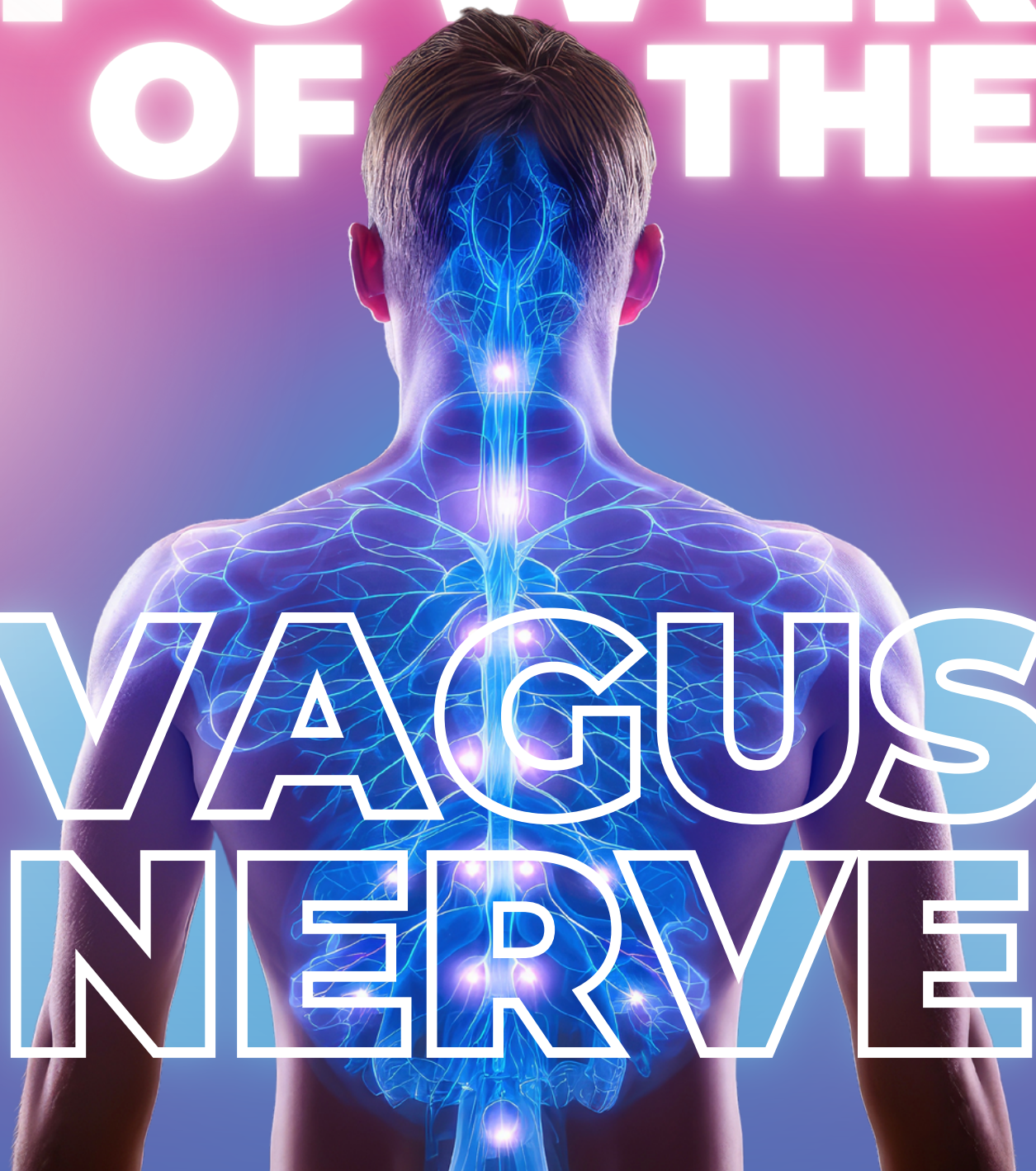
MY MYNDPROJECT
OUTSIDE YOUR MIND WHERE IS THE PROBLEM?

ACCESSING THE HEALING POWER OF THE VAGUS NERVE



WHAT'S IN IT FOR ME?

A new understanding of the nervous system, and how to make it work for you.

When was the last time you felt stressed? Maybe it was last week or last month. Maybe it was earlier today. Or maybe, like many of us, you're anxious so often that you can't remember the last time you weren't stressed out, worrying about the past, present, or future.

