 pounds? Drink 4 cups of water.

### **What if I’m not that active?**

Aim to drink whenever you eat (hopefully at least 4-5 times daily), and include lots of fruits and vegetables at meals as snacks as they’re mostly made of water.

### **What about over hydration?**

It is possible to overdo hydration, particularly if you drink straight water without electrolytes in it (which is why Gatorade and other sports drinks are good options during long activities), increasing the risk of developing a dangerous condition called hyponatremia. This sometimes happens because people get freaked out about possibly getting dehydrated. If you follow the guidelines above, and try to drink sports drinks with electrolytes as at least part of your fluid replacement, you won’t be at risk.

*This article has been reviewed by BodiMojo expert Carolyn Butterworth.*