



STRESS REDUCING BREATHING TECHNIQUES FOR PHYSICIANS

Introduction

These breathing techniques you're about to be introduced to are tools for you to:

- manage stress and anxiety
- help with sleep quality (if done before bed – specifically the 4-7-8 method)
- improve focus

These breathing techniques can help manage stress, improve focus, and enhance sleep quality, particularly with the 4-7-8 method before bed. A systematic review highlights that slow breathing (fewer than 10 breaths per minute) improves autonomic functions by increasing heart rate variability and respiratory sinus arrhythmia. It also positively impacts the central nervous system, with EEG studies showing increased alpha and decreased theta power.

Additionally, slow breathing can reduce anxiety, depression, and confusion, while boosting relaxation, vigor, and alertness. These effects arise from regulating internal bodily states and influencing brain activity through the nasal vault's mechanoreceptors.

Breathing techniques, especially slow breathing (under 10 breaths per minute), have gained popularity for their therapeutic potential to improve mental health. Systematic reviews and meta-analyses reveal that these techniques enhance autonomic functions (e.g., increased heart rate variability), improve brain function (e.g., increased alpha and decreased theta waves), and reduce stress, anxiety, and depression.

Recent meta-analyses of randomized-controlled trials showed that breathwork interventions led to significant stress reduction compared to non-breathwork controls. These findings suggest that breathwork can be a valuable tool for mental and emotional well-being.



I'From the research and what we know about the autonomic nervous system, we can understand why these methods would positively impact someone's well being due to the power of the exhalation and the impact it has on vagus nerve stimulation which is the drive of parasympathetic nervous system activity.

ve had clients of mine have success with these methods (or other forms), I've heard countless stories from others, and have experienced the benefits in my personal life.

The Methods

First, we look at **“Box Breathing”**

How to Do It

- 1) Sit upright in a chair with your shoulders relaxed.
- 2) Fully exhale out of your mouth until you feel your lungs are “empty”. Exhale as if you were doing a breath check – you know, when you put your hand close to your face and mouth is slightly open and you go “huuuuuuuhhhh”.
- 3) With your mouth closed, inhale through your nose for 4 seconds
- 4) Hold your inhale for 4 seconds
- 5) Exhale out your mouth for 4 seconds. Think of the amount of force you're exhaling with is about a 5 out of 10.
- 6) No breath in for 4 seconds.
- 7) Repeat for as many breaths as you need to feel more calm, centered, and focused

[Click here](#) to watch a demo.

When breathing, you shouldn't feel tension in your neck and shoulders. Think of everything from your pelvic floor up to the top of your chest as a glass. Think of your breath as water.



We're trying to fill up the glass – bottom – to – top – with our breath (water). So, as you inhale you should pressure mount up from the bottom up and you should feel everything from bottom up expanding 360 degrees.

I would not implement this before bed. I'd make this method for something during the day when you want to keep your energy levels up but need something quick to manage the stress of your day.

Next up, ***"4-7-8 Method"***

How to do it:

- 1) Lie down on your bed or a couch
- 2) Think of your body as being very heavy and relaxed – almost like your body was becoming a part of whatever it is you're resting on
- 3) Fully exhale out of your mouth until you feel your lungs are "empty". Exhale as if you were doing a breath check – you know, when you put your hand close to your face and mouth is slightly open and you go "huuuuuuuuhhhh".
- 4) Inhale through your nose for 4 seconds
- 5) Hold the inhaled breath for 7 seconds
- 6) Exhale out of your mouth for 8 seconds. Think of the amount of force you're using is about a 3 out of 10.
- 7) This isn't recommended in the "4-7-8 Method" but I like to implement the 1 second pause because it forces you to own your breath rather than rapidly transitioning to the next inhale
- 8) Repeat for desired number of breaths



[Click here](#) to watch a demo.

I recommend using this before bed for sleep latency and an overall better night of sleep.

If you have trouble with not breathing in for 8 seconds after finishing your exhale, then decrease the number of seconds you wait until your next inhale.

References:

PMID: [36624160](#)

PMID: [30245619](#)