

Water

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Amazing!

Truly the most amazing molecule of life is water. Two hydrogen atoms and one oxygen bound by polar covalent bond. With a pH of 7, it is neither acidic or alkaline, but neutral. 1 Water freezes at 0°C, boils at 100°C, and weighs 1 kg for every liter. While we can go weeks without food, months without love, years without doctors, we can only go days without water. It is second only to the air we breathe. We are about 60 to 80% water, the brain is about 85% water. A few things water does (not a complete list):

Aids red blood cells in collecting O₂.²

It is used in every cell, every body function, every muscle, and every joint.³

Needed to make neurotransmitters - like serotonin.⁴

Needed to make hormones - like melatonin.⁵

Water helps with sleep.⁶

Prevents toxin & waste build up.⁷

Aids in weight loss - helps with appetite control, prevents water retention, and decreases fat deposits.⁸

Increases the ability of the immune system - even helping reduce some cancers.⁹

Memory & brain function.¹⁰

Helps keep blood at proper viscosity which can help reduce risk of: stroke, heart disease, hypertension, and diabetes.¹¹ (Women who drink 5+ glasses of water/day are 41% less likely to die from a heart attack.¹²)

Helps to dilute the bile in the gall bladder, thus reducing the risk of gall bladder diseases.¹³

Helps to reduce risk of kidney stones.¹⁴

Aids in lubricating the body. Dehydration causes fatigue, headaches 16 (the body robs the brain to eliminate toxins), dry skin, mental dullness, and much more.

It helps keep the body fluids at homeostasis. When the composition or volume of these fluids change, even by a little, disease sets in.¹⁷

Pop, coffee, tea, wine, or beer cannot do these functions optimally. But they are mostly water aren't they? Sure so is lettuce so why do you crave a cup of coffee and not salad? Because the coffee offers you a stimulant. These substances which contain caffeine or alcohol are diuretics.¹⁸ In other words they deplete water from the body. In addition they are loaded with calories, chemicals, and sugar which leads to weight gain and blood sugar upsets.¹⁹ And while you may hear people say otherwise quoting a study done by the Beverage Institute of American, what they don't tell you is it was paid for by Coca Cola and it was a very limited study on just a few people, and to top it off, it WAS a diuretic for the first few days. The body's ability to adapt to toxins is not proof they are good for you. What about the studies saying coffee has antioxidants? Well so do all fruits and veggies which also have other phytochemicals and no harmful side effects.

For every cup of soda, beer, or coffee you need an additional cup of water.²⁰ Because they contain chemicals, good and bad, the body must filter them out before using the water, putting more work on the digestive system including the liver. Why not make the best choice? If you are thirsty drink water!

How Much?

Just a small 2% loss of body weight in fluid will cause difficulty breathing and muscle fatigue. With a 4% loss, there is extreme fatigue and light-headedness. Over 6-8% loss can result in death.²¹ So, how much do you need? Well a rule of thumb is about half your body weight in ounces.²² For example: If you are 120lbs that is 60oz or just under 8 cups. If you are 200lbs that is 100oz or just over 12 cups, check with your doctor as needed. For those using metric - The formula is your weight in Kg x 34 = ml needed per day. This formula is really just a VERY ROUGH guide. There have not been any studies to confirm exactly how much water we need. The very best method is to drink water whenever you are thirsty and to check that your urine is light yellow. Check with your doctor, some health conditions may affect your urine color.

“Do NOT drink too much water. Overhydration can lead to low electrolytes and/or hyponatremia, a condition where the body has too low of a sodium level. There have even been people who have died from over drinking water.¹ However, this is very rare. About 1% of hospitalization are from low electrolytes or hyponatremia and the cause is not always too much water drunk. They need to consume more minerals for the amount of water they are drinking or the amount of perspiration they are excreting. Or their body may be retaining water due to a disorder or disease. For those who are drinking too much water, their bodies are struggling to maintain homeostasis. Our bodies need a balance of sodium and water among other minerals. “Sodium is essential for many body functions including the maintenance of fluid balance, regulation of blood pressure, and normal function of the nervous system.” Stöppler, MD Melissa Conrad. “Hyponatremia Symptoms, Signs, Causes & Treatment.” MedicineNet, www.medicinenet.com/hyponatremia/article.htm.

So, what is too much? From several sources, the recommendation is whenever you are thirsty drink water, but no more than 1 liter per hour on average.” Taken from Essay on Water.²⁷

Remember, you will need more if you’re nursing a baby, running a marathon, or sunbathing on the beach. When drinking copious amounts of water be sure you do not deplete your electrolytes. More common with athletes or in the summer, but can happen to anyone.

Electrolytes

An electrolyte is a substance that produces an electrically conducting solution when dissolved in a polar solvent, such as water. There are specific nutrients, mostly minerals, that the body needs which can be deficient when drinking copious amounts of water and/or when a person sweats profusely. This is why athletes drink Gatorade and other such drinks. The four key minerals are: magnesium, sodium, potassium, or calcium. Those need to be kept in balance for the body can maintain homeostasis. IF you don’t want the sugary, chemical drinks, which of course none of the blue zone persons use, be sure to have a little extra salt when drinking lots of water. You can even have a drink of tomato or other veggie juice to get the other minerals.

Kind Of Water

What about what kind of water. First of all, any water is better than none. There is bottled, spring, distilled, well, reverse osmosis, chlorinated, and so on. The best water is the one that is as natural as you can get, filtered (charcoal or ceramic) for bacteria and other critters. Chlorinated water is linked to cancer in the bladder, breast, colon, and rectum.²³ Chlorine can be removed with a charcoal filter or left overnight in an open jug.²⁴ Fluoride also has its problems, so reverse osmosis in this case is a good choice.²⁵

How to Get Enough

Many of us know we need water. Many of us know how much water we need. And yet many people simply don't get enough. So, here are a few tips. When you first wake up in the morning, drink 2 cups of warm water. You can add a little lemon juice to the water, my husband enjoys this. Then fill a water bottle with the amount of water you need for the day. KEEP it by your side. You may even need to write reminders out - Drink at 9:00am, 11:00am, 3:00pm, etc. Quit drinking water 30 minutes before eating and wait at least 1 hour after. You may need even longer if you have any problems with digestion.²⁶ You can also add essential oils to flavour your water, be sure they are ingestible oils.

When you're hungry between meals, drink water; when you have a head ache, drink water; when you are tired, drink water; when you are feeling depressed, drink water. As you hydrate you will find your body will thank you with energy, vitality, and life.

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Disclaimer

This handout is intended to offer general information which is subject to change. We do not make any diagnosis or personal treatment suggestions. This information is not intended to diagnose, treat, or cure any disease. We urge you to learn about nutrition and health so that you can make informed decisions to preserve or regain the vibrant good health you deserve.