

# When meditation actually changes your brain

When you're stressed out or tired, aren't you likely to turn on your favorite soothing music. It seems to calm you down and makes you feel better. Actually, it's **the music's energy pattern that is causing your brain**



**waves to slow down** to match it, this is known as *entrainment*. This is one way of assisting your brain in switching your beta mental energy to the slower alpha energy and why some meditation practices include slow, rhythmic music.

From a meditation practice comes the awareness of **how much access you have to your brain's flexibility and performance**. Rather than having your heavy duty active beta thinking become overloaded and stressed, you can redirect your attention to the alpha and theta states. Focus, attention, clarity of thought, creativity and problem solving now become easier and more accessible.

While meditation creates sensations that we recognize as being different, less stressful, calmer and more relaxed, it also has an **internal affect on the brain**. The reason meditation can have an impact on the structure of the brain is because the brain itself has *neuroplasticity*. This means **your brain is not a finite structure** but has the ability to change itself. We know that ...

- neuron connections can get stronger or weaker
- neural networks can expand and cover more diverse areas
- new neural pathways can develop for learning and memory and circumvent damaged tissue
- neural tissue areas can increase or decrease in size depending on level of use

**Meditation appears to have a direct impact on the brain itself**

**and its ability to function.**

According to a joint effort by Massachusetts General Hospital and Harvard Medical School, lead psychologist Britta Hölzel and colleagues, reported those engaged in a meditation program **increased the gray matter tissue** content in areas of the hippocampus (memory and learning areas) but decreased in the amygdalae (anxiety and stress).

Dr. Richard Davidson, a long time researcher of meditation at the University of Wisconsin – Madison, has uncovered some interesting observations from experienced meditators 1) the understanding that **“attention” is not predetermined** (experienced meditators can detect additional information than less experienced meditators when given the attention blink test) 2) specifically the **activity of the left prefrontal cortex is affected** by meditation and 3) the brain is capable of attaining and sustaining higher gamma brain frequencies (Tibetan monks using “mindfulness” meditation demonstrate **gamma brain wave activity** in the left prefrontal cortex).

What this seems to indicate is that meditation **allows you to gain greater control** over your brain’s left prefrontal cortex – **the area of judgment, self-regulation, planning and decision making**. It is what allows you to reduce your stress and think more clearly before the emotional centers in the amygdalae (fight or flight center) jump in with responses of emotionally charged stress, anger and anxiety.

Maybe it **might be a good idea to combine a little meditation with some soothing music** after a long and stressful day. It certainly looks like you and your brain can benefit.