Nervous System Regulation Guide

HOW TO BALANCE YOUR NERVOUS SYSTEM & BUILD RESILIENCE TO STRESS.

Karen Nard

NUTRITION

NERVOUS SYSTEM BASICS

Your nervous system is your body's command center. It influences everything from your hormones, immune system, digestion, mood, sleep, and *much* more. That's why many are turning to nervous system regulation to improve their health and happiness.

And this guide will help you do just that! But before we dive in, let's cover some basics...

What is the Autonomic Nervous System?

The autonomic nervous system (ANS) is part of your nervous system that controls involuntary processes like breathing, heart rate, and digestion.

There are two divisions of the autonomic nervous system:

- **The sympathetic nervous system:** Also known as the 'fight or flight' response, this division mobilizes your body's resources to respond to stressors. Basically, this system acts as your gas pedal.
- **The parasympathetic nervous system:** Nicknamed 'rest and digest' mode, this division promotes relaxation and helps you maintain a sense of calm. This system serves as your brake pedal.

Both systems are important. The sympathetic nervous system helps you spring into action when you encounter stress -- and the parasympathetic nervous system helps you recover and recharge.

What is Nervous System Dysregulation?

Nervous system dysregulation is when these systems get out of balance. This can happen due to stress, trauma, overwork, poor sleep, or toxin exposure.

If the sympathetic nervous system becomes dominant, stress hormones shoot up. This can lead to anxiety and agitation.

On the flip side, if the parasympathetic nervous system becomes overly active, you may feel lethargic and apathetic.

Signs of a Dysregulated Nervous System

- Anxiety
- Panic attacks
- Mood swings, irritability, or agitation
- Digestive problems
- Poor sleep
- Persistent fatigue
- Trouble concentrating
- Chronic pain
- Headaches or migraines



A healthy nervous system is *flexible***.** Meaning, it shifts from survival mode (sympathetic activation) back to safety (parasympathetic activation) with relative ease.

The trouble is, between bills, traffic, and overpacked schedules, modern life throws stress at us every day. On top of that, thanks to our fast-paced lives, most of us don't carve out enough time to rest and recharge.

No wonder nervous system dysregulation has become the norm! Luckily, there are many simple things you can do to restore balance to your nervous system.

What is Nervous System Regulation?

Simply put, **nervous system regulation is the ability to calm your nervous system.** There are TONS of tools to do this (many of which we'll share in this guide). Each one sends a safety signal to your brain to bring your nervous system back into balance.

What is the Vagus Nerve?

The vagus nerve is bundle of nerves that connects your brain, heart, and gut. It plays a crucial role in the parasympathetic nervous system and **helps you feel calm and safe.**

When the vagus nerve is stimulated, your heart rate and breathing slow down, and your body and mind relax. That's why many nervous system tools target the vagus nerve. More on this later...



TOOL #1: MINDFULNESS

Awareness is the first step to changing anything, *including* your nervous system. Your thoughts, emotions, physical sensations, and responses to external stimuli can all trigger stress.

The more you stay in the present moment, the more you notice the subtle signs of stress. And the earlier you catch it, the easier it is to come back into balance.

But *how* do you build present-moment awareness? **Mindfulness**.

Practicing mindfulness helps you become aware of your thoughts, emotions, sensations, and surroundings in the present moment, without judgment.

That way, you can build awareness of the current state of your nervous system and know when to use your tools.



Ways to Practice Mindfulness

- **Observe your thoughts.** Take note anytime you're ruminating about the past or worrying about the future. Notice your thoughts without judgment and gently bring yourself back to the present moment.
- **Engage your 5 senses.** When you're going about your day, tune into what you see, hear, feel, smell, and taste in each moment.
- **Mindful eating.** Eat meals free of distractions. Put all your attention on your food, appreciating the subtle nuances of flavors.
- **Try single tasking.** Resist the urge to multitask and do one task at a time, whether that's driving, doing the dishes, or sipping a cup of coffee.

