

Here's What Dehydration Does to Your Body (and What to do About it)

Written by Laura Newcomer – *The Fix*



None of us would be alive today if it weren't for water. Our bodies are made up of approximately 60 percent water; many of our internal organs are composed of well over that amount. Even our bones are around 30 percent water! That's how integral this element is to our bodies and lives.

Not only does water make up a large percentage of our body weight, but it also helps regulate internal body temperature, metabolize food, flush waste, and lubricate joints. Water allows cells to grow and survive, and carries oxygen throughout our bodies.

Given all this, it should come as no surprise that when our bodies don't have enough water, things can go seriously awry. When we don't have enough fluid, our regulatory systems have to pick and choose which of the functions listed above take priority and compromise on the rest. Depending on the level of dehydration, effects can be mild – say, a faint headache – or severe, such as seizures or coma.

In short, fluid levels are nothing to mess with. Here's how to identify dehydration's symptoms and causes, treat it once it starts, and prevent it before it ever has a chance to wreak havoc on your water-loving body.

What Is Dehydration and Why Does It Happen?

Dehydration describes what happens when a person's body doesn't have as much fluid as it needs, either because it's lost too much fluid or the person hasn't consumed enough fluid, or both.

Common causes of dehydration include sweating too much, fever, vomiting, diarrhea, frequent urination, and not drinking enough fluids.

In addition to these common causes, dehydration can stem from other, more surprising sources. These include:

- Menstruation, when hormones influence hydration levels
- Prescription medications or dietary supplements, which may act as diuretics
- Low-carb diets
- Pregnancy, when morning sickness may cause women to vomit
- Breastfeeding
- Consuming alcohol, which is a diuretic
- Stress

While anyone can become dehydrated, certain groups – including infants, children, the elderly, people with chronic illnesses, people living at high altitudes, and endurance athletes – tend to be at greater risk.

Regardless of its cause, dehydration affects the body in some predictable ways. When there's not enough water in our blood, the hypothalamus gland, which controls fluid balance, gets triggered. The hypothalamus then communicates with the kidneys and tells them to withdraw less water from the blood, so we urinate less frequently. At the same time, having inadequate levels of water in the blood causes blood pressure to drop and heart rate to spike. As dehydration sets in, cells throughout the body have to work harder in order to carry out basic functions. That causes strain, which can manifest in any number of ways.

How to Tell If You're Dehydrated

AM I DEHYDRATED?

HERE'S HOW TO TELL

SIGNS OF MILD TO MODERATE DEHYDRATION INCLUDE:



THIRST



DRY MOUTH



FATIGUE



HEADACHE



INFREQUENT URINATION AND/OR DARK URINE



DRY SKIN OR SKIN THAT'S LOST ITS ELASTICITY



CONSTIPATION



DIZZINESS OR LIGHTEADEDNESS



MUSCLE CRAMPS



BAD BREATH



CRAVINGS FOR SWEETS



ALTERED MOOD, CRANKINESS, OR FUZZY THINKING

SIGNS OF SEVERE DEHYDRATION INCLUDE:



RAPID BREATHING



RAPID HEARTBEAT



SEVERE DIZZINESS OR LIGHTEADEDNESS



UNCONSCIOUSNESS OR DELIRIUM



NOT URINATING, OR HAVING VERY DARK-COLORED URINE



EXTREMELY DRY OR SHRIVELED SKIN THAT LACKS ELASTICITY



SUNKEN EYES



EXTREME THIRST



LOW BLOOD PRESSURE



NOT SWEATING EVEN WHEN YOU SHOULD BE (FOR INSTANCE WHILE OUT FOR A RUN IN HOT WEATHER)

When the body has to work overtime to accommodate dehydration, it lets us know. Signs of mild to moderate dehydration include:

- Thirst
- Dry mouth
- Fatigue
- Infrequent urination and/or dark urine
- Dry skin or skin that's lost its elasticity
- Headache
- Constipation
- Dizziness or lightheadedness
- Muscle cramps
- Bad breath
- Cravings for sweets
- Altered mood, crankiness, or fuzzy thinking

Signs of severe dehydration that necessitates medical attention include:

- Not urinating, or having very dark-colored urine
- Extremely dry or shriveled skin that lacks elasticity
- Severe dizziness or lightheadedness
- Rapid heartbeat
- Rapid breathing
- Sunken eyes
- Unconsciousness or delirium
- Low blood pressure
- Extreme thirst
- Not sweating even when you should be, such as while out for a run in hot weather. This is a sign your body is so dehydrated it has shut down some normal functions.

