



Image: dreamstime.com

Myth #1: You need to drink at least eight glasses of water a day.

"The best advice is to listen to your body," she says. "If you get thirsty, drink water. If you're not thirsty, you don't need to drink water."

"This will protect you against the dangers of both drinking too much and drinking too little," she adds.

"And this recommendation applies to [people of] all shapes and sizes in all temperature conditions."

Hew-Butler says hydration is also about the balance of water to salt. Sodium is necessary for our nerves and muscles to function. And it's what our body uses to regulate the amount of fluid it needs to stay hydrated.

Thirst plays a central role in fine-tuning that balance, she explains. "There are sensors located in your brain and they are constantly tasting your blood to see if [there's] just the right [amount of] salt. If it's too salty, then [those sensors are] like, 'Oh my God, I need more water.' When that happens, it makes you thirsty."

Then, if you drink too much water and the sensors in your brain detect that your blood is too watery, they signal a hormone that tells your kidneys to pee out the extra water, she says.

Myth #2: Caffeine makes you dehydrated.

Another persistent myth about hydration states that caffeine is a diuretic that makes you pee, and therefore caffeinated drinks like coffee and tea don't hydrate your body. The idea is based on the findings of a [study from 1928](#) that looked at three people. Not only is that sample incredibly small by today's standards, but the finding has not held up to more recent experiments. So consider this myth busted.

According to multiple studies, ranging from a [2003 review of research](#) dating back to 1966 to a [2014 clinical trial that compared coffee to water ingestion in 50 men](#), caffeine can be a mild diuretic in large amounts for people who aren't accustomed to it. But caffeinated drinks consumed in moderation provide the same hydration as non-caffeinated drinks.

"Those studies have shown that drinking caffeinated and some low alcohol-content beverages [such as beer] are not much different than drinking water," says Millard-Stafford of Georgia Tech.

Myth #3: We need sports drinks to replace salt and other electrolytes.

If you're exercising for more than an hour or so, it's likely you will need to replace the salt you're sweating out along with water, say the experts. But you don't have to do that by drinking sports drinks like Gatorade. While they can be *one* effective way to replace the body's salt,

you can get that salt from other foods and drinks. And like thirst, you can trust your body to tell you how much you need.

Researchers have found that along with a thirst for water, humans have [evolved a thirst for salt and other minerals](#) too. "The brain monitors [how much you lose], then triggers a precise appetite" for something salty, says Oka, the professor of biology at Caltech. That might be sports drinks — or a salty snack like peanuts.

Hew-Butler and a team of colleagues conducted a study to find out just how well the body's thirst mechanism for salt works. They [analyzed five years of research](#) on ultra-marathon runners in northern California. Organizers at the races set out tables with salty snacks such as peanuts, pickles, salted watermelon and even salt packets in addition to water, soda and sports drinks and encouraged the runners to consume only what they craved. The researchers found that the runners were able to keep their salt-balance levels in check just by following their thirst and appetite.

Bottom line? Your body will tell you when it's got a hankering for salt — so let your cravings be your guide.

Myth #4: Drinking water can help you lose weight.

Studies have shown that drinking water *can* help with weight loss if it's replacing sugary beverages like soda, sweet juices and sports drinks. In [a study](#) published in the *American Journal of Clinical Nutrition*, researchers asked a group of more than 300 overweight and obese individuals to replace such beverages with water for 6 months and found it helped reduce the subjects' weight by an average of 2 to 2.5%, an only barely significant amount.

Myth #5: Dark-colored pee means you're dehydrated.

In 2017, she [conducted a study](#) published in the journal *BMJ Open Sport & Exercise Medicine* to see if measuring the salt concentration of urine was an accurate reflection of the salt concentration in blood. She asked 318 athletes to "pee in a cup, then we drew their blood," she says. More than half of the athletes showed up as dehydrated when she measured their urine — but when she looked at their blood, *none* of them showed up as dehydrated.

Just because your urine is dark gold, says Hew-Butler, it doesn't mean your body is dehydrated. It just means your kidneys aren't releasing as much water in order to keep your blood's water-sodium level balanced. It would be more accurate to look at the concentration of sodium in our blood, she says, because our brain's sensors use that to decide how much water our bodies need.

That said, if you're not great at paying attention to your thirst, [some hydration experts](#) recommend drinking enough water to keep your urine a light, straw-yellow color — a simple way to assess hydration.

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