

#### HEALTH

## What does water do for the brain?

Your brain is 75% water. Drink up for better cognition, improved memory and more robust brain health. Here's how.



Water plays a vital role in every function of your body. And the following groundbreaking research pinpoints exactly how powerful hydration is for optimal brain health. If you want to experience clearer thinking, better memory and even enhanced focus and concentration, these cognitive



benefits are just a sip of water away. Here's what you need to know to drink your way to better brain health.

#### ARTICLE BREAKDOWN

- Does water help your brain?
- How much of the brain is water?
- 3 ways drinking more water benefits your brain
- How to stay hydrated

## Does water help your brain?

Your brain needs to stay hydrated because water helps to:

- Balance your hormone levels: It plays a role in <u>producing</u> <u>neurotransmitters and hormones</u>, and is also necessary for lowering your cortisol levels.
- Maintain the fluid levels that **protect your brain and spinal cord** from trauma and injury.
- Maintain neurogenesis (creation of new neurons) and overall brain cell health, including cell production, function and longevity.
- Flush out toxins and **metabolic waste** that accumulates in the brain.
- Maintain proper blood circulation, and transport vitamins, minerals and oxygen to your brain.

As hydration levels dip, the above brain functions begin to suffer. This is why dehydration is so closely correlated with poor brain health, and why neuroscientists and brain health experts recommend increasing your fluid intake to support and enhance your learning, thinking, focus and more.

# How much of the brain is water?

Water makes up far more of your body and organs than you may realise. In fact, up to 90% of your body weight is actually water. But that's not all:

- Your skin is more than 60% water.
- Your muscles are nearly 80% water.
- Your lungs are more than 70% water.
- Your bones are approximately 30% water.

Water constitutes a large component of all these different organs and systems, and it plays an outsized role in ensuring each of these areas is working optimally.

Nowhere is that more true than with your brain, which is nearly 75% water.

# 3 ways drinking more water benefits your brain

#### 1. You'll experience improved psychological wellbeing and a better mood

Your body needs to be well-hydrated to manufacture hormones and neurotransmitters like dopamine and serotonin (important chemicals that regulate your mood), and also to ensure the proper functioning of these neurotransmitters and chemical processes.

Multiple studies have linked **moderate levels of dehydration** with significantly impaired mood, including lower rates of self-reported happiness and increased rates of mental health issues.

Additionally, dehydration increases your levels of the hormone cortisol, which leads to symptoms such as nerves, tension, and irritability. If left unmanaged high cortisol levels can **trigger numerous brain health problems** and lead to.

- A loss of brain cells
- Decreased brain size
- Disruption of your brain synapses, leading to psychological problems like social withdrawal and isolation

### 2. You'll think and focus better

Water helps your brain cells communicate with each other, clears out toxins and waste that impairs brain function, and carries nutrients to your brain. This all falls apart if your fluid levels drop.

Staying hydrated has been linked to:

- Faster decision making and improved performance on cognitive tests
- Better concentration and enhanced short-term memory
- Higher test scores in an educational context
- Improved focus and decreased mental fatigue
- Stronger cognitive functioning across the board, including more alertness, less confusion, and even improved learning

### 3. You'll fall asleep faster (and sleep deeper)

This is about far more than just catching more Zs. When you sleep, your brain heals itself, flushes out toxins, and even generates new neurons. This is why getting enough sleep may lead to **brain health benefits** such as:

- A better memory
- More mental alertness, focus and concentration
- Enhanced psychological well-being and better mood
- Faster response times
- More balanced levels of brain hormones and neurotransmitters

Yet we're facing a global epidemic: Millions of people struggle to sleep. In a **global survey**, British adults ranked the worst in the world when it comes to sleep duration and sleep quality, followed by Canada, Ireland and the United States.

Drinking more water can help <u>support a good night's rest</u>. Your body's water levels influence your internal sleep-wake cycles, your body temperature, your metabolism, your hormones, and many of the other functions that are linked with sleep health. Research suggests that this may be why <u>people who are</u> <u>dehydrated tend to experience shorter sleep cycles</u>.

# How to stay hydrated

# What are the signs and symptoms of dehydration?

Even a small amount of dehydration—as little as  $\underline{1\%}$ —can affect your cognitive function.

While everybody is different, some of the **most common warning signs** that you're dehydrated include:

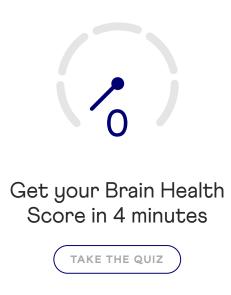
- Dark yellow urine, or very infrequent trips to the bathroom
- Headaches
- Dry eyes, dry skin or a dry mouth
- Mood changes and dips, including nerves and irritability
- Fluctuations in your energy levels, including a general sense of fatigue and exhaustion, or higher levels of mental fatigue, lack of mental alertness, etc.

#### How much water should you drink?

Aim for 2-3 litres of water a day. Add an extra serving of water for every serving of alcoholic or caffeinated beverages you may be having in a day (these types of beverages tend to be dehydrating).

However, your specific needs vary based on your physical activity, your lifestyle habits and more. For instance, athletes who strenuously work out wi

require far more water on a daily basis than someone who lives a more sedentary lifestyle.



# Hydration strategies to get more fluids into your body

Some people struggle to drink enough water. Try these hydration tips and tricks to keep your body and mind well-hydrated:

- Drink a glass of water right when you wake up. After a night of sleep, you're already dehydrated and it's a great way to jump-start your system.
- Use prompts and reminders. For example, drink a glass of water around important milestones in your day (e.g., meals, work breaks, etc.). Or fill up a 2-litre water bottle and carry it around with you, aiming to finish it by the end of your day.
- Make hydration fun. If you find plain water unappealing, increase the taste factor with natural, healthy additives like a sprig of fresh mint or a squeeze of fresh lemon juice. Or, channel your inner spa and infuse your water with slices of cucumbers or watermelon.

