

Unlock Your Wellbeing: Could This Nerve Be The Key?

What if you were to realise that the way you are trying to manage stress could be sabotaging your health, fitness and ability to hack into your optimal performance state of mind? What if you were to understand that this could change by simply stimulating a nerve? Then, when you learn to work with this nerve instead of fighting against it, you will align your body and mind to boost your health and performance.

This may seem like it's too simple to be true, but this article will help you to understand how to manage stress.

Have a look at this picture bellow...



...The warm, red moon, the stillness of the birds just resting on the tree and the beautiful pink and purple colours as the sun fades into nightfall; you might have subconsciously taken a slow, deep breath. If you haven't, do so now, a slow, deep breath. Just one. And once you do, you'll notice it relaxes you almost on cue. This is because slow, deep breathing from the stomach has always done so. We are born with this ability. This process is called **vagus nerve stimulation**.



This area of your nervous system is called the autonomic nervous system which, largely unconsciously, regulates your body's functions such as: digestion, respiratory rate, pupillary response, urination, sexual arousal and your heart rate.

Your Nervous System

Your autonomic nervous system (ANS) has two branches which are:

- 1. Sympathetic (more commonly known as fight or flight)
- 2. Parasympathetic (rest and digest)

In an ideal wold, these systems would be balanced. A simple analogy for your ANS would be to think of your autonomic nervous system like a volume control. The sympathetic (fight or flight) turns the volume up on your organs and glands, while the parasympathetic (rest and digest) lowers the volume. ANS imbalance is caused by the volume on either side being left on too long. 99% of people are consistently in a sympathetic activation state. But, when you learn to stimulate your vagus nerve, you are the master of your parasympathetic nervous system, you will boost your health, recovery and ultimately your performance.

What can cause the imbalance?

The imbalance in ANS is a reaction to a stimulus that disturbs your physical or mental equilibrium... Stress.

Stress cannot be avoided. You cannot disappear into the mountains and live like a hermit, thinking you will avoid stress. When you eat, breathe, walk and talk, you are creating stress on your system. A big common mistake is to try and hide from stress. If you want to develop your skill or improve your health, you need to learn about what you are reading today.

You must learn to work with stress. To regain your control over it, you must understand and work with the two types of stress:

Eustress - Good stress

Moderate or normal psychological stress interpreted as being beneficial for the experiencer.

Distress - Bad stress

Negative stress that occurs when an individual cannot adapt to the stress.



So, how can we cope with stress and allow ourselves even in the toughest times to relax?

Our bodies contain a 'wandering nerve' which we can stimulate to help with relaxation. This method is called vagus nerve stimulation (VNS). This nerve wanders on; it starts out at the base of our brain, travels into the neck, then further through the chest and down to large gut in the abdomen. In women, it reaches as low in the abdomen as the cervix of the uterus. The vagus, or the "wandering nerve," is the longest autonomic nerve in the human body.

The credit of that deep breathing induced relaxation goes to our body's "wandering nerve." There is one vagus nerve on each side of our body. The vagus, as a part of your autonomic nervous system, controls those functions of the body that are not under your voluntary control, such as the heart rate. The stimulated vagus releases a bunch of anti-stress chemicals in our body — acetylcholine, prolactin, vasopressin, and oxytocin. Of these, the neurochemical acetylcholine brings down our heart rate.

Other than heart rate, it also controls our gut movements and sweating. It commands the release of tears, saliva, and stomach acid, too. It causes us to gag when something touches the back of our throat, and to cough when a cotton bud tries to clear out a plug of ear wax.

Our hearts have a built-in pacemaker, the natural pacemaker of the heart, called the sinoatrial node (SAN). It regulates our heart beats. In turn, the vagus controls this pacemaker of our heart. The wandering nerve asks the SAN to instruct the heart to maintain its beat at a certain rate.

If the vagus nerve was cut, then our hearts would start racing at around 100 beats every minute, even if we were just catching a breeze on a hammock. Any heart that is always beating that fast can wear out our organs, and ourselves, rather too soon. So, having an intact vagus that is always alert keeps our resting heart rate controlled, between 60 to 80 per minute.

When we actively stimulate the vagus, as you did earlier by letting in a deep breath looking at that sunset above, our hearts go into relaxation.

Recent scientific research hints that vagus nerve stimulation could help in the strengthening of our memories. This could open up a world of possibility in Alzheimer's patients.



The role of vagus in keeping down the inflammation in our body is also a promising direction of research. Further, those with stronger vagal response, (that is those who get more affected by vagus nerve stimulation), might recover better after a stressful event; such as your training session.

This all might seem a little confusing at first, but here is where it is important. Below are **10** things you can do to stimulate your 'wandering nerve' to bring your heart rate down and initiate your body's relaxation response.

- 1. Deep and slow breathing (the belly breathing).
- 2. Holding your breath for a few seconds.
- 3. Splashing your face with cold water.
- 4. Coughing and gargling.
- 5. Tensing your tummy muscles (as if bearing down to evacuate the bowel!).
- 6. Massaging the sides of your neck (the carotid sinus massage, ask a member of staff for help where this is if needed).
- 7. Pressing on your eyeballs.
- 8. A hearty bout of laughter.
- 9. Meditation, especially the loving-kindness meditation.
- 10. EXERCISE and yoga.

When you're stressed and anxious, you could stimulate your vagus nerve to relax yourself.

Vagus nerve stimulation via belly breathing is a very practical method of relaxing yourself on short notice. Doing this deep, diaphragmatic breathing for at least 10 minutes a day on a regular basis can bring about a sea change in your anxiety levels.

CHALLENGE: See how few breaths you can take in 10 minutes! Ask a member of staff to see if you made the leader board!