Neuro Café:
Brain Awareness Week 14th-20th March
23rd March 2022

Brain Awareness Week

- Last week was Brain Awareness Week ! 14th – 20th March 2022
- Brain Awareness Week is celebrated annually in the third week of March globally.
- It is about increasing public awareness of the progress and benefits of brain research. It lets people know about the progress in brain research and the diagnosis, treatment, and prevention of brain disorders.
- Brain research allows us to understand our biology and body function better, which empowers medical professionals to find ways to prevent or treat brain, nervous system, and body problems.

Truth or Myth – game for brain awareness week

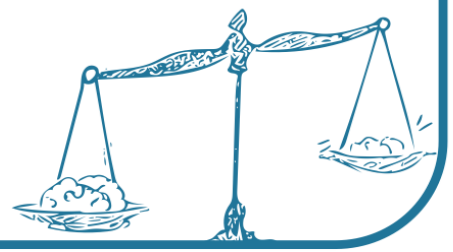
Dana Foundation

TRUTH OR MYTH?

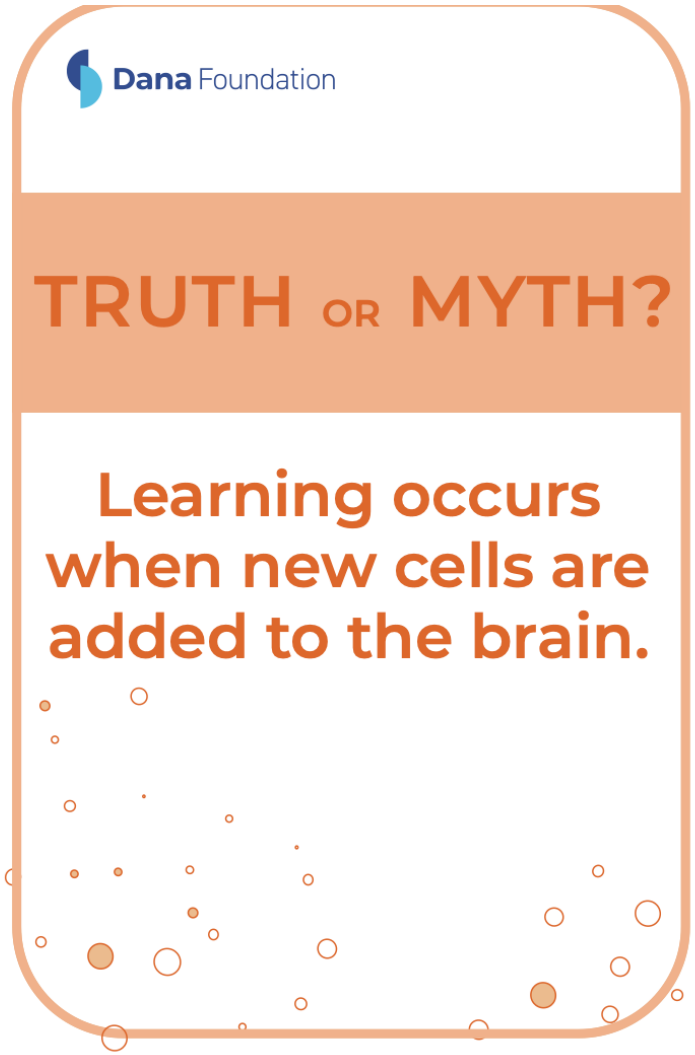
Brain size does not determine intelligence.