Professional body therapist Stanley Rosenberg understands. Over the years, he's seen hundreds of clients at his clinic in Copenhagen who are stuck in a state of stress. You might also be familiar with their symptoms: sleeplessness, depression, anxiety, weight gain or weight loss, a lack of interest in socializing, and even teeth grinding.

The good news is that Rosenberg has traced all these symptoms back to a single source: the vagus nerve. Even better? He's pioneered a way to treat them at home.

In these MYNDSETS, you'll learn

- ☑ why the vagus nerve is known as the wanderer;
- ☑ how our nervous systems get stuck in a state of stress; and
- ☑ how to help get yourself back into a state of social engagement.

The following applications are now being studied, either clinically or via community / citizen science

WELL-FUNCTIONING CRANIAL NERVES ARE CRUCIAL TO HEALTHY SOCIAL ENGAGEMENT.

You probably know the last time you were stressed. But when did you last feel relaxed? Maybe you were sharing a drink and a meal with a friend. Maybe you were taking a long walk with your partner or family. Your body and mind probably felt at ease and safe from any potential threat or danger.

This is what Stanley Rosenberg calls a state of social engagement. In this state, our minds and bodies rest and recover. We also enjoy intimacy and foster emotional connections with family and friends. But how do we access this state? Well, it all depends on one crucial component of our nervous system: our cranial nerves.

We have twelve cranial nerves, which, through tiny openings in the skull, connect the brain to our organs and muscles. The vagus nerve is the longest of these nerves.

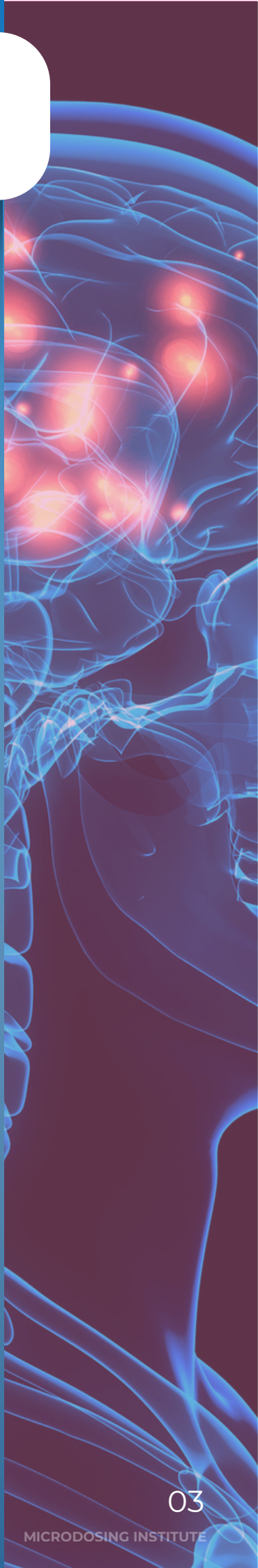
The key message here is: Well-functioning cranial nerves are crucial to healthy social engagement.

Before we learn about the vagus nerve, let's zoom out a bit. The overall goal of our nervous system is incredibly simple: to keep our physical bodies alive. Each of the twelve cranial nerves serves a different purpose in support of that goal. Many cranial nerves, as you might imagine, are related to helping us find, consume, and digest our food. The ninth cranial nerve – CN IX – is one of these. Its purpose is to facilitate tasting and swallowing.

But our ability to survive isn't just about the physical requirements for life, like food and water. We need a healthy emotional life, too, and we achieve this through social engagement. Social engagement itself depends on five crucial cranial nerves. If these aren't functioning properly, they can impede our social relationships and, as a result, hinder our evolutionary success.

To illustrate this point, let's have a look at the spinal sympathetic nervous system. This system is a bundle of cranial and spinal nerves that, when activated, trigger our fight-or-flight response. If a lion is about to attack, we might appreciate this system being triggered, so we can either run away or brace for impact. But if the fight-or-flight response is triggered because of a stressful day at work, it can make us restless or aggressive, and not much fun to engage with.

These are just a few of the ways in which cranial nerves govern our lives. In the next MYNDSET, we'll learn more about their evolutionary purposes.



ACCORDING TO POLYVAGAL THEORY, THERE ARE FIVE POSSIBLE SETTINGS FOR OUR NERVOUS SYSTEMS.

Not all cranial nerves are created equal – at least not when it comes to social engagement. When it comes to social relationships, one cranial nerve is king. That's the vagus nerve.

The vagus nerve travels from the brain stem down into the chest and all the way into the abdomen. No surprise, then, that the nerve is named after the Latin vagus, which means "wanderer."