TOOL #2: BREATHWORK

As mentioned before, your nervous system controls your breathing. When stressed, your breathing becomes shallow and fast. But when relaxed, breathing is slow and deep.

The good news is, you can consciously change your breath to influence your nervous system. Taking slow, deep breaths calms your nervous system and sends signals to your brain that you're safe.

The following are a few breathwork techniques that can help regulate your nervous system. Play around with them anytime you feel anxious, worried, or restless.

Deep Breathing Exercises

BOX BREATHING

Inhale slowly through your nose for 4 counts and hold your breath in for 4 counts. Then exhale slowly through your nose for 4 counts and hold your breath out for 4 counts. Repeat for 10 or more rounds. <u>Here's a video demo</u>.

PHYSIOLOGICAL SIGH

Popularized by neuroscientist Dr. Andrew Huberman and also known as cyclic breathing. Take two deep inhales through your nose, followed by one long slow exhale through the mouth. <u>Here's a guided walk-</u> <u>though</u>.

ALTERNATE NOSTRIL BREATHING

As the name suggests, this yoga technique involves breathing through one nostril at a time. It's said to balance the right and left hemispheres of the brain. <u>This</u> <u>video</u> will show you how to do it.

BELLY BREATHING

Also known as diaphragmatic breathing, this breath pattern stimulates the vagus nerve to help trigger the relaxation response. Breathe slowly through your nose, lettting the air go deep into your belly. <u>Here's a demonstration</u>.

TOOL#3: MOVEMENT

Exercise has endless benefits for your physical and mental health. It **burns off stress, relieves muscle tension, boosts your mood**, and **improves sleep quality** -- *all* of which benefit your nervous system.

Just don't overdo it. Intense exercise without enough recovery time can add more stress into the mix. So if you've been dealing with chronic stress for some time, stick to light to moderate exercise for now.

Here are some of the best exercises to help regulate your nervous system:



Mindful Movement

Yoga, tai chi, and chi gong are all examples of mindful movement that help calm the nervous system. These practices help you slow your breath, tune into your body, and release tension. Try them anytime you need to instill some inner calm. If you're new to mindful movement, <u>here's a</u> <u>beginner's yoga class</u> to get you started.



Light to Moderate Exercise

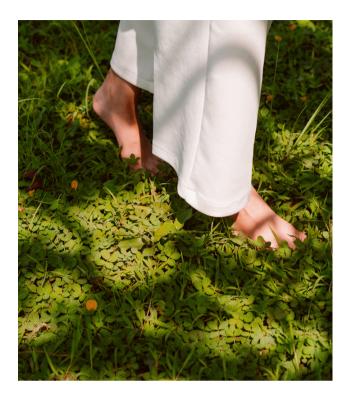
Walking, dancing, biking, swimming, jogging, or hiking all help you get in your body and let go of stress. Not to mention, they improve circulation and trigger the release of endorphins, your body's natural feel-good chemicals. So the next time you're feeling edgy, go for a walk or put on a playlist and dance it out.

TOOL #4: NATURE

Nature can be incredibly calming to the nervous system.

In fact, forest bathing (aka spending time immersed in natural settings), is shown to lower your blood pressure, heart rate, and levels of the stress hormone cortisol.

Try to squeeze in outdoor time any chance you can. Garden, go for a hike, hit a local park, or simply sip a cup of tea on your back porch and listen to the birds. Your nervous system will thank you.



What is Grounding?

Grounding, also known as earthing, is the practice of making direct contact with the Earth. This connects you with the electrical charge of the Earth's surface, which can, in turn, help ground your nervous system.

Grounding has been shown to **reduce inflammation**, **ease stress**, **relieve pain**, **improve sleep**, and much more. Best, of all, it's free and easy to do!

