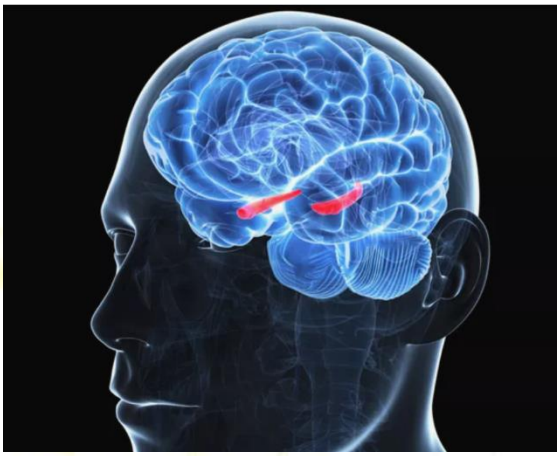
What Does Meditation Actually Do to the Brain?

There are actual physical changes that happen to the brain when we meditate regularly.

A Bigger, Stronger Hippocampus



We'll start with the hippocampus, the part of the brain that is important for converting short-term memories into long-term memories. This function is necessary for learning, which relies on memory retention and proper consolidation of new memories. The hippocampus plays a role in spatial memory as well, which involves taking in information about one's surroundings and remembering locations. This ability is necessary in order to navigate one's environment. The hippocampus also works in concert with the amygdala to consolidate our emotions and long-term memories. This process is critical for evaluating information in order to respond appropriately to situations. with magnitude determined by experience.

Alzheimer's disease, for example, damages the hippocampus by causing tissue loss.

But meditation dramatically increases hippocampal cortical thickness. In other words, like an artist molding clay, meditation shapes the learning and memory center of our brain into something beautiful.

Better Brainwaves

MRI studies of meditating Buddhist monks have found that the prefrontal cortex, was far more active. The prefrontal cortex helps us set and achieve goals and contributes to a wide variety of executive functions, including focusing attention and planning.

The brainwave patterns of the Buddhist monks were also far more powerful, implying a higher level of external & internal thought and they had enhanced focus, learning ability and neural coordination.

Basically, the brains of the Buddhist monks were physically and functionally superior than those without meditation experience. Researchers believe that meditation changes the brain in the same way exercise changes the body.

How Meditation Builds a More Emotionally Intelligent Brain

In 2016, a team of Spanish and German researchers imaged the brains of 13 meditation newbies before and after 40 days of mindfulness training. What did they find?

In addition to massively reducing their anxiety and depression scores (which is confirmed by countless other studies), the meditators significantly increased their temporoparietal junctions. One feature of the temporoparietal function is the ability to orient the body in space and to feel situated within the body. This allows people to coordinate when they need to interact with objects around them.

This part of the brain also plays a role in emotional processing. People use the connections at the temporoparietal junction to understand their own emotions, and this structure plays a role in moral judgments and allows people to discern and process the emotions of others, attributing emotions to specific events or information known about other people.

By strengthening the brain's emotional intelligence, meditation opens the door to a wonderful and especially important bundle of traits: self-awareness, adaptability, empathy, conscientiousness, self-motivation, and emotional balance.

There are countless other studies showing the positive effects on the brain, but for now, let's just focus on learning how to tap into this power, and nurture stronger, happier brains!