Watering the Brain

Getting enough water is considered the most important thing you can do to live a healthier life. Your brain is made up of 60%water. Not drinking enough water has detrimental effects on our brains. When your body lacks water, brain cells and other neurons shrink and biochemical processes involved in cellular communication slow. A drop of as little as 1 to 2% of fluid levels can result in slower processing speeds, impaired short-term memory, tweaked visual tracking and deficits in attention.

With proper hydration however, neurons work best and are capable of reacting faster. Water is needed to efficiently manufacture neurotransmitters in the brain, including serotonin and melatonin (for hormones). It also improves our attention span and helps prevent memory loss as we age, reducing the risk of degenerative diseases such as Alzheimer’s.

How much do I drink a day?

The age old “eight glasses of water a day” works great for some people, but not all of us. Instead, we have supplied something a little bit more customized to your body type. Simply take your weight (in pounds) and divide it by two:

*\_\_ lbs. / 2 = \_\_\_ ounces a day.*

So for example take a 120 lb female. Divide her weight by two, and you have 60 ounces of water a day. Keep in mind that this is total water intake, and there are many foods with a high water concentration. To be safe, you should drink eighty percent of this in pure water.

F. Batmanghelidj, MD, highlights some main benefits of keeping your body well hydrated in his book titled “*Water for Health, for Healing, for Life”:*

* Water being the main lubricant in joints, helps prevent arthritis and back pain.
* Water increases efficiency of the immune system
* Water prevents the clogging of arteries in the heart and brain, thus reducing the risk of heart attack and stroke.
* Water is needed to efficiently manufacture neurotransmitters in the brain, including serotonin and melatonin (for hormones). It also improves are attention span, and can prevent attention deficit disorder (ADD).
* Water prevents memory loss as we age, reducing the risk of degenerative diseases such as Alzheimer’s.
* Water reduces the effects of aging, making our skin smoother and giving is a sparkling luster.

**Water Keeps you Young**

Yes you read that right. Getting the proper amount of water each day will keep you looking and feeling young. For one, drinking water helps you loose weight. Not many people know this, but hunger pains and thirst pains are nearly identical, so many people eat when they should be drinking. Assuming that you are dehydrated, you body will carry extra “water weight” because it is unsure when it will get some next, and it wants to be sure it has enough to survive. This is caused by the hormone aldosterone, and its main job is water retention. However keeping your body well hydrated dramatically decreases this emergency storage, so you are not carrying around extra weight. Emerging research shows that dehydration also contributes to a low metabolism, which in turn causes your body to store up more fat.

Water revives your cells, and keeps them alive. Roughly two-thirds of your body’s fluids are on the inside of cells, and the other third are on the outside of them. The first sign of failing health is when the fluids shift from the inside to the outside. After this happens, cells do not have enough energy to maintain the membrane pumps inside them, causing the cells to die. Likewise, when there is more water on the outside of cells than there should be, your blood vessels compress, causing less nutrients and oxygen to be delivered to them. Everything from your cells to the largest organ in your body, your skin, suffers.

Did you know a lack of water contributes to memory loss? Your brain cells are eighty-five percent water, and your brain itself is the only organ that never rests. It is safe to say that your brain is the single most important organ to be sure is well hydrated. Ensuring it has enough water guarantees the production of new brain cells to replace damaged ones, as well as being sure the brain is working to its full potential. Many doctors today believe that long term dehydration contributes to Alzheimer’s disease.

**When is it best to drink water?**

There are two big mistakes many people make here. One is drinking when your thirst, and the second is drinking with a meal. A dry mouth is actually one of the last signs of dehydration, and when you experience it, you are already mildly dehydrated. When you drink with a meal, you are washing down all the hydrochloric acid in your saliva, and enzymes in your stomach. What results is a poor digestion process. Don’t get us wrong, you need to drink some liquid during a meal, but no more than six – eight ounces.

