

Vagus Nerve Stimulation (VNS) for Chronic Constipation: A Natural Approach
The vagus nerve plays a crucial role in digestive motility, controlling the peristaltic
movement of the intestines via the gut-brain axis. If vagal tone is low, the communication
between the brain and gut slows, contributing to chronic constipation, bloating, and
sluggish digestion.

Vagus nerve stimulation (VNS) can help by **enhancing gut motility, increasing digestive secretions, and reducing inflammation**—all of which support regular bowel movements.

How Vagus Nerve Stimulation Supports Digestion

√ Enhances Peristalsis (Gut Motility)

- The vagus nerve stimulates the **enteric nervous system (ENS)**, which controls the movement of food through the intestines.
- Low vagal tone is linked to slow-transit constipation and intestinal dysmotility.
- VNS **increases acetylcholine**, a neurotransmitter that signals the gut to contract and move waste efficiently.

√ Boosts Digestive Enzyme and Stomach Acid Production

- Low stomach acid leads to incomplete digestion and slow emptying.
- VNS helps increase stomach acid (HCl) and digestive enzyme secretion, improving food breakdown and motility.

√ Reduces Inflammation in the Gut

- The vagus nerve activates the cholinergic anti-inflammatory pathway, lowering
 inflammatory markers that may contribute to irritable bowel syndrome (IBS) and
 chronic constipation.
- Lower inflammation = improved gut function.

√ Balances the Gut Microbiome

- A well-functioning vagus nerve supports **gut-brain communication**, which influences the **microbiome**.
- Poor vagal tone has been linked to dysbiosis, which can contribute to constipation.

Methods to Stimulate the Vagus Nerve for Constipation Relief

1. Non-Invasive Techniques

✓ Deep Breathing (Diaphragmatic Breathing)

- How: Inhale for 4-6 seconds, hold briefly, exhale for 6-8 seconds (longer exhale).
- Why: Stimulates the vagus nerve, increasing peristalsis and gut motility.

√ Humming, Gargling, or Singing

- How: Gargle vigorously with water for 30-60 seconds, hum deeply, or sing loudly.
- Why: Activates the vagus nerve via throat and vocal cords, promoting digestion.

√ Cold Therapy

- How: Splash cold water on the face or use a cold pack on the neck for a few minutes.
- Why: Cold exposure stimulates vagal activity, reducing gut sluggishness.

✓ Acupressure & Auricular Stimulation

- How: Massage the tragus (small cartilage near the ear opening) for 30-60 seconds or use an ear VNS device.
- Why: Stimulates the auricular branch of the vagus nerve, enhancing gut motility.

√ Abdominal Massage

- How: Use circular motions around the navel, moving clockwise for 5 minutes.
- Why: Stimulates vagal activity and bowel motility.

√ Probiotics + Omega-3 Fatty Acids

- How: Supplement with DHA-rich fish oil and high-quality probiotics.
- Why: Omega-3s and probiotics improve vagal tone and gut-brain communication.

√ Yoga & Gut-Specific Movements

- How: Try child's pose, seated twists, and downward dog before meals.
- Why: Enhances vagal activation and improves bowel regularity.

2. Electrical Vagus Nerve Stimulation (tVNS)

- Transcutaneous VNS (tVNS) Devices:
 - Ear-based vagus nerve stimulators (like Parasym or taVNS) have been shown to enhance gut motility. I often recommend the <u>Relaxus Acu-</u> <u>Massage Pen</u> following this technique: <u>Resetting the Vagus Nerve</u>
 - Studies suggest auricular VNS can activate enteric nervous system function, helping with constipation and IBS.

Implantable VNS (iVNS):

 Used in medical settings for epilepsy and depression but has been found to improve bowel function as a secondary benefit.

Scientific Evidence for VNS and Constipation

- ✓ A 2020 study found that vagal nerve stimulation increased colonic motility, improving symptoms in individuals with gut motility disorders.
- ✓ A 2018 study on IBS showed that auricular VNS reduced constipation and bloating, likely due to increased parasympathetic activity.
- ✓ Research in Parkinson's disease (where vagal dysfunction is common) has found that VNS improves slow-transit constipation.

Conclusion

Vagus nerve stimulation is a **promising, natural approach** to **chronic constipation**, especially in cases of **slow gut motility, IBS-C, or nervous system dysfunction**. By improving **peristalsis, gut-brain communication, and digestive enzyme production**, **VNS can help restore healthy bowel function**.