

# IBS Protocol – In-Depth Guide

## Evening Lesson: Practices to Stimulate the Parasympathetic System and Vagus Nerve

In this evening lesson, we focus on deep relaxation by stimulating the parasympathetic system and the vagus nerve through slow movements, vibrations and breathwork. The practice is designed to promote physical and mental relaxation, improving sleep quality and reducing the stress accumulated throughout the day.

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### 1. Neck Rotations and Vagus Nerve Connection

Neck rotations help release tension in the neck and shoulders and stimulate the vagus nerve, promoting better blood circulation to the brain.

#### How to practise:

1. **Seated position** – Sit with your back straight, relaxing your shoulders and neck.
2. **Rotate the neck** – Gently tilt your head to the right, drawing a semicircle, then return to centre. As you exhale, tilt your head to the left.
3. **Slow movements** – Perform 5–10 cycles, maintaining slow movements and a fluid breath.

**Benefits:** - Releases tension in the neck - Stimulates the vagus nerve, promoting relaxation - Improves blood flow to the brain, reducing stress

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### 2. Vibrations with the “MMM” Sound

The practice of sound vibrations through the “MMM” sound is a powerful vagus nerve stimulation and deep relaxation technique. Rooted in ancient sound healing traditions, it combines elements of traditional medicine with the latest neuroscience discoveries on the relationship between sound, vibration and the autonomic nervous system.

#### How to practise:

1. **Seated or supine position** – Sit or lie down comfortably.
2. **Turn head to the right** – Inhale deeply, turn your head to the right and, as you exhale, produce the “MMM” sound, allowing the vibration to resonate in your chest and throat.
3. **Return to centre** – Inhale and bring your head back to centre.
4. **Repeat to the left** – Turn your head to the left, repeating the “MMM” sound.
5. **Cycles** – Repeat for 5–7 cycles on each side.

## Why the “MMM” sound?

The “MMM” sound was not chosen randomly. When we produce this vibration: - The lips close gently - The tongue relaxes - The soft palate vibrates - Resonance is created in the nasal cavities and paranasal sinuses - Vibrations propagate through connective tissue

This specific vibrational pattern: 1. Directly stimulates the vagus nerve through nerve endings in the larynx 2. Activates mechanoreceptors in fascial tissue 3. Influences brainwave frequency 4. Modulates cardiac and respiratory rhythm

### Benefits:

*Immediate effects:* - Reduction of sympathetic nervous system activity - Decrease in heart rate - Slowing of the respiratory rhythm - Deep muscle relaxation

*Long-term effects:* - Improvement of vagal tone - Greater stress resilience - Regulation of the autonomic nervous system - Improvement in sleep quality - Reduction of anxiety and chronic tension

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## 3. Butterfly Hug: Bilateral Stimulation

The butterfly hug is a powerful and surprisingly simple technique that combines the calming power of physical touch with the benefits of bilateral brain stimulation.

When we practise the butterfly hug, we create a silent dialogue between the two brain hemispheres through the alternating movement of the hands. This simple gesture activates the parasympathetic nervous system — our “rest and digest” system — promoting a state of deep calm and inner safety.

### How to practise:

1. **Seated or supine position** – Sit or lie down comfortably.
2. **Right hand on left shoulder** – Place your right hand on your left shoulder and your left hand on your right shoulder, as if giving yourself a hug.
3. **Bilateral stimulation** – Begin tapping alternately with one hand and then the other on the opposite shoulder, creating a steady rhythm.
4. **Deep breathing** – Breathe deeply during the movement, focusing on relaxation.

**Benefits:** - Stimulates the release of calming neurotransmitters - Promotes integration between the two brain hemispheres - Creates an immediate sense of containment and protection - Helps you stay anchored to the present moment

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## 4. Supported Supine Position with Butterfly Legs for Diaphragmatic Breathing

This practice involves a relaxing position with a cushion under the lower back to promote hip opening and diaphragmatic breathing. It is ideal for deeply relaxing the abdominal and pelvic muscles while simultaneously stimulating the parasympathetic system.

### How to practise:

1. **Lie down with support** – Place a cushion or yoga block under your lower back, lying comfortably on the mat.

2. **Butterfly legs** – Bring the soles of your feet together, allowing the knees to open laterally, creating a butterfly shape with the legs. The knees can fall toward the mat without forcing.
3. **Diaphragmatic breathing** – Place one hand on the abdomen and one on the chest. Inhale deeply from the diaphragm, feeling the expansion of the abdomen, then exhale slowly, allowing the diaphragm to relax completely.
4. **Duration** – Hold this position for 5–10 minutes, breathing deeply and slowly.

**Benefits:** - Helps relax the muscles of the pelvis and lower back - Promotes deep diaphragmatic breathing, reducing stress - Stimulates the parasympathetic system, favouring relaxation and night-time rest

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## 5. Meditation Practice

Meditation, a millennia-old practice originating from Eastern traditions, is today recognised as a wellness tool by modern Western medicine as well. Neuroscience has demonstrated how this practice produces significant changes in the structure and functioning of the brain — a phenomenon known as neuroplasticity.

At a neurological level, regular meditation increases grey matter density in areas associated with learning, memory, emotional regulation and perspective-taking. In particular, studies using functional MRI have highlighted a thickening of the prefrontal cortex and hippocampus — regions crucial for attention and stress management.

The meditative process acts through several physiological mechanisms. When we meditate, we activate the parasympathetic nervous system — responsible for the relaxation response — which counterbalances the effects of stress. This process reduces cortisol production (the stress hormone) and increases the secretion of serotonin and dopamine, neurotransmitters associated with wellbeing and happiness.

### Meditation Styles and Traditions

**Mindfulness**, derived from the Buddhist tradition, emphasises non-judgmental observation of the present moment. This technique has been extensively studied in clinical settings, demonstrating efficacy in the treatment of anxiety disorders, depression and chronic pain.

**Transcendental Meditation** uses the silent repetition of mantras to reach a state of quiet awareness. Research has demonstrated its benefits in reducing blood pressure and improving sleep quality.

**Zen Meditation**, rooted in the Japanese Buddhist tradition, focuses on posture and breath, promoting a state of alert presence through the practice of zazen.

### What Happens Physiologically During Meditation

- **Respiratory rate slows** naturally, from an average of 12–20 breaths per minute to 4–10 breaths. This slowing activates the vagus nerve, the main component of the parasympathetic system.
- **Brainwaves shift**, showing an increase in alpha and theta activity — associated with deep relaxation and creativity. In experienced meditators, an increase in gamma waves has also been observed, linked to elevated states of consciousness and insight.
- **Oxygen consumption decreases** by 10–20%, indicating a deep state of physiological rest.

## Tips for Getting Started

- **Posture** – The spine should be aligned to facilitate a state of relaxed attention. An upright posture allows optimal breathing and balanced energy flow. Research shows that an erect posture improves cerebral oxygenation and mental alertness.
- **Environment** – Aim for a comfortable temperature (18–22°C) with moderate lighting. Silence or natural sounds aid concentration.
- **Duration** – Start with short sessions (5–10 minutes) and gradually increase the duration.

Meditation is a powerful tool for psychophysical self-regulation, whose efficacy is supported both by millennia of tradition and by modern scientific research. Regular practice can significantly contribute to overall wellbeing, offering a natural response to the challenges of contemporary stress.

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