In the past, we thought that there were only two settings for the nervous system: stress or relaxation. This was based on the idea that the vagus nerve was a single entity. But one psychiatrist's theory changed all that. Cue Stephen Porges and his Polyvagal Theory.

The key message here is: According to Polyvagal Theory, there are five possible settings for our nervous systems.

With Polyvagal Theory, Stephen Porges complicates our understanding of the vagus nerve. Porges hypothesizes that, rather than being a single nerve, the vagus nerve has two branches: the dorsal or rear branch, and the ventral or front branch.

But Porges goes even further: He argues that there aren't just two settings for the nervous system, but five.

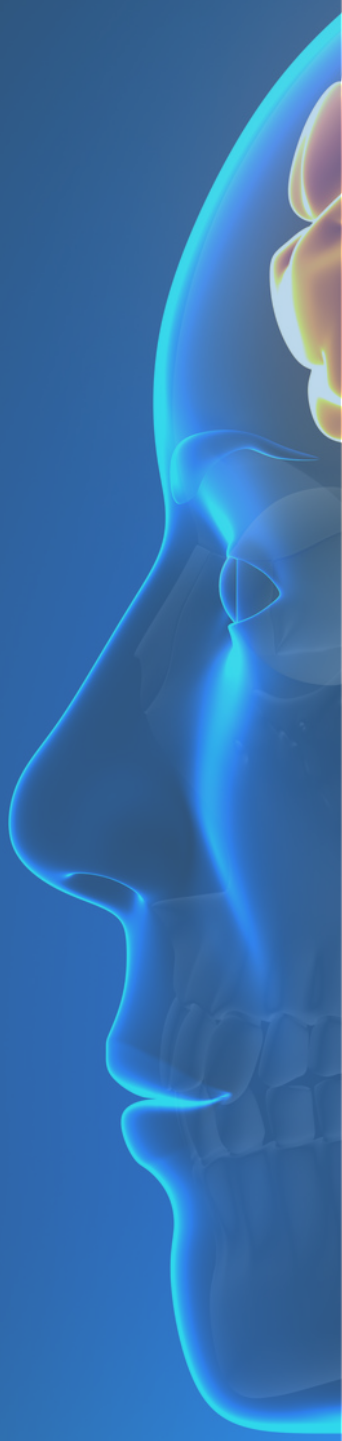
We came across the first two of these settings in the previous MYNDSET. The first is the relaxed state of social engagement, in which our nervous system is free from a sense of danger. Number two is the fight-or-flight response, which happens when the spinal sympathetic system is activated. This is known as "mobilization with fear."

The third setting for the nervous system is called "immobilization with fear." In nature, this usually happens when, upon perceiving an extreme danger, we freeze to conserve our remaining resources. In this setting, the dorsal or rear vagus nerve is activated, our blood pressure drops, and our muscles soften.

The fourth setting occurs when both branches of the vagus nerve – the dorsal and the ventral vagus – are engaged. This setting is called "immobilization without fear," and it typically fosters feelings of safety and intimacy, encouraging activities like cuddling.

The fifth and final setting is called "mobilization without fear." This happens when the fight-or-flight setting is combined with the activation of the ventral vagus, typically triggering a spirit of friendly competition.

Many people get stuck in chronic states of mobilization or immobilization with fear. But Rosenberg has developed a simple treatment to remedy both chronic states. Let's find out more.



ACTIVATING YOUR VENTRAL VAGUS NERVE CAN IMPROVE YOUR WELL-BEING.

When your nervous system gets stuck in a state of fear, it can be physically as well as emotionally debilitating.

Some people's dorsal vagus nerve is overactive, meaning it's consistently responding to dangers that are not present. Now, when the dorsal vagus nerve is activated, it immobilizes us with fear. If this happens repeatedly over time, we start to feel generally weak, tired, and weighed down.

An overactive fight-or-flight response causes similar problems. When we're in fight-or-flight mode, our heart rate and blood pressure jump. We take in more oxygen, and our liver dumps extra sugar into our bloodstream for quick energy. This can be distracting in the moment, and over longer periods it becomes exhausting.

How can we deal with these damaging chronic states? According to Stanley Rosenberg, all it takes is activating the ventral vagus nerve.

The key message here is: Activating your ventral vagus nerve can improve your well-being.

