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## If There Was Ever a Time to Activate Your Vagus Nerve, It Is Now

Four simple steps to return to a 'rest and digest' state




[Ashley Abramson](#) Apr 9 · 6 min read ★

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 If you experience a racing heartbeat or tightness in your chest when you read a news story about the pandemic, it's because of your sympathetic nervous system. When the brain senses a threat, it triggers the fight-or-flight response.

On the flip side, your parasympathetic nervous system plays a role in calming your body. For example, escaping from a grizzly bear and returning to your safe, cozy cave signals to the brain that the threat is gone, so the stress response ends. Now that you've resolved the threat, you can return to a state of peace.

But what happens when a stressor doesn't have a definitive ending — like, say, a pandemic that might go on for months? You could suffer some significant health consequences — unless you intervene, with the help of your nervous system.

Emerging research on the vagus nerve, a major nerve in the parasympathetic nervous system, sheds light on how people can tune in to their nervous systems and find ways back to a “rest and digest” state amidst the chronic stress.

 In his “polyvagal theory,” professor of psychiatry Stephen Porges hypothesizes that the parasympathetic nervous system has two parts that cause two different responses: the dorsal vagal nerve network and the ventral vagal nerve network.

When you can't resolve a threat through fight-or-flight (you can't exactly run away from or physically fight a virus) or establish a social connection to help calm you, your body sometimes decides it's better to physically and mentally “check out.” That's called dissociation, and it's the work of the dorsal vagal nerve network. When you're dissociated, you'll feel powerless and hopeless, or even depressed — that's one reason it's so easy to glue yourself to the couch and go numb after you hear news about the virus.

“If we can’t respond with fight-or-flight or social engagement, that’s when we might dissociate. It’s like the body has begun to decide it’s trapped,” says Aundi Kolber, a Colorado-based therapist and author of *Try Softer*.

The ventral vagal nerve network, on the other hand, gets activated when you’re connecting with another person (or with yourself, by responding to your body’s signs of stress), which triggers calmness. This is the part of your nervous system you want to stimulate when you’re stressed.

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Also known as the social engagement system, the ventral vagal network runs upward from the diaphragm area to the brain stem, crossing over nerves in the lungs, neck, throat, and eyes. Actions involving these parts of the body — including deep breaths, gargling, humming, or even social cues like smiling or making eye contact with someone — send messages to the brain that it’s okay to relax.

This activation can have a snowball effect. Dr. Ruth Lanius, professor of psychiatry and director of the post-traumatic stress disorder research unit at the University of Western Ontario, says activating the ventral vagus nerve also activates the prefrontal cortex, the part of the brain that deals with logic. Calming yourself allows you to think clearly and process your difficult circumstances — which will further resolve stress.

Through the ventral vagal network, you can limit the effects of stress and prevent dissociation. Here’s a four-step plan to activate it — and regain a sense of calm — when the threat of Covid-19 is overwhelming you.

### Step 1: Tune into how your body feels

If you’re not aware of how your body feels when you’re stressed, it’s hard to know when you need to give your nervous system some rest and relaxation. The first step back to “rest and digest,” Kolber says, is paying attention to your body’s sensations.

Lynn Bufka, PhD, senior director of practice research and policy at the American Psychological Association (APA) recommends making note of your body's baseline physical state when you're calm so you can notice how stress changes your body. Go for a walk, stretch your legs, or even bend over and touch your toes, noticing what feels good and what doesn't. "The more we recognize our bodies' capabilities and limitations, the more we can take care of them," she says.

Once you have a general understanding of your body's "baseline," you can notice the small ways stress impacts you physically. For example, you might feel your shoulders slightly tense when you read the news about the latest case numbers. Then, you can take time to relax them — an act of compassionate self-care that not only relieves physical pain but signals to your ventral vagus nerve you're in a safe place.

## Step 2: Use your breath

Whether your sympathetic or dorsal nerves are active, mindful breathing — or paying focused attention to your breath — can be a powerful way to self-regulate. Specifically, deep breathing directly stimulates the ventral vagal system, since the vagus nerve passes through the vocal cords.

Research shows that mindful, deep breathing from the diaphragm reduces cortisol, the stress hormone. In a 2017 study, people who participated in a guided breathing program — where they took, on average, four deep breaths a minute — had lower cortisol levels in their saliva immediately after the exercise.

Boston-based therapist Kimberly Schmidt Bevans says the exhale is one of the most important aspects of mindful breathing. Exhaling longer than you inhale puts the ventral vagal network into action and promotes the rest and digest response.

## Step 3: Connect with people

Social connection, whether with other people or through what Kolber calls "compassionate attention" to yourself, is one of the most important ways to activate the ventral vagal network. You can't go out with friends because of practicing social distancing, but you can FaceTime a loved one or have a meaningful conversation with someone you're isolating with. Lanius says establishing a sense of safety and connection with someone — and making eye contact, even over a Zoom meeting — can cue your body to relax.

If there's no one to socialize with, or if blurry, online interactions just aren't cutting it, Schmidt Bevans says you can visualize someone you trust — even a pet — and imagine feelings of safety and connection. Or you can just hunker down in a relaxing room in your house. “If you're stuck in your home, looking for cues of safety in your space or with another person can activate the ventral vagal system,” she says.

**These things bring your body back to the present moment, which may feel safer to your nervous system than the potential scenarios of the future.**

### **Step 4: Harness anxious thoughts**

The story you tell yourself about your stressors can dictate how your body responds.

“How you interpret your situation and its danger lays out the potential for how chronic your stress will be,” says Bufka. If you know external stressors aren't going to change anytime soon, it's important to minimize your perception of the threat by shifting how you respond mentally.

For instance, rather than thinking about social distancing as being stuck in your house indefinitely, think about being home as a way to contribute to public health, and an opportunity to slow down.

Lanius says steering your thoughts in a more hopeful direction could cause the brain to send messages through the vagus nerve, triggering calm in all the organs and systems along the way.

One way to do that is by using your five senses. Going outside, listening to birds, and smelling a flower are all simple “grounding” activities, which Lanius says could help activate the ventral vagus nerve. Essentially, these things bring your body back to the present moment, which may feel safer to your nervous system than the potential scenarios of the future.

“If you're actually in a dangerous situation, like getting chased by a lion, then you should run,” says Kolber. “If you're actually safe in the present moment but your body feels like it's threatened, grounding can calm those perceived threats.”

When you're paying attention to both your mind and body under stress, you'll feel more relaxed — and ultimately, more yourself. “When you're in the hyped-up state of perceiving everything as a threat, all your resources will try to hold it together,” Bufka says. “If you try to cope with your emotional response, you'll have more energy and resources to problem-solve.”

*The coronavirus outbreak is rapidly evolving. For updates, check the [U.S. Centers for Disease Control and Prevention](#) as well as your local health department. If you're feeling emotionally overwhelmed, reach out to the [Crisis Text Line](#).*

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