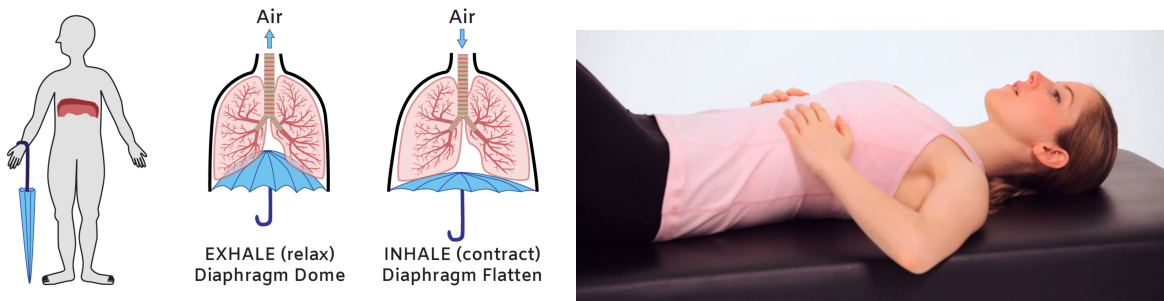


Relaxation for Pain Management

When we are stressed, our overactive sympathetic nervous system is in a state of ‘fight or flight’. This causes increased heart rate, shallow and rapid chest breathing, muscle tension, fascial tightness, increased pain sensitivity, inflammation and digestive problems. This can be reversed by activating the parasympathetic, or ‘rest and digest’ part of the nervous system powered by the vagus nerve. Activation of the vagus nerve decreases inflammation throughout the body.(Bonaz, 2016)

- **Slow, diaphragmatic breathing** is a research-supported way to calm the sympathetic nervous system, activate the parasympathetic nervous system, and has multiple other health benefits.(Laborde, 2022) Breathe into your belly and lower ribs, allowing the lower ribs to expand like an umbrella. Inhale for 4 seconds, exhale for 6 seconds. For detailed discussion of other benefits of breathing properly: <https://webpace.clarkson.edu/~lrussek/docs/hypermobility/RussekBreathing.pdf>

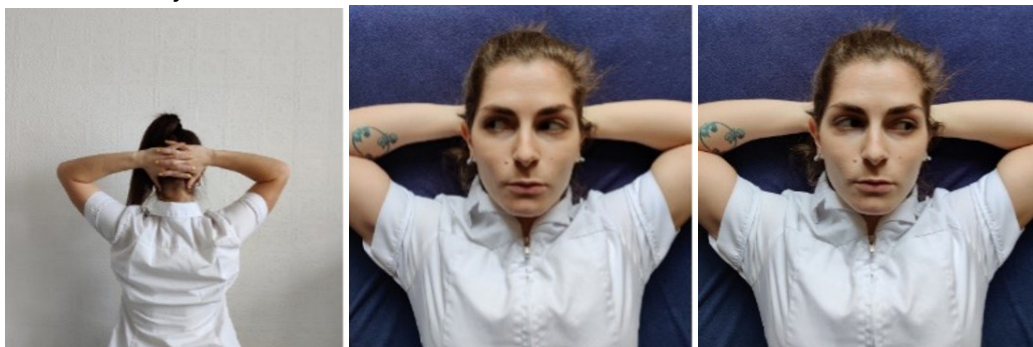


- **Mindfulness meditation** is another way to calm the nervous system. There are many apps and YouTube videos with a range of mindfulness practices. A selection of free mindfulness recordings from The Free Mindfulness Project: <https://www.freemindfulness.org/download>

The following strategies are specifically intended to activate the vagus nerve. Research is not as strong for these approaches, except where references are noted, below. However, most are safe and easy to try, and may be helpful for you.