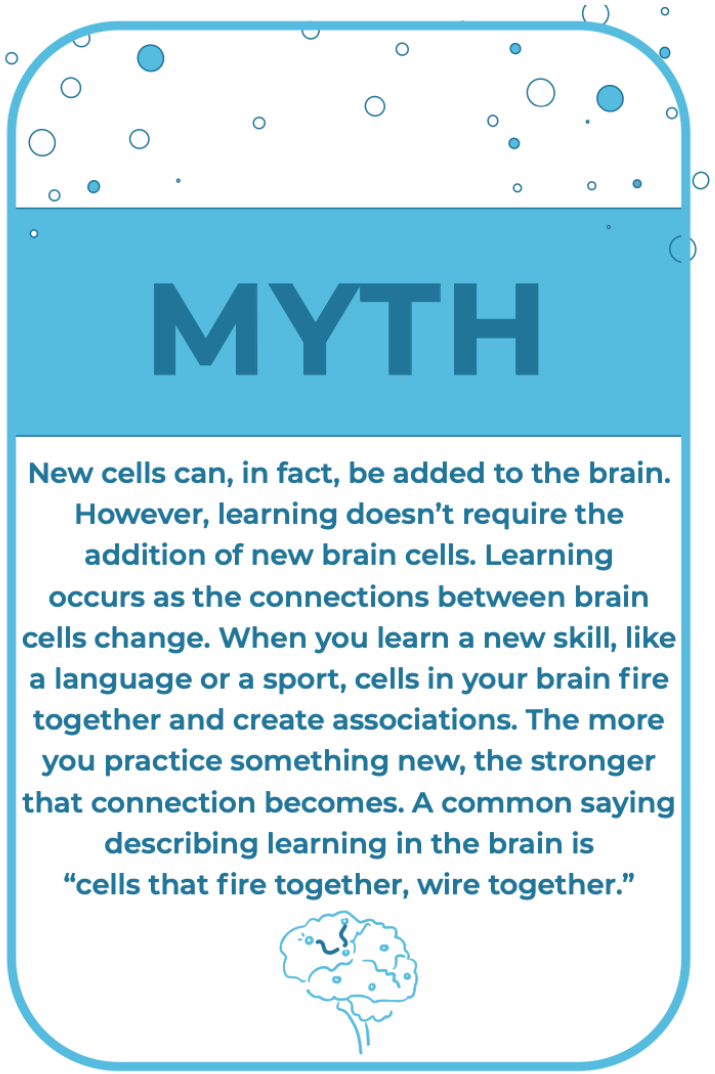
TRUTH

Surprisingly, Albert Einstein's brain weighed less than the average brain. This genius' brain did, however, show relatively dense connections between brain areas. Scientists attribute the connections between areas and their efficiency to intelligence more than they do size.



Truth or Myth – game for brain awareness week





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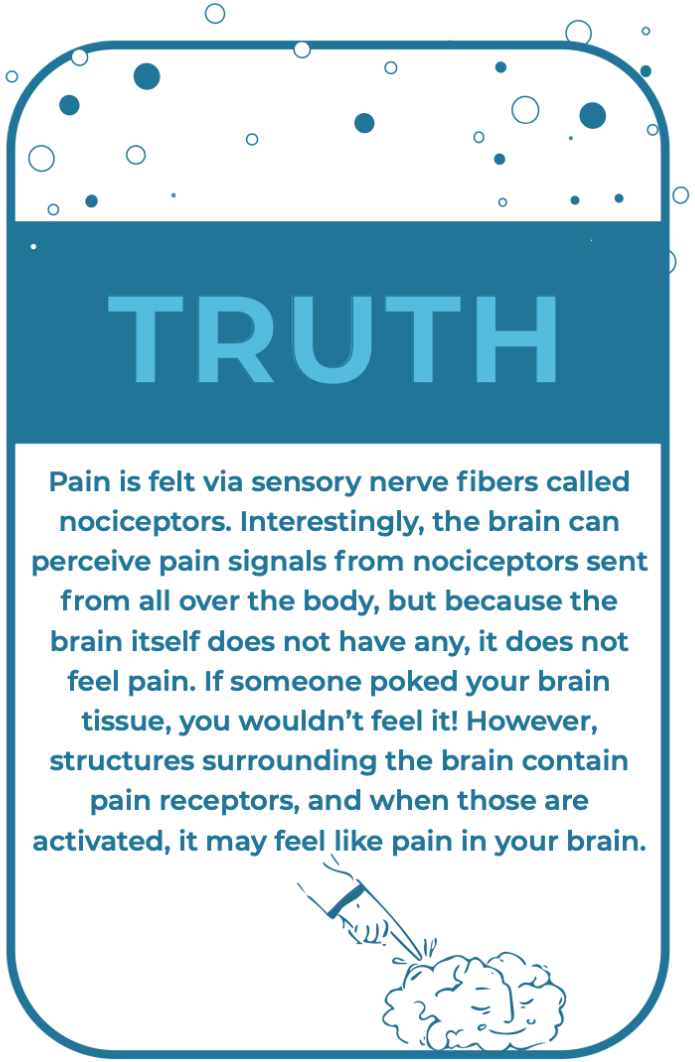


Truth or Myth – game for brain awareness week

Dana Foundation

TRUTH OR MYTH?

Your brain is fully developed by the age of 18.

MYTH

Brain development continues well past adolescence and into adulthood. In particular, the prefrontal cortex, which is important for reasoning and decision-making, does not fully mature until we reach our mid-twenties.

