An anatomical illustration of a human figure from the waist up, rendered in a semi-transparent blue color. The nervous system is highlighted in bright yellow and orange. The vagus nerve is shown as a thick yellow line descending from the neck into the chest and abdomen, where it branches out. The facial nerve is shown as a network of orange lines branching across the face. The background is a gradient of blue and orange.

Facial Nerve

Vagus Nerve

**“THE VAGUS NERVE IS THE CONDUCTOR
OF THE HUMAN BODY’S SYMPHONY
ORCHESTRA.”**

A man and a woman are shown in profile, embracing each other on a balcony. The man is on the right, wearing a dark grey t-shirt and a blue PULSETTO neck device. The woman is on the left, wearing a dark green long-sleeved top and a grey PULSETTO neck device with a green light. They are both looking towards each other with soft expressions. The background shows a white balcony railing and a building with windows.

“ LIFE SLOWS DOWN WITH PULSETTO ”

Effective, Safe, Simple, and
Affordable Vagus Nerve Stimulation.

What is the vagus nerve?

The vagus nerve is your **longest cranial nerve**, connecting your brain to several of your internal organs.

It's named after the Latin word for wandering. That's because it starts at the brain before branching to almost every **major organ in your body**.

Your vagus nerve is responsible for signaling the brain to **release calming neurotransmitters** like acetylcholine and serotonin.

The vagus nerve is crucial for **activating your relaxation response** so you can “rest and digest.”

VAGUS NERVE STIMULATION

Vagus nerve stimulation (or VNS), as it is commonly used today, works by delivering electrical impulses to the vagus nerve, which is the major highway between your brain and internal organs.

But now, using cutting-edge technology, we can stimulate the vagus nerve using non-invasive vagus nerve stimulation, nVNS. That means no need for invasive surgery or for needles!

The purpose of Pulsetto is to provide stress resilience and well-being to people from all walks of life by utilizing effective methodologies and cutting-edge technology.

Based on decades of expertise working with stress and trauma-related conditions, we are bringing to the mainstream market a vagus nerve activation technology designed to help people manage stress, support better sleep, and promote overall wellness.

What does the vagus nerve affect?

The vagus nerve has a number of different functions.

The four key functions of the vagus nerve are:

Sensory: From the throat, heart, lungs, and abdomen.

Special sensory: Provides taste sensation behind the tongue.

Motor: Provides movement functions for the muscles in the neck responsible for swallowing and speech.

Parasympathetic: Responsible for the digestive tract, respiration, and heart rate functioning.

Its functions can be broken down even further into seven categories. One of these is balancing the nervous system.

The nervous system can be divided into two areas: sympathetic and parasympathetic. The sympathetic side increases alertness, energy, **blood pressure**, heart rate, and breathing rate.

The parasympathetic side, which the vagus nerve is heavily involved in, decreases alertness, blood pressure, and heart rate, and helps with calmness, relaxation, and digestion. As a result, the vagus nerve also helps with defecation, urination, and sexual arousal.

OTHER VAGUS NERVE EFFECTS INCLUDE:

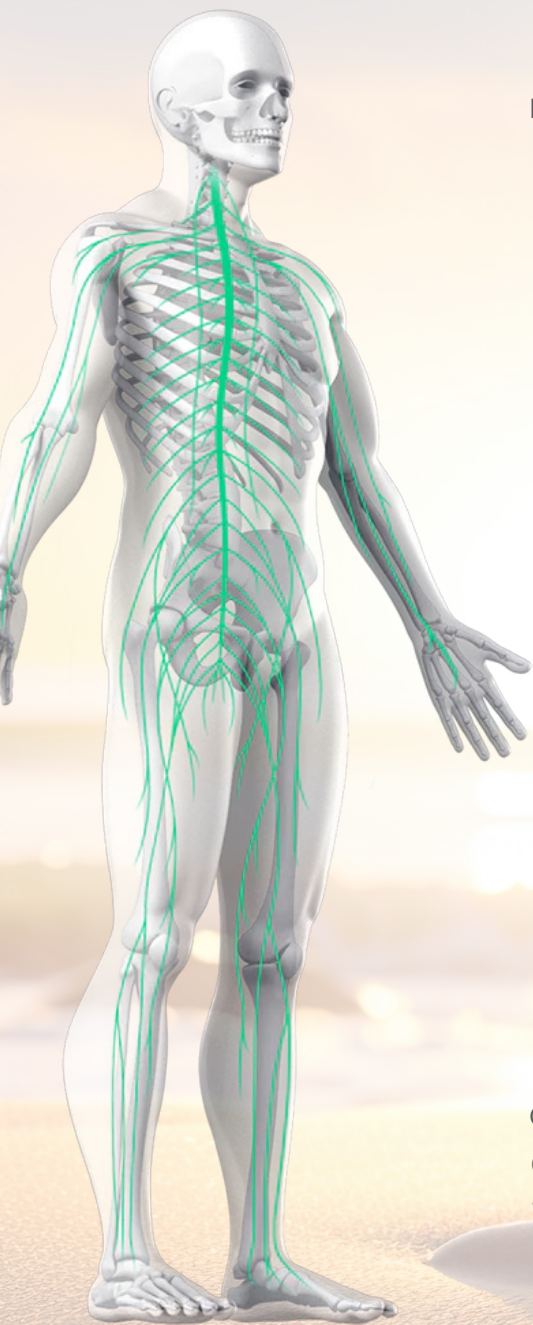
Communication between the brain and the gut: The vagus nerve delivers information from the gut to the brain.