The “Basic Exercise” for Activating the Vagus Nerve

- Lie comfortably on your back and weave your fingers together leaving your thumbs free. Put your hands on the back of your head, and let the weight of it rest on your fingers. Modify as needed if uncomfortable.
- Keeping your head still, look to your right and keep this eye position for 30-60 seconds. Then move your eyes to look left for 30-60 seconds.
- During the exercise you might notice yourself sighing, yawning or swallowing, this is a sign of relaxation. If you feel dizzy while sitting back up, it is probably due to your blood pressure lowering during the exercise. Take your time to slowly move out of the exercise when finished.



Other Vagus Nerve Activators

The graphic here describes a variety of techniques that may activate the vagus nerve. Note: People with hypermobile Ehlers-Danlos Syndrome should probably avoid gargling to stimulate the vagus nerve, as it could aggravate neck instability, and may cause problems because of weak throat muscles.

Graphic: <https://www.health360-swansea.co.uk/post/vagus-nerve-activation-exercises>

Other techniques that may help:

- **Ear massage** to stimulate the vagus nerve – this is super easy to do: <https://youtu.be/LnV3Q2xlb1U>
- **Splashing cold water on your face**, or placing an ice pack on your face is another way to activate the vagus nerve.
- **Chanting:** A single session of loud chanting OM for 5 minutes can increase heart rate variability (HRV), through increased parasympathetic/vagus nerve activity. (Inbaraj, 2022)
- **OM chanting and Yoga Nidra** practice 5 d/wk for 2 months decreased stress and improved sleep and autonomic function. (Rajagopalan, 2022) Yoga Nidra is a form of yoga meditation, not yoga poses.
- Other **vagus nerve ‘exercises’** (do not do these movements if they do not seem appropriate/safe for you): <https://youtu.be/L1HCG3BGK8I>
- **Electrical stimulation of the ear** may also activate the vagus nerve. See a health professional if interested.
- Inbaraj G, Rao RM, Ram A, Bayari SK, Belur S, Prathyusha PV, Sathyaprabha TN, Udupa K. 2022. Immediate Effects of OM Chanting on Heart Rate Variability Measures Compared Between Experienced and Inexperienced Yoga Practitioners. *Int J Yoga*. 15(1):52-58. 10.4103/ijoy.ijoy_141_21
- Rajagopalan A, Krishna A, Mukkadan JK. 2022. Effect of Om chanting and Yoga Nidra on depression anxiety stress, sleep quality and autonomic functions of hypertensive subjects - a randomized controlled trial. *J Basic Clin Physiol Pharmacol*. 10.1515/jbcpp-2022-0122
- Laborde S, Allen MS, Borges U, et al. Effects of voluntary slow breathing on heart rate and heart rate variability: A systematic review and a meta-analysis. *Neurosci Biobehav Rev*. Jul 2022;138:104711.
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Natural Techniques For Stimulating The Vagus Nerve

Exercise

Exercise is good for your brain's cognitive faculties, your mental health and your gut flow, thanks to its ability to stimulate the vagus nerve.

Deep, slow breathing

Breathing slowly and deeply activates your vagus nerve to send messages to your brain that help lower your blood pressure and heart rate.

Thoughtful meditation

You can improve your mood simply by silently repeating positive phrases about your friends and family.

Chill out

Exposure to cold dampens the fight or flight response and increases the rest and digest response, like taking a cold shower or drinking ice water.

Singing

Humming, chanting and singing are all exercises that increase heart rate variability (HRV). Higher HRV is linked with "reduced morbidity and mortality" and "improved psychological well-being and quality of life."

Singing also increases oxytocin, aka the love hormone, because it's an activity that brings people closer together.

Laughing

Laughter is a natural immune booster which, like singing, can increase HRV in a group setting.

Gargling

Gargling with water stimulates the muscles of the pallet and has been shown to improve working memory performance.

Yoga

Disciplines like yoga increase vagus nerve activity to help keep you calm and are particularly effective for people suffering from anxiety or depression.

HYPNOSIS TRAINING ACADEMY