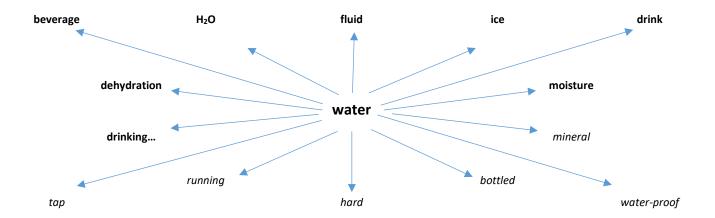
MIND MAP





VIDEO

https://youtu.be/9iMGFqMmUFs

QUIZ

- 1. What is the solid state of water known as?
- 2. What is the chemical formula of water?
- 3. What percenage of water does the average human consist of?
- 4. How much water do we actually need to drink to stay healthy?
- 5. Does it always have to be water?
- 6. What can happen if we don't drink enough water?
- 7. Is it possible to drink too much water?

Answers:

- 1. ice
- 2. H₂O
- 3. between 55 and 60%
- 4. from between 2.5 to 3.7 litres of water a day for men and about 2 to 2.7 for women
- 5. No, other beverages, even those with caffeine like coffee or tea, replenish fluids as well.
- 6. Dehydration can cause drops in energy, mood, skin moisture and blood pressure, and signs of cognitive impairment.
- 7. Yes, it may cause overhydration. Its effects include headache, vomiting and in rare instances seizures or death.



What would happen if you didn't drink water?

Water is virtually everywhere, from soil, moisture and ice caps to the cells inside our own bodies. Depending on factors like location, fat index, age and sex the average human is between 55 and 60% water. At birth, human babies are even wetter, being 75% water, they are swimmingly similar to fish. But their water composition drops to 65% by their first birthday. So what role does water play in our bodies and how much we actually need to drink to stay healthy?

The H_2O in our bodies works to cushion and lubricate joints, regulate temperature and to nourish the brain and spinal cord. Water isn't only in our blood. An adult's brain and heart are almost three quarters water. That is roughly equivalent to the amount of moisture in a banana. Lungs are more similar to an apple at 83%, and even seemingly dry human bones are 31% water.

If we are essentially made of water and surrounded by water, why do still we need to drink so much? Well, each day we lose two to three litres through we sweat, urine and bowel movements even just from breathing. Well, these functions are essential to our survival; we need to compensate for the fluid loss. Maintaining a balanced water level is essential to avoid dehydration or overhydration, both of which can have devastating effects on overall health.

At first detection of low water levels, sensory receptors in the brain's hypophalmus signal the release of anit-diuretic hormone. When it reaches the kidneys, it creates aquaporins - special channels that enable blood to absorb and retain more water, leading to concentrated dark urine. Increased dehydration can cause notable drops in energy, mood, skin moisture and blood pressure, as well as signs of cognitive impairment. A dehydrated brain works harder to accomplish the same amount as a normal brain and even termporarily shrinks because of its lack of water. Over-hydration or hyponatremia is usually caused by overconsumption of water in a short amount of time. Athletes are often the victims of overhydration because of complications in regulating water levels in extreme physical conditions. Whereas the dehydrated brain amps up the production of anit-diuretic hormone, the overhydrated brain slows or even stops releasing it into the blood. Sodium electrolytes in the body become diluted, causing cells to swell. In severe cases the kidneys can't keep up with the resulting volumes of dilute urine. Water intoxication then occurs, possibly causing hSeadache, vomiting and in rare instances seizures or death.

But that's a pretty extreme situation. On a normal day-to-day basis maintaining a well-hydrated system is easy to manage for those of us fortunate enough to have access to clean drinking water. For a long time conventional wisdom said that we should drink eight glasses a day. That estimate has since been finetuned. Now the concensus is that the amount of water we need to imbibe depends lergely on our weight and environment. The recommended daily intake varies from between 2.5 to 3.7 litres of water a day for men and about 2 to 2.7 for women - a range that is pushed up or down if we are healthy, active, old or overheating.

While water is the healthiest dehydrator, other beverages, even those with caffeine like coffee or tea, replenish fluids as well. And water within food makes up about a fifth of our daily H₂O intake. Fruits and vegetables like strawberries, cucumbers and even broccoli are over 90% water and can supplement liquid intake, while providing valuable nutrients and fibre.

Drinking well might have various long-term benefits. Studies have shown that optimal hydration can lower the chance of stroke, help manage diabetes and potentially reduce the risk of certain types of cancer.

No matter what, getting the right amount of liquid makes a world of difference in how you'll feel, think and function day to day.

