



# SUPERHYDRATION

*By Ellington Darden, PhD.*

## Water and the Human Body

The human body is from 50-65% water. But not all body components have the same water percentage. Your blood, for example, is 90% water, your brain is 85%, your muscle is 72%, your skin is 71%, your bone is 30%, and your fat is 15%.

As your body experiences dehydration, you feel it first in those systems that contain the most water. For example, you lose your mental alertness and you suffer from overall muscular weakness. The last component that dehydration affects is your fat. That's why excessive sweating makes almost no dent in reducing your body-fat percentage.



Men have more water in their bodies than women, primarily because men have more muscle mass and less fat than women. A lean man with a body weight of 180 pounds may have 14 gallons of water in his system. A gallon of water (128 ounces) weighs approximately 8 pounds, so simple multiplication (8 x 14) reveals that 112 pounds of this man's body is water.

You may not think of water as food, but it's the most critical nutrient in your daily life. You can only live a few days without it. Every process in your body requires water. For instance, it:

- acts as a solvent for vitamins, minerals, amino acids, and glucose
- carries nutrients through the system
- makes food digestion possible
- lubricates the joints
- serves as a shock absorber inside the eyes and spinal cord
- maintains body temperature
- rids the body of waste products through the urine
- eliminates heat through the skin, lungs, and urine
- keeps the skin supple
- assists muscular contraction

## Partial Dehydration

Water contributes to so many functions that most people take it for granted. At the end of a long workday, maybe you have a headache. Plus, your eyes are irritated, your back hurts, and your entire body has a dull numbness. You blame it on stress and lack of sleep over the weekend.

Maybe you're right. But more likely, you're simply suffering from partial dehydration.

Perhaps you had several cups of coffee for breakfast, a high-fat lunch with more coffee or maybe an alcoholic drink or two, and spent the rest of your time breathing air-conditioned or heated air at work—all of which has left your body, and most of its systems, dry and parched. Unless you've been drinking water throughout the day, dehydration is your problem.

If you are attuned and sensitive enough to your body's signals, you should be able to recognize some of the early warnings of dehydration:

- dizziness
- headache
- fatigue
- thirst
- flushed skin
- blurred vision
- muscle weakness

These warning signs merit your attention. Unfortunately, most people never realize that they spend most days in a state of partial dehydration.

Although thirst is an important warning sign, many people seem to be desensitized to the signal. Some people, especially adults over 40, may actually have a decreased sensation of thirst.

## **Water and Fat Loss**

Large amounts of water facilitate the fat-loss process in a number of ways:

### **Kidney-liver function**

Your kidneys require abundant water to function properly. If your kidneys do not get enough water, your liver takes over and assumes some of the functions of the kidneys. This diverts your liver from its primary duty—to metabolize stored fat into usable energy.

If your liver is preoccupied with performing the chores of your water-depleted kidneys, it doesn't efficiently convert the stored materials into usable chemicals. Thus, your fat loss stops, or at least plateaus. Superhydration accelerates the metabolism of fat.

### **Appetite control**

Lots of water flowing over your tongue keeps your taste buds cleansed of flavors that might otherwise trigger a craving. Furthermore, water keeps your stomach feeling full between meals, which can help take the edge off your appetite.

## **Urine production**

Here's a little-understood fact: As much as 85% of your daily heat loss emerges from your skin. Heat emerging from your skin is important because another word for heat is calories, and another word for calories is fat. That's right, most of your fat is lost through your skin in the form of heat. Anyway, the remaining 15% of that heat loss is divided between warm air coming from your lungs and warm fluid being passed out through the normal urination process.

Superhydration can double, triple, or even quadruple your urine production. As a result, you'll be able to eliminate more heat. Remember, inside your body, fat loss means heat loss. So get used to going to the bathroom more frequently than normal.

## **Cold-water connection**

Have you ever wished for a food that supplies negative calories? Let's say such a food exists and it contains a minus 100 calories per serving. Any time you feel like a piece of chocolate cake or a donut, all you have to do to compensate is simply follow the sweet with two servings of the negative-calorie food. Presto—plus 200 calories and minus 200 calories yields 0 calories. While no negative-calorie food exists in science—ice-cold water has a similar, but smaller, effect inside your body.

When you drink chilled water, which is about 40 degrees Fahrenheit, your system has to heat the fluid to a core body temperature of 98.6. This process requires almost 1 calorie to warm each ounce of cold water to body temperature. Thus, an 8-ounce glass of cold water burns approximately 8 calories, or 7.69 to be exact. Extend that over 16 glasses, 128 ounces, or one gallon—and you've generated 123 calories of heat energy, which is significant.

There's real calorie-burning power in cold water. A professor of biology from the University of Florida added to my understanding of the cold-water connection when he pointed out that melting ice and a burning candle both require the transfer of heat. They simply modify their forms. The ice changes from solid to liquid, and the candle from solid to gas. Both transfers, or changes, involve heat.

## **Constipation help**

When deprived of water, your system pulls cellular fluid from your lower intestines and bowel creating hard, dry stools. One of the big roles of water is to flush waste from the body. This is a substantial task during fat metabolism because waste tends to accumulate quickly. Superhydration tends to make people more regular and consistent with their bowel movements, which is helpful to the overall fat-loss process.

## Water-Drinking Guidelines

How do you drink a gallon of ice-cold water a day? "With great difficulty," you may reply. Although such a recommendation may sound difficult, in fact, it only presents a few minor problems—such as how, when, and where. Each of these problems can be solved with some intelligent planning.