Relaxation with deep breathing: The vagus nerve communicates with the diaphragm. With deep breaths, a person feels more relaxed.

Decreasing inflammation: The vagus nerve sends an anti-inflammatory signal to other parts of the body.

Lowering the heart rate and blood pressure: If the vagus nerve is overactive, it can lead to the heart being unable to pump enough blood around the body. In some cases, excessive vagus nerve activity can cause loss of consciousness and organ damage.

Fear management: The vagus nerve sends information from the gut to the brain, which is linked to dealing with stress, anxiety, and fear – hence the saying, “gut feeling.” These signals help a person to recover from stressful and scary situations.



Vagus nerve stimulation (VNS) may be a promising method for managing long COVID symptoms.

VNS activates the parasympathetic nervous system and reduces inflammation.

HRV (Heart Rate Variability) exercises like deep breathing and cold showers can complement VNS.

Non-invasive VNS devices like **Pulsetto** are an accessible and user-friendly way to stimulate the vagus nerve.

Using **Pulsetto** regularly can relieve stress, anxiety, and insomnia, contributing to the better management of long COVID.

Transcutaneous vagus nerve stimulation in patients with attention-deficit/hyperactivity disorder: A viable option?

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Individuals with attention-deficit/hyperactivity disorder (ADHD) suffer from a range of cognitive and behavioral problems that severely impair their educational and occupational attainment. ADHD symptoms have been linked to structural and functional changes within and between different brain regions, particularly the prefrontal cortex. At the system level, reduced availability of the neurotransmitters dopamine (DA) and norepinephrine (NE) but also γ -aminobutyric acid (GABA) have been repeatedly demonstrated. Recently, non-invasive brain stimulation (NIBS) techniques have been explored as treatment alternatives to alter dysfunctional activation patterns in specified brain areas or networks. In the current paper, we introduce transcutaneous vagus nerve stimulation (tVNS) as a systemic approach to directly affect NE and GABA neurotransmission. TVNS is a non-drug intervention with low risk and proven efficacy in improving cognitive particularly executive functions. It is easy to apply and therefore well-suited to provide home-based or mobile treatment options allowing a significant increase in treatment intensity and providing easier access to medical care for individuals who are unable to regularly visit a clinician. We describe in detail the underlying mechanisms of tVNS and current fields of application and discuss its potential as an adjuvant treatment for ADHD.

Keywords: ADHD; Cognitive function; GABA; NIBS; Norepinephrine; tVNS.

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Vagus Nerve Stimulation and Its Cardioprotective Abilities: A Systematic Review

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Despite the vagus nerve stimulator (VNS) being used in neuroscience, it has recently been highlighted that it has cardioprotective functions. However, many studies related to VNS are not mechanistic in nature. This systematic review aims to focus on the role of VNS in cardioprotective therapy, selective vagus nerve stimulators (sVNS), and their functional capabilities. A systemic review of the current literature was conducted on VNS, sVNS, and their ability to induce positive effects on arrhythmias, cardiac arrest, myocardial ischemia/reperfusion injury, and heart failure.

Both experimental and clinical studies were reviewed and assessed separately.

Of 522 research articles retrieved from literature archives, 35 met the inclusion criteria and were included in the review. Literature analysis proves that combining fiber-type selectivity with spatially-targeted vagus nerve stimulation is feasible. The role of VNS as a tool for modulating heart dynamics, inflammatory response, and structural cellular components was prominently seen across the literature. The application of transcutaneous VNS, as opposed to implanted electrodes, provides the best clinical outcome with minimal side effects. VNS presents a method for future cardiovascular treatment that can modulate human cardiac physiology. However, continued research is needed for further insight.

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SALIVA	Result	Range	Units
Female Hormone Profile-Basic			
Progesterone (P4)	586.0		pmol/L
DHEAS.	14.4	2.5 - 25.0	nmol/L
Testosterone.	40.0	25.0 - 190.0	pmol/L
Estradiol (E2)	16.0		pmol/L
Estrone (E1)	14.0	9.6 - 20.0	pg/mL
Estriol (E3)	12.0	0.0 - 29.0	pg/mL
E3/[E2+E1]	0.40 *L	> 1.00	RATIO
P4/E2 Ratio (Saliva)	36.6	4.0 - 108.0	RATIO

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A stack of smooth, grey stones is positioned on the right side of the image, set against a background of a beach at sunset. The sky is a mix of soft yellow and light blue, and the ocean is visible in the distance. The stones are stacked vertically, with the top stone being the most prominent.

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