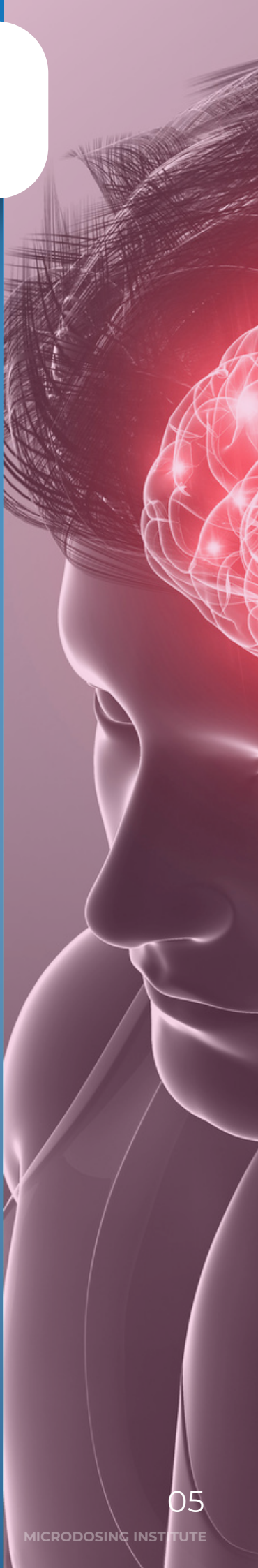
Rosenberg started his career as a body therapist, performing craniosacral massage, a type of therapy focused on applying gentle pressure to specific points on a person's cranium. Polyvagal Theory confirmed many things he'd already learned through years of treating clients at his clinic in Copenhagen. Using both craniosacral massage and Polyvagal Theory, he began developing simple therapies to regulate a person's nervous system.

One method he developed is a simple routine, easy to learn and perform, that takes just two minutes. Using data from hundreds of his clients, Rosenberg has found that this method successfully activates the ventral vagus nerve. People suffering from a variety of conditions have seen marked improvement in their health, as well as their work lives and social relationships.

Of course, before recommending therapy, Rosenberg needs to confirm that the ventral vagus nerve really isn't functioning properly. There's an easy test for this, which will probably sound familiar to anyone who's ever been to a doctor. Rosenberg asks his clients to open their mouths and say "Ah."

When a client does this, Rosenberg checks the uvula – the small bulb-shaped structure hanging down from the back of the throat – as well as the soft-tissue arches on either side of it. When the client says "Ah-ah-ah," the arches should lift. Asymmetrical lifting indicates that the ventral vagus nerve is not functioning properly. This shows Rosenberg that the client may benefit from his simple, two-minute exercise.

Let's find out what it is.



YOU CAN EASILY TRY ROSENBERG'S BASIC EXERCISE FOR YOURSELF.

Right, time to get down to business. We're going to learn Rosenberg's simple, two-minute exercise for activating the ventral vagus nerve. The exercise is called – wait for it – the Basic Exercise.

Though it's incredibly simple, this exercise really does activate the ventral vagus nerve – which of course means it increases social engagement. But the Basic Exercise also increases mobility in the neck and spine, as well as upping blood flow to the brain stem, where the cranial nerves originate.

Before and after the exercise, rotate your head and neck to the right and the left, to measure the impact. If you're like most people, you'll notice an increased range of movement.

The key message here is: You can easily try Rosenberg's Basic Exercise for yourself.

Here's how you do the Basic Exercise. First, lie down on your back. Once you've learned the exercise, you can do it sitting up, but it's best to start lying down. Weave the fingers of your hands together in front of you. Now place your hands behind your head, with the weight of your head resting comfortably on your fingers. Feel the hardness of your cranium with your fingers, and feel the bones of your fingers with your head.

Keeping your head in place, look to the right, moving only your eyes, as far as you can. Be sure not to turn your head. After half a minute or a minute, you'll notice yourself swallowing, yawning, or sighing. This is a sign of relaxation. Now, bring your eyes back to the center, and then look to the left. Hold your eyes in place until you notice the same signal of relaxation.

And that's it.

But wait – how can something so simple work so well? Well, there are two reasons. First, when you lie with the weight of your head on your hands, the muscles in your neck relax just enough for two crucial vertebrae to align, which in turn relieves pressure on the cranial nerves. Second, when you move your eyes to either side, you're engaging the eight small muscles located at the base of the skull, called suboccipital muscles. You can sense this connection by placing a finger across the back of the head, just under the lower edge of the skull. Move your eyes around, and you'll notice slight movement under your finger.

It might be simple, but the Basic Exercise has the potential to improve some pretty complicated health diagnoses. We'll find out which ones in the next MYNDSET.

THE BASIC EXERCISE CAN HELP TREAT SYMPTOMS OF SEVERE PHYSICAL DISORDERS.