### How

One secret is to not drink the water, but to sip it. Get yourself one of those 32-ounce plastic bottles, the kind that has a long straw in the top. I've found that most people can consume water easier with a straw than trying to gulp it down the standard way with a glass. Also, while you're checking out various bottles, select one that is insulated. The insulation will keep your fluid colder for a longer time.

### When

Another tip is to spread your water drinking throughout the day. Here's a useful guide that I worked out.

Water-drinking (number of 32-ounce bottles per day)		schedule					
Week		1	2	3	4	5	6
7am	to	1.50	2.00	2.00	2.00	2.25	2.50
12pm							
12pm	to	1.50	1.50	2.00	2.00	2.25	2.50
5pm							
5pm	to	1.00	1.00	1.00	1.50	1.50	1.50
11pm							
Total		4.00	4.50	5.00	5.50	6.00	6.50
Note: Drink 75-80% of water between 7am and 5pm.							

You'll notice on this plan that after Week 1, the men add 16 ounces of water each week to their starting level of 128 ounces per day. During Week 6, the recommendations are up to a daily consumption of 208 ounces, or 1-5/8 gallons. This schedule is just an example. Notice, too, that it's important to sip from 75-80% of the water before 5pm. The early drinking of most of the water eliminates the need to get out of bed during the night and visit the bathroom.

## **Where**

You sip water everywhere you go during the day because you know how to plan ahead. Once again, you need a 32-ounce, insulated, plastic bottle. Okay. But what about refilling the bottle, the ice, and all that hassle of keeping count of the ounces?

The really motivated people invest in a two-gallon thermos jug. First thing in the morning, they fill the large jug with ice and water. Then, they draw off their initial 32 ounces of fluid into their insulated bottle and start sipping. As soon as the bottle is empty, it's refilled from the thermos jug. When they leave home each day, they carry both the thermos jug and the smaller bottle with them. That way they always have access to their chilled water. When they return home that night, they wash the jug and the bottle and prepare for the next morning.

A great way to keep count of the bottles and ounces is to place rubber bands around the middle of the bottle equal to the number of bottles of water you are supposed to drink. Each time you finish 32 ounces, take off a rubber band and put it in your pocket.

## **Additives**

There is a difference between plain water and other beverages that contain mostly water. Those mostly water fluids—such as soft drinks, coffee, tea, beer, and fruit juices—contain sugar, flavors, caffeine, and alcohol. Sugar and alcohol add calories. Caffeine—found in coffee, tea, and many soft drinks—stimulates the adrenal glands and acts as a diuretic. Rather than superhydrate the system, caffeine-containing beverages actually dehydrate the body. You should keep such beverages to a minimum.

The only recommended flavoring for water is a twist of lemon or lime. Even so, most of the people who like lemon or lime eventually get to the level where they prefer their water plain with nothing added.

## **Tap water or bottled water**

In general, the United States has one of the safest water supplies in the world. Chances are high that your community's tap water is fine for drinking. Furthermore, research shows that bottled water is not always higher quality water than tap water. The decision to consume bottled water or not is usually one of taste.

If you dislike the taste of your tap water, then drink your favorite bottled water. Just be sure to check the label carefully for unwanted additives. If you have no problems with your city's water supply, then save some money by consuming it.

## **Too Much Water**

It's possible to drink too much water, but it's highly unlikely that you would ever do so. In the medical literature, drinking too much water leads to a condition known as hyponatremia. Hyponatremia most often occurs in athletes involved in triathlons and ultramarathons. A few of these athletes consume many gallons of water during the course of these unusually long competitions, and because of the continuous activity they don't or can't stop to urinate. Thus, they impede their normal fluid-mineral balance and actually become intoxicated with too much water. Such a condition, however, is rare.

I've never observed anything close to intoxication happening with any of my participants, and some of them consume two gallons of water daily. Of course, they also have no trouble urinating frequently.

**Note:** Persons with a kidney disorder or anyone who takes diuretics should consult a physician before making modifications to his or her water consumption.

## **Give Superhydration a Try**

If you have more than five pounds of fat to lose, then I would suggest that you get involved with Superhydration through one of my books. Both "Living Longer Stronger" and "A Flat Stomach ASAP" have all of the latest recommendations incorporated into their week-by-week rules—which include eating and exercising plans.

On the other hand, if you only have a few pounds of fat to remove, if you're already in lean condition, or if you just want to give Superhydration an informal trial for whatever reason, here are the most efficient guidelines to utilize:

- 1) Purchase a 32-ounce, insulated, plastic bottle from which to sip your water.
- 2) Start by sipping one gallon, or 128 ounces, of water a day. Do not go higher than 128 ounces per day for this informal trial period.
- 3) Drink most of the water before 5pm.
- 4) Keep the water ice cold. Remember, each ounce of 40 degrees Fahrenheit water requires approximately 1 calorie to warm it to a core body temperature of 98.6.
- 5) Apply the above recommendations for at least 14 days.

## **What to Expect**

Expect to feel more energetic, less fatigued, smoother skinned, and more satiated (from a nutritional standpoint) by the end of the first week. Anticipate being a little leaner by the end of the second week.

If you keep the Superhydration routine intact for a full month, you just may get healthily hooked for a long time.

During this brief process, you'll experience some of your body's quest, thirst, and fulfillment for water: large amounts of it. You'll realize that, for years and years, what you've been calling hunger was really an inner cry for more water.

Listen closely to your body. It will reward you when it gets what it needs.

### **A Final Toast**

Superhydration has worked for thousands of people. It will work for you by improving your well-being—both on the inside and the outside of your body.

It will definitely help you lose fat and live leaner longer.

Decide today to make Superhydration a salient aspect of your daily lifestyle.

Let's drink to it. Water — on the rocks, straight up, and with a straw. Make it a double!