



**Dr. Maddalena frau**



## **THE IMPORTANCE OF WATER AND HUMAN HEALTH**

**"I'm dying of thirst!"**

Well, you just might. It sounds so simple. H<sub>2</sub>O. Two parts hydrogen, one part oxygen.

But this substance better known as water, is the most essential element, next to air, to our survival. Water truly is everywhere, still most take it for granted.

Water makes up more than two thirds of the weight of the human body, and without it, we would die in a few days. The human brain is made up of 95% water, blood is 82% and lungs 90%. A mere 2% drop in our body's water supply can trigger signs of dehydration: fuzzy short-term memory, trouble with basic math, and difficulty focusing on smaller print, such as a computer screen. (Are you having trouble reading this? Drink up!) Mild dehydration is also one of the most common causes of daytime fatigue. An estimated seventy-five percent of Americans have mild, chronic dehydration. Pretty scary statistic for a developed country where water is readily available through the tap or bottle.

Water is important to the mechanics of the human body. The body cannot work without it, just as a car cannot run without gas and oil. In fact, all the cell and organ functions made up in our entire anatomy and physiology depend on water for their functioning.

Water serves as a lubricant Water forms the base for saliva Water forms the fluids that surround the joints. Water regulates the body temperature, as the cooling and heating is distributed through perspiration. Water helps to alleviate constipation by moving food through the intestinal tract and thereby eliminating waste- the best detox agent.

Regulates metabolism In addition to the daily maintenance of our bodies, water also plays a key role in the prevention of disease. Drinking eight glasses of water daily can decrease the risk of colon cancer by 45%, bladder cancer by 50% and it can potentially even reduce the risk of breast cancer. And those are just a few examples! As you follow other links on our website, you can read more in depth about how water can aid in the prevention and cure of many types of diseases, ailments and disorders that affect the many systems of our bodies.

Since water is such an important component to our physiology, it would make sense that the quality of the water should be just as important as the quantity. Drinking water should always be clean and free of contaminants to ensure proper health and wellness.



## ARE YOU GETTING ENOUGH?

We've all heard that drinking water will help keep us healthy. But how much is really enough?

The experts have always said, on average, that eight eight-ounce glasses per day will suffice. However, that might not be enough. While eight is great, amounts really need to be tailored to meet the needs of every individual. Most adults will lose between two to three quarts of water per day by way of normal body functions, but athletes and those who live in work in warmer environments tend to lose more. For those people, drinking more water will make up for the bigger loss of water they had through perspiration, as well as in the regulation of body temperature.

Our bodies are made up of 55-70% water, but it does not replenish itself, so drinking water helps maintain that healthy balance. But even still, many will walk around dehydrated, most of the time unknowingly. That is because thirst is a poor indicator of dehydration. By the time someone gets thirsty, it is too late! Or, if one is thirsty, they may go for a beverage that does not actually replenish the body. A cold soda may feel nice going down, but beverages with caffeine are not meant to hydrate. Water is the best remedy for dehydration. If mild dehydration sets in, it can decrease one's energy level and mental functioning and increase stress on the body. Severe dehydration can have far more damaging effects.

There are three important rules when it comes to drinking water:

Drink twice as much as it takes to quench your thirst. Drink frequently throughout the day to prevent dehydration. Drink at least eight glasses daily, or one cup for every 20 pounds of body weight. For example, a 150-pound person who does not exercise or work in hot climates needs 7.5 cups. While some fruit juices and green tea may account for some fluid intake, you can count out beverages such as coffee or alcohol. They have a mild diuretic effect, which promotes urination and therefore water loss, which ultimately defeats the purpose.



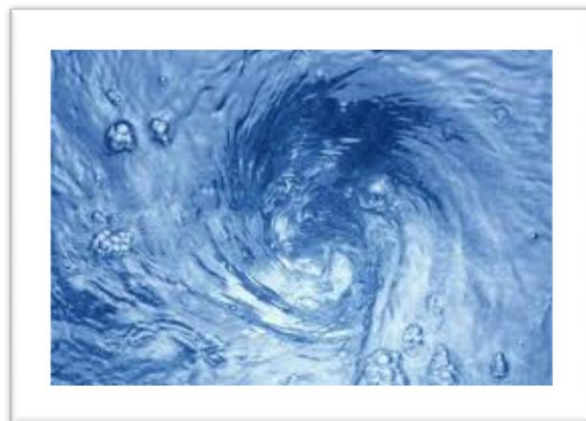
## QUICK TIP:

A trick to ensure people are drinking their daily allowance is to fill a pitcher or jug with the allotment of water and keep it on your desk at work, or handy at home. The goal is then clearly marked. As you drink down the water, you know that you are on the right path to drinking enough water.

And finally, those frequent bathroom trips are not a bad thing. The best indicator that one is drinking enough water is when urine comes out pale yellow to clear. A dark yellow color, however, is a sign your body is dehydrated and is concentrating the urine in an effort to conserve water.

When it comes to your health, the quality of your drinking water is just as important as the quantity.

