

Ways Meditation Can Actually Change The Brain

The meditation-and-the-brain research has been rolling in steadily for a number of years now, with new studies coming out just about every week to illustrate some new benefit of meditation. Or, rather, some ancient benefit that is just now being confirmed with fMRI or EEG. The practice appears to have an amazing variety of neurological benefits – from changes in grey matter volume to reduced activity in the “me” centers of the brain to enhanced connectivity between brain regions. Below are some of the most exciting studies to come out in the last few years and show that meditation really does produce measurable changes in our most important organ.

Meditation Helps Preserve the Aging Brain

A study from UCLA found that long-term meditators had better-preserved brains than non-meditators as they aged. Participants who’d been meditating for an average of 20 years had more grey matter volume throughout the brain — although older meditators still had some volume loss compared to younger meditators, it wasn’t as pronounced as the non-meditators. “We expected rather small and distinct effects located in some of the regions that had previously been associated with meditating,” said study author Florian Kurth. “Instead, what we actually observed was a widespread effect of meditation that encompassed regions throughout the entire brain.”

Meditation Reduces Activity in the Brain’s “Me Center”

One of the most interesting studies in the last few years, carried out at Yale University, found that mindfulness meditation decreases activity in the default mode network (DMN), the brain network responsible for mind-wandering and self-referential thoughts – a.k.a., “monkey mind.” The DMN is “on” or active when we’re not thinking about anything in particular, when our minds are just wandering from thought to thought. Since mind-wandering is typically associated with being less happy, ruminating, and worrying about the past and future, is the goal for many people to dial it down. Several studies have shown that meditation, through its quieting effect on the DMN, appears to do just this. And even when the mind does start to wander, because of the new connections that form, meditators are better at snapping back out of it.

Its Effects Rival Antidepressants for Depression and Anxiety

A review study last year at Johns Hopkins looked at the relationship between mindfulness meditation and its ability to reduce symptoms of depression, anxiety, and pain. Researcher Madhav Goyal and his team found that the effect size of meditation was moderate, at 0.3. If this sounds low, keep in mind that the effect size for antidepressants is also 0.3, which makes the effect of meditation sound pretty good. Meditation is, after all an active form of brain training. “A lot of people have this idea that meditation means sitting down and doing nothing,” says Goyal. “But that’s not true. Meditation is an active training of the mind to increase awareness, and different meditation programs approach this in different ways.” Meditation isn’t a magic bullet for depression, as no treatment is, but it’s one of the tools that may help manage symptoms.

Meditation May Lead to Volume Changes in Key Areas of the Brain

In 2011, Sara Lazar and her team at Harvard found that mindfulness meditation can actually change the structure of the brain: Eight weeks of Mindfulness-Based Stress Reduction (MBSR) was found to increase cortical thickness in the hippocampus, which governs learning and memory, and in certain areas of the brain that play roles in emotion regulation and self-referential processing. There were also *decreases* in brain cell volume in the amygdala, which is responsible for fear, anxiety, and stress – and these changes matched the participants’ self-reports of their stress levels, indicating that meditation not only changes the brain, but it changes our subjective perception and feelings as well. In fact, a follow-up study by Lazar’s team found that after meditation training, changes in brain areas linked to mood and arousal were also linked to improvements in how participants said they felt. So for anyone who says that activated blobs in the brain don’t necessarily mean anything, our subjective experience – improved mood and well-being – does indeed seem to be shifted through meditation as well.

<https://www.forbes.com/sites/alicegwaltson/2015/02/09/7-ways-meditation-can-actually-change-the-brain/#39c74f201465> (Last Accessed 2/24/2020)

Consultant of the Month Dina Travis



Dina Travis has been practicing as an HIS in our Salem Miracle-Ear office since July of 2010. “When I saw the impact of how hearing aids made such a difference in patients’ lives, I knew this was the career path for me! Being a Specialist is incredibly rewarding. It is all about the connection with my patients. Every day I can improve their quality of life by making a positive change. The relationships I have built are a daily source of joy. I love that my patients look forward to their appointments and coming to see me.”

PCC of the Month Rachel Lawhorn



“One of my favorite stories has a lot to do with just being there for our patients. One patient in particular has struggled quite frequently. She came in to our office one day and was so distraught. Her husband passed away a month ago. One of her hearing aids wasn’t working. I checked her hearing aid and realized her receiver had stopped working. I replaced her receiver and cleaned both hearing aids. When she put them back in, the look on her face was priceless. She had tears in her eyes and gave me a big hug. She said, “Rachelle, you are a life saver, I can’t thank you enough!”

Fresh Spring Rolls & Peanut Sauce

Prep Time: 40 mins

Cook Time: 5 mins

Total Time: 45 mins

Serves: 8

- 2 ounces rice vermicelli or maifun brown rice noodles
- 1 teaspoon toasted sesame oil
- 1/4 teaspoon fine sea salt
- 1/4 cup thinly sliced green onions
- 1/4 cup roughly chopped fresh cilantro
- 1/4 cup roughly chopped fresh mint
- 1 cup torn butter lettuce, ribs removed
- 1 cup very thinly sliced red cabbage
- 2 medium carrots, peeled and cut strips
- 2 small cucumber, thinly sliced into strips
- 2 medium jalapenos, ribs and seeds removed, thinly sliced
- 8 sheets rice paper (spring roll wrappers)

Peanut Sauce

- 1/3 cup creamy peanut butter
- 2 tablespoons rice vinegar
- 2 tablespoons reduced-sodium tamari or soy sauce
- 2 tablespoons honey or maple syrup
- 1 tablespoons toasted sesame oil
- 2 cloves garlic, pressed or minced
- 2 to 3 tablespoons water, as needed



Bring a pot of water to boil and cook the noodles just until al dente. Drain, rinse them under cool water, and return them to the pot. Off the heat, toss the noodles with the sesame oil and salt, and set aside.

Fill a shallow pan with an inch of water. Fold a lint free tea towel in half and place it next to the dish. Make sure your prepared fillings are within reach. Combine the green onion, cilantro and mint in a small bowl, and stir.

Place one rice paper in the water and let it rest for about 20 seconds, give or take. You'll learn to go by feel– wait until the sheet is pliable but not super floppy. Carefully lay it flat on the towel.

Leaving about 1 inch of open rice paper around the edges, cover the lower third of the paper with a few pieces of butter lettuce, followed by a small handful of rice noodles, some cabbage, and a few strips of carrots, cucumber, and jalapeno. Sprinkle generously with the herb mix.

Fold the lower edge up over the fillings, rolling upward just until the filling is compactly closed. Fold over the short sides like you would to make a burrito. Lastly, roll it up. Repeat with the remaining ingredients.

To make the peanut sauce: In a small bowl, whisk together the peanut butter, rice vinegar, tamari, honey, sesame oil, and garlic. Whisk in 2 to 3 tablespoons water, as needed to make a super creamy dip-able sauce.

<https://cookieandkate.com/fresh-spring-rolls-recipe/#tasty-recipes-34271>(LastAccesses2/18/2020)

Riddle of the Month

What do you call a dishonest noodle?

Answer: _____

STAY TUNED! Answer will be in our April's Newsletter

February's Riddle and Answer:

A man rode in to town on Tuesday, and left two days later on Tuesday. How so?

His horse is named Tuesday!