Truth or Myth – game for brain awareness week

Dana Foundation

TRUTH OR MYTH?

The brain is the fattiest organ in the body.

TRUTH

Overall, the brain is 75-80% water. The other 20-25% of the brain is solid tissue and is a minimum of 60% fat.

Truth or Myth – game for brain awareness week

Dana Foundation

TRUTH OR MYTH?

Human brains have shrunk over the last 20,000 years.

TRUTH

Scientists speculate that human brain shrinkage might be due to a number of factors:

- As populations became less aggressive, humans went through "domestication", a process known in animals to be associated with shrinking brain sizes.
- Warmer climates caused smaller body size and thus smaller brains.
- Increased social networks are associated with smaller brain size. In other words, instead of dying out through natural selection, our smaller-brained ancestors survived with a little help from their friends.

Truth or Myth – game for brain awareness week

Dana Foundation

TRUTH OR MYTH?

The brain is good at multitasking.

MYTH

If you define multitasking in terms of voluntary tasks which require attention, the brain is not a good multitasker. While involuntary tasks such as regulating blood pressure and breathing can be done simultaneously, the brain cannot attend to two or more attention-rich stimuli at the exact same time. Instead, the brain quickly switches back and forth between tasks, a process known as "context-switching."

Truth or Myth – game for brain awareness week

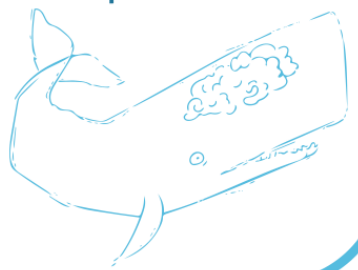
Dana Foundation

TRUTH OR MYTH?

Humans have the largest brain of all mammals.