THE DEHYDRATION PINCH TEST

For a quick and easy way to decipher if you're dehydrated, try out **the pinch test** (also known as the skin turgor test):



Lightly pinch some skin on the back of your hand and pull it up about **one centimeter** before letting go.



If you're not dehydrated, the skin will **spring back** into its regular position almost immediately.

If it **takes a few seconds to settle back down**, you may be dehydrated.

While the range of symptoms is very broad, several indicators call for emergency medical attention. Call 911 if a person loses consciousness, demonstrates confusion, has a seizure, has a fever over 102 degrees Fahrenheit, exhibits symptoms of heatstroke (such as rapid breathing or heart rate), or does not start to feel better even after drinking fluids and getting out of the sun. If left untreated, severe dehydration can result in permanent brain damage, kidney failure, coma, and even death.

The good news is that, except in the most severe cases, treating and preventing dehydration is pretty simple. It just takes a little bit of mindfulness and a willingness to check in with your body's cues.

How to Treat and Prevent Dehydration

If you're already showing signs of dehydration, then it's time to go into fix-it mode, stat. Remember, if you or someone else exhibits signs of severe dehydration, it's important to seek immediate medical attention.

If symptoms are only mild or moderate, your best bet is to drink non-diuretic fluids — ideally water or a sports drink with electrolytes. If you have trouble gulping down water, take small sips at regular intervals or suck on ice cubes.

If dehydration stems from diarrhea, try to drink at least one cup of fluid after every trip to the bathroom. It can also be helpful to eat high-potassium foods such as bananas, skinless potatoes, and fruit juices. No matter the cause of dehydration, avoid taking salt tablets, which can cause serious health complications.

Ideally, you'll never need to treat dehydration because you'll have prevented it in the first place. The best way to stop dehydration before it ever starts? Consume enough fluids, of course! Here's how to ensure your daily fluid intake is up to snuff.

Keep a water bottle handy

It's easy to get absorbed in work or other activities and forget to walk to the sink for a glass of water. Eliminate the need to break focus by keeping a bottle of water with you at all times. Go easy on the environment by choosing a reusable water bottle. Whenever the bottle is empty, use it as a signal to take a break, stretch your legs, and refill. Then get back to sipping.

Increase your produce intake

Fruits and vegetables have a high water content and are a great way to up your hydration without needing to use the bathroom every 30 minutes. In fact, the foods we eat can provide up to 20 percent of our hydration.

Make water more exciting

If you have trouble getting jazzed about drinking lots of water, spruce it up by mixing in some fruit juice, fruit slices, unsweetened and uncaffeinated tea, or mint leaves.

DODGE DEHYDRATION

WITH THESE EASY TIPS

Keep a water bottle handy

Whenever the bottle is empty, refill and keep sipping.

Increase your produce intake

Fruits and vegetables have a high water content.

Make water more exciting

Mix in a splash of fruit juice, fruit slices, unsweetened (and un-caffeinated) tea, or mint leaves.



Adjust to different situations



Up fluid intake at the first sign of illness.



Hydrate before and during exercise.



Keep water on hand at all times in hot, humid weather or at high altitudes.

Choose room-temperature water



Ice water constricts the arteries surrounding the stomach, which slows down water absorption.



Drink room-temperature (or slightly cooler) water instead.

Listen to your body



Water intake requirements vary by person and circumstance.



Pay attention to any signs of dehydration.



Respond immediately to thirst cues.



Adjust water intake according to activities and the weather.

Adjust to different situations

Some circumstances require that you consciously increase your water intake – particularly illnesses that include vomiting or diarrhea, intense exercise, or high temperatures and humidity. Up your fluid intake at the first sign of illness, hydrate before and during exercise, and keep water on hand at all times in hot, humid weather or at high altitudes.

Choose room-temperature water

Ice water isn't a great choice because it constricts the arteries surrounding the stomach, which – rather ironically – slows down water absorption. Nix the ice and stick to room-temperature or slightly cooler water, instead.

Listen to your body

The common advice that everyone should drink eight 8-ounce cups of water a day isn't necessarily an accurate metric. In reality, water intake requirements vary by person and circumstance. For example, someone who's working at a desk for eight hours has different fluid needs than someone who is training for an ultramarathon. The best way to ensure you're adequately hydrated is to respond immediately to thirst cues, pay attention to whether your body exhibits signs of dehydration, and adjust your water intake according to your activities and the weather.

The Takeaway

No matter who you are, where you live, or what you do on a daily basis, water is integral to keeping you alive and keeping your internal organs and systems healthy and functioning properly. By recognizing the signs of dehydration and (better yet) knowing how to prevent it, you'll be able to keep your body humming along with all the water it needs.