

## Take a Deep Breath

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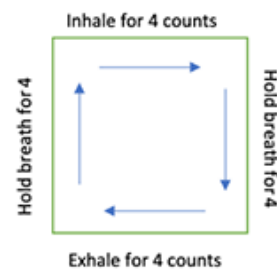
“Take a deep breath...again...breathe normally....” Primary care clinicians say these words on a regular basis. How often do we think about our own breath? Our breath is something we may not notice much until it is impacted by something...a strong emotional experience such as fear or grief so profound that we can’t “catch our breath”...an illness or a disease process that makes breathing difficult or a chore...physical exertion where we can’t seem to get enough oxygen. Most of the rest of the time we tend to take our breath for granted. Yet when we stop and reflect on this biological function, we realize not only how critical the breath is to our survival, but also how life affirming and grounding the breath can be.

In mindfulness practices, we learn to focus our awareness on the breath. With mindful breathing, we do not change the breath, but rather practice noticing what it feels like to breathe in and out. Take a moment to do this now. Close your eyes and just notice the sensations of breathing. Notice what it feels like to have the air enter your body. Notice what it feels like to exhale and let the breath go. This type of awareness of the breath helps us to step out of the natural busyness of our minds. It can help us hit a mental reset button. Regular practice of mindful breathing meditation can increase our ability to focus and concentrate and enhance our ability to nonjudgmentally be with our own experiences. Guided mindful breathing meditations can easily be found through internet searches. One that I often recommend to others is [Sitting Meditation \(20 min\)](https://www.palousemindfulness.com) ([palousemindfulness.com](https://www.palousemindfulness.com)).

We can also work with the breath in a more active way to help downregulate the nervous system and moderate a stress or fear response. Diaphragmatic breathing (also known as belly or abdominal breathing) is a key skill that I teach residents and patients. Through diaphragmatic breathing, we stimulate the vagus nerve and send signals to our brain to activate the parasympathetic nervous system. While the method is simple, it does take regular practice to develop the skill of diaphragmatic breathing. It often helps to start practicing lying down. Place one hand on your abdomen and one hand on your upper chest. Focus your breathing on your abdomen and

imagine that you are blowing up a balloon in your abdomen. Breathe in slowly through your nose. As you inhale, the hand on your abdomen should rise. Breathe out slowly through pursed lips. As you exhale, the hand on your abdomen should lower. I recommend practicing for 10 minutes twice a day to develop the skill of this deep breathing. I also recommend a free app, *Breathe2Relax*, to help guide the practice.

Building on diaphragmatic breathing, there are additional breathing exercises that are helpful in reducing feelings of anxiety, stress, or panic. These exercises are rooted in the yogic practice of breath regulation or *pranayama*. The first is four square or box breathing. It can be helpful to visualize a box with four equal sides when using this technique. Sitting in a comfortable position with your eyes closed, inhale slowly through your nose while counting to four. Hold the breath for four counts then slowly exhale for four counts. Hold for four counts. Repeat the cycle three more times.



Fans of the TV show *Ted Lasso* may have noticed that Ted’s therapist coaches him to use 4-7-8 breathing when he is having a panic attack. This is another type of breathwork that can be used to downregulate the nervous system. Start by placing the tip of your tongue against the ridge of tissue behind your upper front teeth and exhale through the mouth, with a whooshing sound, emptying the lungs. Next, inhale through the nose for four counts, hold your breath for seven counts, and then exhale forcefully through the mouth for a count of eight (make a whoosh sound). This cycle should be repeated three additional times. People may feel lightheaded after practicing 4-7-8 breathing, so it is a good idea to sit down when first practicing

this breathing skill. With 4-7-8 breathing the rate of counting is not as critical as the ratio of time spent inhaling, holding the breath and exhaling. Follow this link to see a demonstration of 4-7-8 breathing by Andrew Wiel, MD: [https://youtu.be/YRPh\\_GaiL8s](https://youtu.be/YRPh_GaiL8s). Researchers at Stanford University have also been studying the benefits of physiological sighing or double-sigh breathing. This breathing tactic mimics sighing. Start by inhaling slowly through the nose, and once your lungs are expanded, inhale again. The second inhale is typically shorter in duration than the first. Next, slowly exhale through the mouth or nose depending on your preference. In a recent randomized controlled trial, researchers found that practicing 5 minutes of this cyclic sighing daily for one month was associated with improved mood. Box breathing and mindful meditation also yielded reductions in state anxiety and negative emotion. The formal breathwork exercises yielded improvements in physiological arousal.<sup>1</sup>

The advantage of all of these breathing tools is that they can be used on demand. You can practice them anytime and

anywhere. They help to moderate the fight, flight, or freeze response and feelings of anxiety. You can use them prior to a stressful event such as giving a presentation or having dental work. Use them to center yourself when you may need to switch your focus such as transitioning from a difficult meeting to patient care. Use them to restore a sense of calm after a stressful event. Our breath is a gift and if we remember, we can use it to center and ground ourselves.

The next time you ask a patient to take a deep breath, I invite you to do the same.

Feelings come and go like clouds in a windy sky. Conscious breathing is my anchor.

—Thich Nhat Hanh, Zen Buddhist monk

## REFERENCES

1. Balban MY, Neri E, Kogon MM. Brief structured respiration practices enhance mood and reduce physiological arousal. *Cell Rep Med.* 2023;4(1):100895.