

The nervous system plays a pivotal role in regulating your mental - emotional state. It also sends many signals throughout the body to tell other systems what to do and how to respond. This has largely been simplified over the years into the idea that we're either in parasympathetic or sympathetic mode. However, some newer theories explain the nervous system state as more of a ladder - called the poly-vagal theory. This viewpoint shows that it's not as simple as an on-off switch, you're activated or chill; but it's a wider range of activation states. This perspective shift really helped people learn more about a regulated nervous system and what it takes to achieve. Much of this research also comes from the lens of support for people who have experienced trauma. What the last decade or so has shown a light on, is that we don't need to have had classic PTSD type trauma (like soldiers in wartime), but that we can experience variations of traumatic experiences that influence how the nervous system learns to respond to stressors.

So what does all that mean and how do we use that information to help support your health? The way I typically explain it to patients is, our system is wired for safety. When that feels challenged in a short burst, we have a quick response reaction. An example is how almost getting into a car accident can make your heart race, your blood pressure rise, and your muscles clench. That reaction makes really good sense short term so you're alert and make better decisions to keep you safe. However, much more commonly these days is frequent and chronic stress. This can look like daily reminders that you don't have time to care for things around your home, or a big project at work that you've been working on for months, or the cost of living escalating faster than your paycheck. These are all little things that can make your brain feel unsafe. What a luxury it is to not worry about having healthy food and money for bills!

Another issue that can happen to dysregulate some of us, is a severe illness. Your body initially responds as if this is a big threat. Then your brain, in an effort to be efficient, continues to react to anything that feels akin to that infection with a large (and often unnecessary) response. This is termed the "cell danger" response. This, while well meaning, can lead to your body over-reacting to immune insults. This is how for some folks, immune dysregulation can begin as well. This can lead to a condition called Mast Cell Activation Syndrome (aka MCAS). This is dysregulation in the mast cells having the smallest triggers firing off a "cell danger" response that is disproportional to the insult.

This can often feel like things are out of our control. How do we create more time or more money out of thin air?! But the good news is there are many well researched daily practices that help to signal safety to our bodies and our brains. There are two main approaches (and it is important to do a little of both); brain down practices and body up practices. These things help literally re-wire the brain towards a new path of safety. Then we can start to see less reactivity and more regulated responses! Some of my favorite examples you can start today are:

- Alternate nostril breathing: simply block one nostril, breathe in on the other side, then switch the side you're blocking and exhale on the opposite side. While you're there breathe in on that side, then switch back to blocking the other nostril and exhale. Repeat a minimum of 5 rounds.

- Mindfulness meditations: you can do free guided meditations on several apps like Insight Timer, Calm, Headspace, etc.
- Humming or singing activates the vagus nerve, which is a major player in nervous system state.
- “The Basic Exercise” from the book *Accessing the Healing Power of the Vagus Nerve*: Lie on your back with your hands interlaced behind your head. Then look to one side while keeping your head straight / central. Continue looking to one side for up to 60 seconds or until you yawn, sigh, or swallow -whichever comes first. Blinking is okay. Repeat on the opposite side. You will likely notice this happens quicker the more you do these exercises.