



Gaertner Psychiatric
Rehabilitation & Adult Services

Food, Mood and Beyond



Volume I, Issue 4

August 2016

Your Brain on Mindfulness

[Yoga and Meditation](#) have been in existence for thousands of years. Yoga was originally practiced as a community activity, led by spiritual leaders to improve the overall human condition. Over time it has morphed to a more individual practice, incorporating asanas (poses), Pranayama (breathwork) and Dhyana (meditation). These practices are known as mindfulness practices. The benefits of yoga and meditation include deep relaxation, physical fitness, overall improved health and ultimately an experience of communion with the Divine. In many circles, yoga is more than an activity to help stretch and

relax. It is a lifestyle focused on healthy relationship with yourself, your body, your fellow man, and nature.

What I am going to focus on today is the amazing fact that Yoga and Meditation can also literally change your brain!

[Mind Over Matter](#)

The physical benefits of yoga and meditation have been touted for years:

- lower blood pressure
- improved blood circulation
- lower heart rate
- slower respiratory rate
- less anxiety
- more feelings of well-being.

More recently the scientific literature has reported the neuroscience behind mindfulness techniques that supports the emotional benefits as well.

Thanks to sophisticated brain imaging technologies, we can actually see the brain's response to regular meditation and yoga practice.

Several researchers (R. Davidson, A. Newberg, S.Lazar) found that the practice of meditation **increased** the size as well as the function of an area in the front of the brain that effects our experience of empathy, social awareness, intuition, compassion, and ability to regulate emotion. They showed that meditating for 30 minutes a day also resulted in a **reduction** in the size of the amygdala, which is the part of the brain responsible for our fight or flight response. It regulates fear and anxiety. It tends to reason, the bigger the front of the brain, the better our capacity to control

emotions like fear and anger, self-defeating behaviors and negative thoughts. Meditating on a daily basis helps us feel less anxious, less angry and resentful, more hopeful.

TIP As I mentioned, breath work is an integral piece of these healing practices. We are

ALWAYS being run by our thoughts. Since dropping in to downward dog is not always the most appropriate maneuver to reset ourselves, try this instead: Breathe in; Breathe out; Repeat. It's amazing how powerful a shift is created by simply focusing on our breath.

But wait, there's more...

Meditation and yoga also reduce the amount of cortisol in our system. Cortisol is a hormone secreted by our adrenal glands. It has many jobs to do, and in excess amounts causes inflammation, blood sugar and cholesterol imbalances, high blood pressure, and poor immune system function. It is toxic to the brain and causes emotional imbalances like anxiety, irritability, sleep issues and depression.

Excess cortisol results from chronic stress: emotional as well as physical; real or imagined. Our

bodies do not know the difference between fantasy and reality. So the drip, drip, drip of negative and fearful thinking acts as a source of chronic emotional stress. Studies have shown that yoga, prayer and meditation practices increase the levels of specific neuroreceptors and hormones that live in the brain (dopamine, serotonin, oxytocin and GABA) that help maintain the positive balance of our emotional responses. With daily practice we can begin to feel more peace, calm and joy. We sleep better, too.

Change Your Mind and Heal Your Brain

Have you ever wondered why, no matter how much you may want to stop the negative thoughts, they just keep coming? Well scientists, with the help of our bodies, have found an answer. And it is in the brain...of course. The brain's ability to remember past experiences is remarkable. Unfortunately, painful, negative memories and thought patterns tend to override

the good stuff. In your brain, there are separate sections for processing negative and positive events. Negative experiences produce more brain activity than do equally intense positive ones and stick longer. In effect, the brain is like **Velcro for negative experiences** but **Teflon for positive ones**. The brain has the capability to lay down "tracks" with repetitive thoughts and experiences. When we have repetitive negative experiences like abuse or abandonment or trauma, or even when we sit in our own negativity, we deepen those tracks until it becomes more and more difficult to pull out of them. This results in more depression, anxiety, hopelessness, fatigue and irritability. Those "happy hormones" in our brain become depleted. The good news is the brain is able to replace the negative tracks with positive ones which will ultimately replenish those



hormones and help us feel better. But...it takes Awareness or Mindfulness to lay down new tracks. Awareness of our negative thinking. We cannot always control what life throws at us, but we can take control over how we think about it. By replacing the negative thoughts with positive memories or sitting in a positive emotion like the love we have for our children or how peaceful it feels to watch the ocean and feel the sun on our face, we can begin to lay down new tracks and heal. **What flows through the mind, sculpts the brain.**

Home Practice Tips

Try the following yoga asanas* daily for a month and see how you feel. When following the breathing

instruction, use your imagination and "6th sense".

