HEALTHY BRAIN, HAPPY LIFE

A PERSONAL PROGRAM TO ACTIVATE YOUR BRAIN AND DO EVERYTHING BETTER

WENDY SUZUKI, PhD WITH BILLIE FITZPATRICK



The human brain.

THE BRAIN AND ALL ITS PARTS

Neuroscientists used to think of the different parts of the brain as housing certain functions. We know now that that's only partially true. While specific areas of the brain do have specific functions (see the following list), it's important to keep in mind that all parts of the brain are connected, like a vast and intricate network.



• Frontal lobe: This front section of the brain houses the allimportant prefrontal cortex (making up the front part of the frontal lobe), understood to be the so-called seat of personality

(Continued on next page)

and integral to planning and attention, working memory, decision making, and managing social behavior. The primary motor cortex, the area responsible for allowing us to move our bodies, forms the most posterior (toward the back) boundary of the frontal lobe.

- Parietal lobe: This lobe is important for visual-spatial functions and works with the frontal lobe to help make decisions. The part of the cortex responsible for allowing us to feel sensations from our bodies (known as the primary touch cortex) is located at the most anterior (toward the front) part of the parietal lobe.
- Occipital lobe: This is the part of the brain that allows us to see.
- **Temporal lobe:** This is the part of the brain involved in hearing, vision, and memory.
- Hippocampus: Located deep inside the temporal lobe, this area is crucial for the formation of long-term memories; it's also involved in aspects of mood and imagination.
- Amygdala: This structure, which is critical for the processing of and response to emotions such as fear, anger, and attraction, is also located deep inside the temporal lobe right in front of the hippocampus.
- Striatum: This area, which is seen best from a cut down the middle of the brain, is involved in motor function and plays an important role in how we form habits (and why they are so hard to break!); it's also integral to the reward system and how addictions develop.



Neurons and their connections.



A memory-encoding task.

ILLUSTRATION OF THE MAJOR BRAIN STRUCTURES INVOLVED IN THE REWARD CIRCUIT

