

Diaphragmatic Breathing for Stress Relief

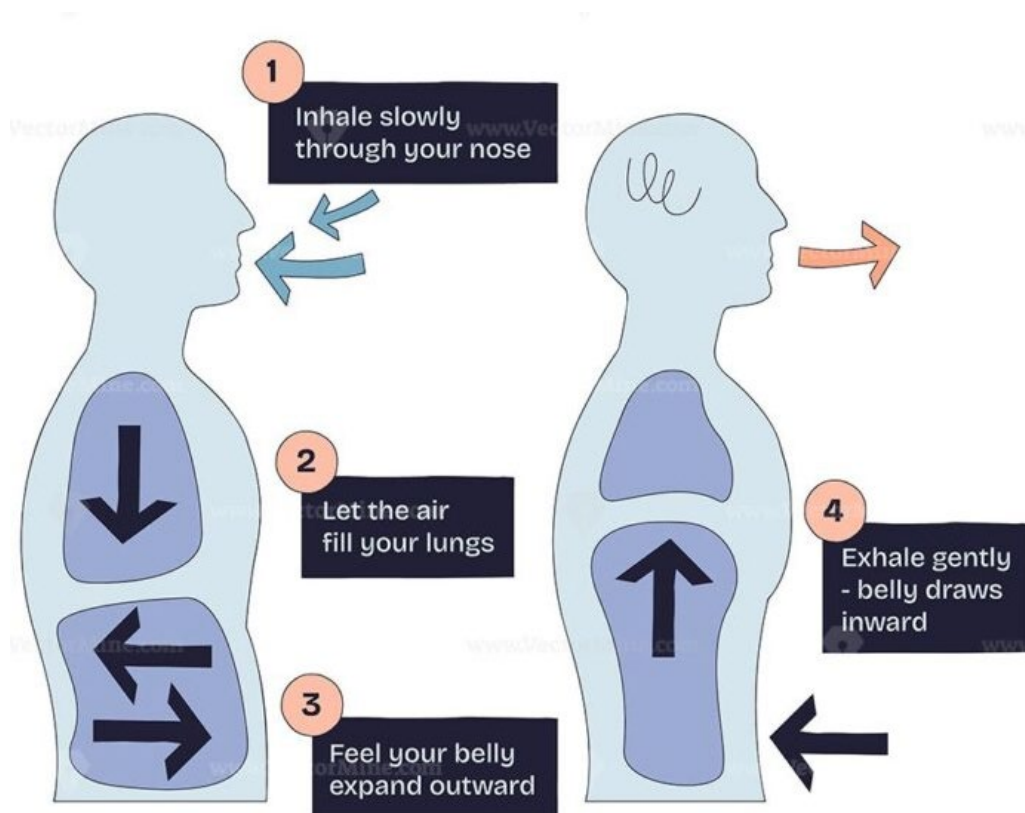
Diaphragmatic breathing (also called deep belly breathing) is one of the most effective, accessible, and well-researched techniques for reducing stress and anxiety. By deliberately slowing your breath and engaging the diaphragm, you activate the parasympathetic nervous system, your body's built-in calming mechanism. A 2023 randomized controlled trial in *Cell Reports Medicine* found that just five minutes of daily structured breathing significantly reduced anxiety and improved mood compared to mindfulness meditation alone. With consistent practice, deep breathing can lower resting heart rate, improve emotional regulation, and build long-term resilience to stress.ⁱ

How It Works

When you perceive a threat, your sympathetic nervous system triggers the stress response: rapid shallow breathing, elevated heart rate, and muscle tension. Deep breathing reverses this by stimulating the vagus nerve, which signals your brain to activate the relaxation response. Heart rate slows, blood pressure drops, and stress hormones decrease. Breathe with the diaphragm rather than the chest. When you breathe deeply enough, your belly rises on the inhale and falls on the exhale. This engages the full capacity of your lungs and maximizes the calming effect.

Diaphragmatic Breathingⁱⁱ

1. Find a comfortable position either sitting or lying down.
2. Place one hand on your chest and the other on your abdomen (belly).
3. Take a deep breath through your nose, letting your abdomen rise while keeping your chest still.
4. Slowly let your breath out through your mouth and feel your abdomen fall.
5. Repeat this for several breaths, aiming for a slow and steady rhythm (pace).



Tips for Successⁱ

- If you feel lightheaded, you are likely breathing too fast. Slow down and let each phase take its full count.
- Practice at the same time each day to build a habit. Morning, before bed, or during a lunch break all work.
- The counting itself serves a dual purpose: it regulates your breath and redirects your mind away from anxious thoughts.
- Adjust the timing to suit your comfort. The ratios matter more than the exact numbers, so aim for an exhale longer than your inhale.
- Use deep breathing proactively (before stressful events) as well as reactively (during moments of anxiety). Prevention is more effective than crisis management.
- Pair breathing with a brief body scan: after several cycles, notice areas of residual tension and consciously soften them on each exhale.

Building a Daily Practice

Research suggests that the benefits of deep breathing compound with regular practice. Aim for at least one 5-minute session per day. Many people find it helpful to anchor the practice to an existing routine, for example, right after waking up or just before bed. Over time, your nervous system becomes more efficient at shifting from stress to calm, and you will notice that you can activate the relaxation response more quickly even in high-pressure situations.

When to Seek Professional Helpⁱⁱ

Shortness of breath can be a serious problem. Stop any breathing exercises if you have shortness of breath, anxiety, discomfort, or pain. It is important to talk to your health care team about any symptoms of shortness of breath you may have. Get emergency help if you have any of the following:

- Chest pain
- Trouble speaking
- Dizziness or weakness
- Wheezing that is new or gets worse

TSC also offers the following resources:

- Academic Success Coaches for support, guidance, and resources
- Counseling Center for licensed mental health counseling and psychiatry. TSC students also have access to Mantra Health, a digital mental health provider

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

ⁱ “Diaphragmatic Breathing for Stress and Anxiety Relief.” TherapyResource, Apr 2026,
www.therapyresource.net/worksheets/deep-breathing-worksheet

ⁱⁱ “Breathing Exercises for Wellbeing.” The.Ohio.State.University.Comprehensive.Cancer.Center, 12 July 2024. healthsystem.osumc.edu/pteduc/docs/BreathExerWell.pdf