Here are a few ways to practice grounding:

- Walk on the grass barefoot
- Lie on the ground
- Garden
- Take a walk on the beach or play in the sand
- Submerge your body in a natural body of water
- Try a grounding tool like <u>earthing shoes</u> or an <u>earthing mat</u>

TOOL #5: VAGAL TONING

As mentioned before, when the vagus nerve is stimulated, it helps you feel calm and relaxed. The good news is, many simple practices can stimulate the vagus nerve to help build vagal tone:

Singing, humming & gargling

The vagus nerve is connected to your vocal cords. Anytime your vocal cords vibrate, it activates your vagus nerve. So if you needed another excuse for some carpool karoake, there you have it! If singing isn't your thing, humming and gargling can have the same effect.

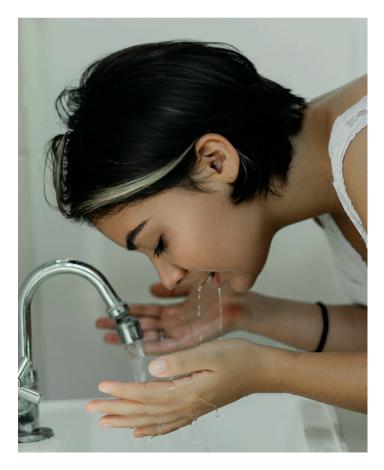
Cold water therapy

Exposing your body to cold water stimulates the vagus nerve. And you *don't* have to do a full-on ice bath to see benefits! Here are some simple ways to sneak in cold exposure:

- Splash cold water on your face
- Submerge your face in a bowl of ice water
- Place an ice pack on the back of your neck
- Switch to cold water for the last 30 seconds of your shower

Laughter

When you have a good laugh, it activates your diaphragm, which stimulates your vagus nerve. Laughter also reduces anxiety, boosts your mood. and strengthens your immune system. So look for opportunities to laugh whenever you can. Watch funny movies or TV shows, hang out with funny friends, or read funny books.

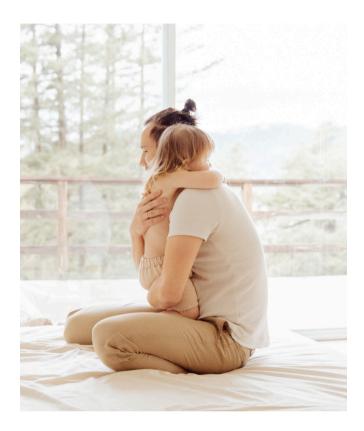


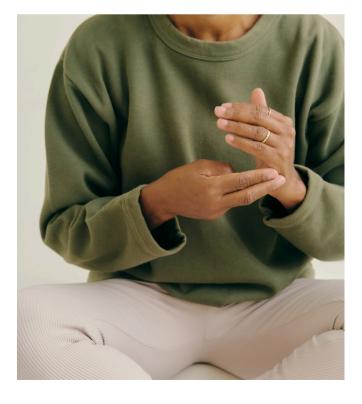
TOOL #6: SOMATICS

When your nervous system is dysregulated, it's easy to get stuck in your head. Somatic practices help pull you back into your body. That way, you can pick up on stress and tension before it gets out of hand. Here are a few somatic tools that may help:

Physical touch

Physical touch eases stress and helps you feel relaxed. Anytime you get skin to skin contact, whether that's through hugging, cuddling, holding hands, or enjoying a massage, it triggers the release of oxytocin, the "love hormone" that promotes feeling of well-being. As an added bonus, when you connect with someone in a regulated state, it helps shift YOU to a more regulated state too, through the power of <u>co-regulation</u>.





Emotional Freedom Technique

EFT, also known as "tapping," is a somatic therapy technique that can help release physical and emotional tension. It involves tapping on certain acupoints while focusing on a negative thought or belief that's causing you distress. Research suggests it can reduce stress and anxiety and even helps ease symptoms of PTSD. If you're new to EFT, <u>here's a video</u> to help you get started.