

## Celebrate the Brain!

One of the greatest wonders and mysteries of the human body is the brain. A small organ weighing 3.3 lbs, the brain defines who we are as human beings. It produces thoughts, makes decisions, sets goals, forms memories, gives us our personalities, regulates our emotions, and allows us to interact with our world.

Don't take for granted the most basic functions—our brains tell our muscles to contract, our lungs to expand, and our hearts to beat. There are countless functions the brain performs, many of which are not entirely understood by science and medicine. In honor of Brain Awareness Week (March 12-18), let's get to know our brains!

- Researchers estimate your brain has 86 billion brain cells.
- Your brain is soft and squishy, like gelatin.
- Information in the brain travels up to 268 miles per hour.
- A single nerve cell, called a neuron, can send 1,000 impulses each second. Your brain can process images you see in less time than it takes to blink!
- Your brain creates enough electricity to power a small LED lightbulb.
- On average, your brain produces 50,000 thoughts each day. However, it is estimated that 70% of all thoughts are negative.
- When Japan's most powerful computer tried to mimic brain activity, it took the computer 40 minutes to process the same data your brain processes in one second.
- You could fill a liter of soda with the amount of blood that flows through your brain each minute.
- The brain can change itself! New neurons can grow and new connections can form or be pruned away—for better or worse.
- When reading, the exact order of letters doesn't matter. As long as the first and last letter of the word are in the correct place, your brain places the other letters in the proper order as fast as you can read. *Yuor bairn raeds wohle wrods, not ervey snilge lteter*, so you can make sense of jumbled letters.
- Your brain is the fattiest organ in the body. Fat is so crucial to the brain that if you sustain a low-fat diet for a prolonged period of time, neurons will eat each other for fuel.
- Be careful of the internet! The constant stimuli from social media is decreasing our attention span, impairing short-term memory, and reducing mental performance. This is why millennials ages 18-34 are more likely to forget things, such as where they put their keys, than their parents.

For more amazing facts about your brain, check out this website: <https://bebrainfit.com/human-brain-facts/>

## Popular Brain Myths

Think you know your brain? There have been multiple “facts” passed around in the public that are downright wrong. See if you’re heard any of the following incorrect information.

- **We only use 10% of our brains.** This is untrue! Modern imaging scans reveal that we use large portions of our brain all the time, even during sleep. The brain is interconnected, relying on input from numerous areas to perceive and send out information. The notion that 90% of our brain sits unused in silence is wrong.
- **Left Brain vs. Right Brain.** There is little truth to the personality types of left brain or right brain. While certain structures are located in the left brain compared to the right brain, researchers emphasize interconnectivity of the brain (“whole brain”). However, it is true that brain injury from stroke produces different personality traits; left brain injury tends to be more cautious and depressed, while injury to the right side tends to leave someone feeling more impulsive. Still, the overall impression is that the brain works together, with no one side truly dominating over the other.
- **There are more cells in your brain than stars in the Milky Way.** While no one can definitively count how many neurons are in the average human brain, rough estimates place the count at 86 billion. Conversely, the Milky Way has 200-400 billion stars. The human brain has a long way to go to catch the galaxy,
- **Alcohol kills your brain cells.** Not necessarily. The nerve cell bodies themselves do not automatically die from excessive alcohol consumption, but the tissue at the ends of the nerve cells can be damaged. While unhealthy alcohol consumption has been shown to cause brain damage, it doesn’t always *kill* the neuron cell body. Because the cell body survives, some brain damage by be reversible by abstinence.



There is still much science is learning about the brain, so more research is needed to understand the effects of disease and injury and how to treat brain damage. The Dana Alliance for Brain Initiatives is an organization that helps educate people about the amazing brain and the hope for future brain research. Visit their webpage at [www.dana.org/baw](http://www.dana.org/baw)