According to recent news and reports, most tap and well water in the U.S. are not safe for drinking due to heavy industrial and environmental pollution. Toxic bacteria, chemicals and heavy metals routinely penetrate and pollute our natural water sources making people sick while exposing them to long term health consequences such as liver damage, cancer and other serious conditions. We have reached the point where all sources of our drinking water, including municipal water systems, wells, lakes, rivers, and even glaciers, contain some level of contamination. Even some brands of bottled water have been found to contain high levels of contaminants in addition to plastics chemical leaching from the bottle.



## CAN OTHER DRINKS/BEVERAGES REPLACE WATER?

Are you one of those people who always have a can of soda at your desk? You may want to think about taking a trip to the water cooler instead. Not only can soda pack on the pounds, it can also deteriorate the body as well.

The sugar in soda, usually containing 9 teaspoons, can over time cause you to pack on the pounds. Also, did you know that that much sugar can compromise the immune system for up to 12 hours? Drinking diet cola? Have you heard about that artificial sweeteners are linked to brain tumors? Caffeine is another major issue for not just soda drinkers, but coffee and energy drink buffs as well. Caffeine consumption can cause dehydration and when not consumed, terrible headaches, shakes and irritability. While a morning boost may not have serious long-term effects, constant consumption will indeed take a toll on the body.

The biggest, most important reason to steer clear of the fizzy beverage is mineral depletion. The long term the effects of colas are devastating to the body. Acidity, sugars, and artificial flavors and sweeteners can actually shorten your life. There is enough acid in a can of soda to kill, that is, if our body did not contain mechanisms to neutralize it. But, that means our bodies' precious minerals, such as calcium, are being used for this instead of what they are intended for! Did you know that it takes 32 glasses of water to neutralize the acid from one 12 oz. cola or soda? Wow!

Sports drinks are arguably said to be a good choice by athletes needing to replenish minerals. However, people should caution themselves to not drink them recreationally. Many times parents will let children drink them because of the "cool" flavors. One Baylor University study of sports drinks said there was one case of irregular heartbeat was reported in a football player who consumed too much potassium per day by drinking too much of a sports drink. Sports drinks also contain sodium, as well as a significant concentration of carbohydrates and calories. If people are drinking sports drinks, not because they are working out and losing minerals through sweat, than they are not very good for you!

Other drinks that cannot be replaced by water are coffee and tea. Much has been said about coffee drinks as a source of fat and empty calories. Many of these coffee specialty drinks have become more like desserts and should be treated as such, not drank on a regular basis. Coffee may be a great way to wake up in the morning, but after 8 hours of sleep, bodies need to be hydrated again, not dehydrated, as coffee will do. Need to wake up? Replenish your body with water and do some stretches or go for a walk or run to get the blood pumping.

Reading about the harmful effects of these drinks should shed some light on the benefits of our great natural resource: water!



## WHEN AND WHO NEEDS TO DRINK MORE WATER?

In similar articles on our site, it was stated that the average person needs about 8 glasses of water per day. But that is just an average. Some people need more, and some people need less. However, there are also times when the body temporarily needs more water.

There are also certain times when people may need more water than usual, whether it is a health condition, or an environmental concern. Under these circumstances, more water should be drank:

When on a high protein diet Did you know that uric acid in meat could cause gout? That said, people on a high protein diet require more water than a regular eater, as the water will flush out things like uric acid, caused by the extra protein. Another risk of high protein diets that can be combated with water is that, if you're not eating carbohydrates, your body breaks down fat cells and then produces a buildup of toxic chemical compounds, called ketones in your blood. When there are too many ketones in your blood, your body eliminates them in your urine. Eliminate too many ketones, and you also eliminate too much water. Without replacing it, you can suffer severe dehydration and the risk of abnormal heart rhythms

When on a high fiber diet Constipation can be an uncomfortable side effect of high fiber intake.

That is because fiber, although good for your health, can absorb fluid from your intestines. Drinking fluids help prevent constipation in those who are eating high fiber.

Having an illness that causes vomiting or diarrhea Vomiting and diarrhea are signs of dehydration. Drinking more water will keep the body hydrated during this illness, and also prevent that vomiting and diarrhea that goes along with it. It is suggested that someone with these symptoms, most likely from the flu or another virus, to drink 2-3 quarts of water per day.

Are being more physically active The more active someone is, the more they will perspire. When you exercise, your body builds up heat, and sweat brings your body temperature back to normal. As sweat evaporates from your skin, your body cools. But, through the cooling process, can lose four cups of water every hour during exercise. As a result, more water is lost. Drinking more fluids will combat that water loss by replenishing the body. Whether this activity is during a workout or during work, keep drinking.

Are exposed to warm or hot conditions As people are exposed to warmer conditions, their body temperatures will rise as a reaction to cool the body, resulting in more perspiration. This can happen whether they are being active or not. Without proper fluid intake, this change in climate could leave people having the uncomfortable effects of dehydration. That is not something someone on a vacation wants to experience! Carry around a water bottle while in warmer conditions. Also, warmer conditions could be in a workplace. If that is the case, always make sure that you are paying a visit to the water cooler, or have a water bottle at your workstation.