Here is a good schedule to follow, adopted from Don Colbert, MD’s book *‘The Seven Pillars of Health”*:

1. Start by drinking eight – sixteen ounces of water before breakfast (There is no need to replace the juice, tea, or coffee you may drink in the morning. Instead, enjoy the water with your choice beverage.)
2. A couple hours after breakfast, drink another eight – sixteen ounce glass of water.
3. Again, a few hours after lunch, drink another eight – sixteen ounce glass.
4. Thirty minutes before dinner, drink sixteen – twenty-four ounces of water.
5. About an hour before bed, have another eight ounce glass.
6. **Health Complications Caused by Dehydration**
7. When your body is not getting enough water, it will ration what it has. There are five primary organs your body hydrates above all else, and they are your brain, heart, lungs, liver, and kidneys. Thus your non-vital organs will often suffer from a lack of water. Signs tend to manifest first in your skin, joints, and gastrointestinal tract.
8. ***Arthritis and joint pains***are common signs of not getting enough water. The cartilage in your joints provides a nice smooth surface for your joints to glide across during movement. Cartilage itself is eighty percent water, and is five times slicker than ice. Well, that is a well hydrated joint. When your body is not getting enough water, one of the first places it puts on a rations list is your joints. Less lubrication equals greater friction. And over time that friction causes your joints to degenerate quicker, eventually leading to arthritis.
9. ***High blood pressure*** is another sign. Instead of spending money on medication, why not try drinking some good old fashion water? Think of a garden hose, when you constrict it at any point, the pressure flowing increases. Your body does the same thing. When dehydrated, it restricts blood flow to less important organ, which may cause an increase in pressure.
10. ***Digestion problems.*** Do you suffer from heartburn, indigestion, or constipation? Do you constantly intake medications such as Pepcid or Tums? Your stomach has a lining on it that should be 98 percent water. This lining contains bicarbonate, which protects against stomach acid. Drinking enough water ensures a thick layer to protect our stomach lining from damage. However, not getting enough water will cause it to thin out, causing many of these problems.

**Brain Hydration**

By [Gregory Kellett](http://www.lumosity.com/blog/author/gregory/) *By Gregory Kellett, a cognitive neuroscience researcher at SFSU and UCSF, and science writer for* [*Lumos Labs*](http://www.lumosity.com/)*.*

Your brain is made up of *60% water* and many of us may not be drinking enough of the clear wet stuff to keep our thinking “juicy.”

Not drinking enough water has detrimental effects on our brains. When your body lacks water, brain cells and other neurons shrink and biochemical processes involved in cellular communication slow. A drop of as little as 1 to 2% of fluid levels can result in slower processing speeds, impaired short-term memory, tweaked visual tracking and deficits in attention.

With proper hydration however, neurons work best and are capable of reacting faster.

What constitutes proper hydration is controversial. Some say that it is important to imbibe 8 tall glasses of water daily, while others claim that one should only drink when thirsty.

In fact, there is no one golden rule to staying well hydrated. The amount of water each of us needs varies from person to person as it depends on each individual’s physiology and lifestyle activities like diet and exercise.

Experiment and see what feels good. In today’s world of infinite distractions however, it is best not to leave hydration to your sense of thirst alone. It is also important to note that your ability to notice thirst typically diminishes with age.

**Also of note:**

* Sweating from exercise or high temperatures can result in more than 3 liters an hour of fluid loss.
* The maximum amount of water the body is capable of absorbing is 1 liter an hour or 330 milliliters every 20 min (the ideal amount to drink under high sweat conditions).
* Although good for energy, foods high in protein and sugar increase the body’s need for water.

**Warning!**

Drinking too much water is very dangerous! Over-hydration causes a sodium imbalance that can be fatal. It is common for marathon runners to be hospitalized because of overzealous hydration during the race.

Approach fluid consumption with moderation.

**Natural Remedy for Headache:** Helps to relieve headache and back pains due to dehydration. Although many reasons contribute to headache, dehydration is the common one.