

# Diaphragmatic Breathing Guide

How to breathe from the diaphragm correctly, why it shifts the nervous system out of a stress response, and how to build the habit daily.

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Evidence-based approach: vagal tone and HRV research (Ma et al., 2017; Zaccaro et al., 2018).

## Why It Works

Most adults breathe shallowly from the chest, using accessory muscles in the neck and shoulders rather than the diaphragm. Chest breathing is associated with sympathetic nervous system activation — the same pattern seen during stress and anxiety. Diaphragmatic breathing does the opposite: slow, deep contractions of the diaphragm stimulate the vagus nerve, which increases parasympathetic tone and heart rate variability (HRV).

A 2017 study by Ma and colleagues in *Frontiers in Psychology* found that eight weeks of diaphragmatic breathing training significantly reduced cortisol levels and improved sustained attention compared to a control group. A 2018 review by Zaccaro et al. in *Frontiers in Human Neuroscience* concluded that slow, controlled breathing consistently shifts the autonomic nervous system toward parasympathetic dominance across multiple study designs.

## Section 1 — The Basic Technique

### 1. Get into position

Lie on your back or sit upright with a straight spine. Place one hand on your chest, one on your belly, just below the ribs.

### 2. Inhale through the nose

Breathe in slowly for a count of 4. The hand on your belly should rise; the hand on your chest should barely move.

### 3. Hold briefly

Pause for 1-2 seconds at the top of the inhale. Don't force it — this is a soft pause, not a strain.

### 4. Exhale through pursed lips

Breathe out slowly for a count of 6-8, longer than the inhale. Let the belly fall as the diaphragm relaxes.

### 5. Repeat

Continue for 5-10 minutes. If you feel lightheaded, return to normal breathing and try shorter sessions.

## Section 2 — Common Mistakes

- **Raising the shoulders**

If your shoulders rise on the inhale, you're still recruiting chest muscles. Focus on keeping them relaxed and down.

- **Breathing too fast**

Diaphragmatic breathing is slow by design — aim for 5-6 breaths per minute, not a fast, forceful pattern.

- **Forcing the exhale**

A forced or clenched exhale defeats the purpose. The exhale should feel like a passive release, not a push.

- **Practicing only when already anxious**

The technique works best as a daily baseline practice. Waiting until a panic moment to try it for the first time is much harder.

## Section 3 — Progressions

- **Weighted breathing**

Once comfortable lying down, place a light book (1-2 kg) on your belly to build diaphragm strength and feedback.

- **Extended exhale (4-7-8)**

Inhale for 4, hold for 7, exhale for 8. A more advanced ratio used in sleep and acute-anxiety protocols.

- **Standing and walking practice**

Practice the technique while standing, then walking, to make it usable in real situations rather than only lying down.

## Building the Habit

Anchor the practice to an existing habit rather than relying on willpower alone. One during waking, one before bed — for five minutes each is enough to see measurable results over weeks based on the training protocols used in the cited research. Track completion. A daily session outperforms an occasional long one.

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### Sources

Ma, X. et al. (2017). The Effect of Diaphragmatic Breathing on Attention, Negative Affect and Stress in Healthy Adults. *Frontiers in Psychology*.

Zaccaro, A. et al. (2018). How Breath-Control Can Change Your Life: A Systematic Review on Psycho-Physiological Correlates of Slow Breathing. *Frontiers in Human Neuroscience*.