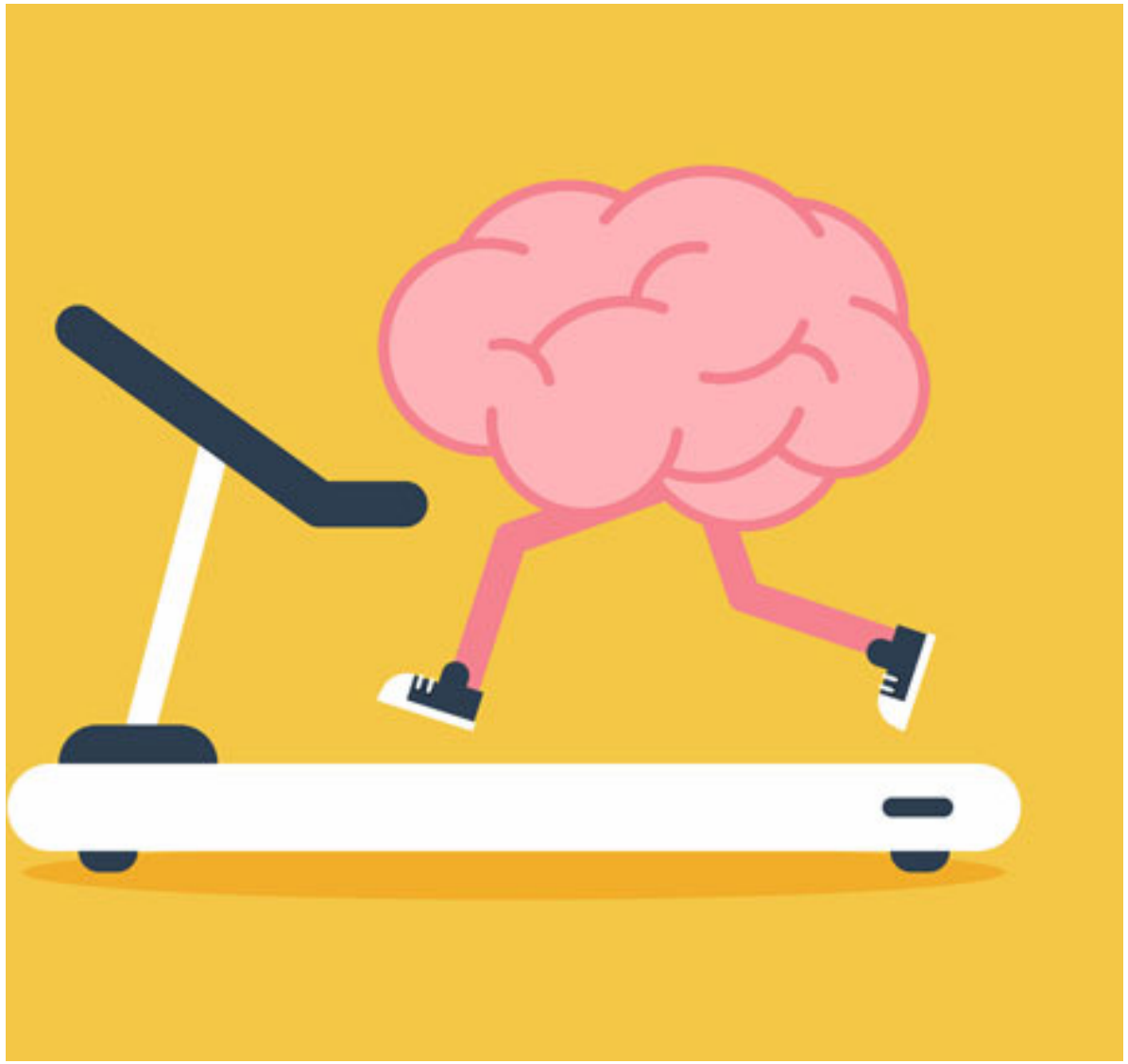
MYTH

Sperm whales hold the trophy for the largest brain of any living species! Although sperm whale brains are more than five times as large as human brains, humans still hold the record for the species with the largest brain relative to body size, otherwise known as "encephalization quotient."



Why Moving Your Body Changes Your Brain

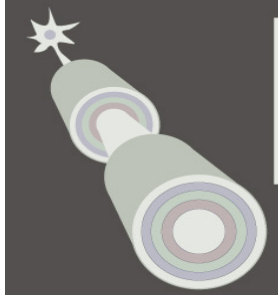
- Exercise can enhance cognition, strengthen learning and memory, improve mood, and stave off neurodegenerative diseases
- Physical activity strengthens the brain, but that means inactivity can weaken it.



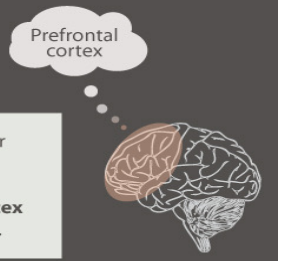
10 Brain Facts

handpicked by the
Knowing Neurons team

1. The brain weighs about 3 lbs but uses 20% of the body's blood supply. The total length of the capillaries supplying blood to a human brain is 400 miles!



2. Just like electrical wires, neurons too have a coating of insulation around them to enable fast communication. Thanks to this **myelin** insulation, neuronal responses can be as fast as 268 MPH, which is approximately 3 times faster than the fastest freeway in the United States!



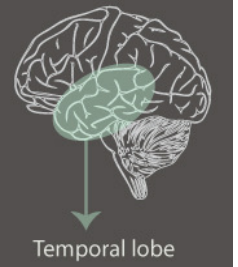
3. You have your own CEO in your brain. Whenever you find yourself taking the shorter route to go somewhere, comparing prices across stores, or simply making a to-do list, your **prefrontal cortex** is working to making logical, planned decisions.

4. Individuals with **synesthesia** experience more than one sensation in response to a single sensory stimulation. They may see numbers as having different colors or taste images.

5. The number of **olfactory receptor cells** indicates how sensitive an animal's sense of smell is. Humans have 12 million olfactory receptor cells, but that is nothing compared to a dog's 1 billion!

6. The **amygdala** registers the emotional facial expressions of others and produces a reaction before we even know we have seen them.

7. "Have we met before?" isn't always a pick-up line. If the **face-recognition** area in the temporal lobe of the brain is damaged, people can develop a disorder known as prospagnosia where they cannot identify people they know. Interestingly, there is a single neuron in that area that selectively responds to pictures of Jennifer Aniston, dubbing it the "Jennifer Aniston neuron."



8. Individuals with **phantom limb pain** can experience relief if the remaining arm is shown as a mirror image and moved to appear as if the missing limb is intact. This illusion has been found to relieve this pain.

9. In **anarchic hand syndrome**, a person has one hand that is no longer under conscious control and appears to move on its own. Hollywood has experimented with this idea in *Dr. Strangelove* and *Idle Hands*.

10. One in 125 million people are born without the ability to feel pain. The condition caused by a genetic disorder, congenital analgesia, results in a lack of pain-sensitive nerve endings in the body.

Participant voice session

- Your opportunity to shape LEGS
- Julie will ask some questions to you all and feed back the discussions to the LEGS leadership team and trustees