Pharmaceuticals and surgery are big business. That's no surprise, given how often Western doctors prescribe or recommend them. In the US alone, about 500,000 people undergo back surgery every year – even though several studies have shown that such operations aren't effective in the long run.

This would all look different if doctors paid more attention to how the nervous system in general, and the ventral vagus nerve in particular, affect physical health. In Rosenberg's practice, he's found that helping the ventral vagus nerve function properly reduces the severity of many health problems, which in turn reduces the need for prescription medication or surgery. But of course, you should never stop taking prescription medication without consulting your doctor first.

The key message here is: The Basic Exercise can help treat symptoms of severe physical disorders.

One of the world's most debilitating and widespread physical disorders is COPD, or chronic obstructive pulmonary disease. COPD affects 329 million people, or about five percent of the world's population. In 2012, COPD was the third leading cause of death worldwide, behind heart disease and cancer.

COPD was also the medical diagnosis given to one of Rosenberg's most dramatic cases of recovery.

One day, Rosenberg opened the door of his Copenhagen clinic to find his next client gasping and wheezing on the landing. Rosenberg's office is only one flight up from ground level. This man, a 44-year-old who had previously been active and healthy, was now so debilitated he couldn't climb one flight of stairs without stopping to catch his breath.

The man did eventually catch his breath, and Rosenberg tested his ventral vagus nerve function by looking at his uvula. Then he took him through the Basic Exercise. Already the man was breathing easier. Finally, after a simple manipulation of his stomach and esophagus to correct what he suspected was a type of hernia, he asked the man to try the stairs again.

This time, Rosenberg's client walked up four flights and back down without stopping once.

The man's results were confirmed by hospital tests, taken before and after his visits with Rosenberg. His vital capacity, a test for lung function, had improved from 70 to 102 percent. At the time of writing, he is planning to do something he never thought he'd do again: go on a cycling holiday with his brother.

Rosenberg's techniques have helped many clients with physical diseases. But as we'll see in the next MYNDSET, they have also benefited people with psychological disorders.

VENTRAL VAGUS ACTIVATION CAN HELP PEOPLE WITH PSYCHOLOGICAL DISORDERS, INCLUDING AUTISM-SPECTRUM DISORDERS.

Some physical problems have their roots in the mind. And some psychological problems can be addressed via body therapies.

As a body therapist, Rosenberg is not qualified to treat psychological problems, and he's careful not to imply that he is. But his years of clinical experience have shown that people with a variety of psychological disorders can be positively affected by having their ventral vagus nerve activated. These include autism-spectrum disorders.

Autism-spectrum disorders are the fastest-growing developmental disorders in the world. In the US, the rate of growth is 10 to 17 percent per year. It's a lifelong disability, costing on average $2.4 million per affected American. But this doesn't include the heavy emotional toll it takes on parents and other family members.

The key message here is: Ventral vagus activation can help people with psychological disorders, including autism-spectrum disorders.

People with autism diagnoses often suffer from chronic activity of both the spinal sympathetic system and the dorsal vagus nerve. This shows up as fearful or panicked reactions for no apparent reason, as well as hypersensitivity to emotional or physical stimuli, like background noise that most people barely notice.

Over the years, Rosenberg has helped many children and young people with diagnoses on the autism spectrum. He's done this by using a simple therapy – a physical manipulation of the cranium – to release restriction and enable proper function in cranial nerves. He's also taught these techniques to his students, who have gone on to use them successfully in their practices.

In one instance, a young man named Thor treated his seventeen-year-old brother William with a technique called the Neuro-Fascial Release Technique. William had been diagnosed with autism as an infant, and had been moody, silent, and uncomfortable with eye contact his whole life. But after Thor treated William for just a few minutes with Rosenberg's technique, he became communicative, outgoing, and curious. Now, years later, William works as a sound designer for a Danish software company and goes on independent holidays with other young adults with diagnoses of autism.

These results are life-changing. But Rosenberg's techniques can have an impact on your life, too, even if you aren't living with a diagnosis of COPD or autism. Just give the Basic Exercise a try and see for yourself!

FINAL SUMMARY

Most of us experience anxiety, stress, and pain in our daily lives, and many of us treat these symptoms with pharmaceuticals or even surgery. Craniosacral therapist Stanley Rosenberg argues that simple therapies that activate the ventral vagus nerve can alleviate these symptoms without medical intervention. One of these therapies is a simple two-minute exercise called the Basic Exercise, which you can try yourself at home.