Heart Openers:

Bridge or supported bridge pose. Inhale to solar plexus and exhale through throat chakra.

Supported fish or Fish Pose.

Inhale through heart chakra and exhale through crown.

Bending Poses :

Cat/Cow. Inhale for cat/exhale for cow.

Downward dog. Just breath.

Notice your body with each inhale and exhale.



Childs Pose. Breath normally and bring awareness repeatedly to your ribs expanding and relaxing. This is a nurturing, heart hugging pose.

Inverted Poses:

Legs up the Wall

*This is a partial list and easy to do. There are oodles of websites to

surf for instruction on these and other poses. Please listen to your body. The old adage “no pain, no gain” does not apply here.

**Any pose where your chest is in contact with your thighs, activates the parasympathetic nervous system which releases those calm, peaceful feelings.

Just a bit about Meditation

There is a lot of confusion about meditation. We have already heard how it works. But what is it, really? First and foremost, meditation is a pathway to inner balance. It can be a form of prayer where one has an opportunity to connect with the Divine. It can be simply a bridge to peace, calm and grounding as one connects to themselves in the deepest inner capacity. There are those who say there is no difference. The Peace attained with meditation happens when we are able to connect with our own Divinity-our soul. When we meditate, there is an internal focus as opposed to an external focus.

When we sit, we close our eyes and focus within. We eliminate external distractions and focus on our internal experience. We create an opportunity to quiet our entire system by focusing on our body sensations and our breath instead of our thoughts. The result is relief of stress, anxiety, depression, and even eating disorders, and addiction.

Word of caution...having an expectation that your brain will stop thinking while you meditate will frustrate you to no end. The brain cannot stop thinking. That is its job. It is not about forcing something to be a certain way. The restless, unconscious, repetitive mind is a habit, we are addicted to our brains. Habits can be changed or broken. And because it is habitual, one can direct it from its usual negative focus to a positive focus through affirmations* and create balance through internal stillness. The idea is to become less and less **aware** of thoughts, less **attached** to your thoughts, and

more aware of what is happening deep inside.

Try this meditation technique daily for a month and notice a shift.

1. Sit or lie comfortably.
2. Close your eyes.
3. Make no effort to control the breath; simply breathe naturally.
4. Scan your body from head to toe and notice any areas of tension. Relax those areas. Keep bringing your focus back to your breath. Your brain will want you to create a story out of every ache and itch.
5. Once you are relaxed bring the focus to your heart center (keep breathing). Notice any sensations in that area of your chest. State your affirmation silently. Continue to bring your awareness to your breath.
6. Maintain this meditation practice for 2–3 minutes to start, and then try it for longer periods, up to 30 minutes.

* An affirmation is a positive statement. It helps us to bring our focus to what goodness we wish to bring into our life. It is

different than prayer in that it is focused on self. It helps us remove all negativity from our lives. Examples: “I am at Peace with myself” “There is a gift in all that is unfolding in my life”. That saying “fake it ‘til you make it” applies here. You don’t have to believe it for it to work on your brain. Remember, the brain does not know fact from fantasy.

On a personal note

My own mindfulness practice was recently renewed after a 5 day yoga and meditation retreat. I will be the first one to admit that it takes commitment and discipline to find time every morning to sit quietly for half an hour and breath, and another 30 for a little yoga. Some days are better than others (hence the word “practice”). I can honestly attest to the benefits of feeling more mentally clear, and emotionally grounded, the more I do it. I notice a difference if I **don't** do it.

Gift yourself with some peace and quiet, a respite from this busy and sometimes overwhelming world we live in.

Breath in, Breath out, Repeat. Your soul will say “Thank you”.

