

Breathwork: Why

“To say that learning breath control is the most important component to forging mental toughness would not be an overstatement.”

- Mark Divine

- Breath control equals **mental control**
- Modulate sympathetic and parasympathetic tone
- **Control stress**
- Optimize oxygen delivery to body

Breathwork: Methods

There are tons of breathing methods out there, all with various aims. A general, unifying theme is that **the average person should breathe less** (fewer breaths per minute). However, at times, it can be helpful to breathe *more* than average. Think of it like exercise – a temporary stress to the body, designed to induce adaptation to make you stronger and fitter.

Another general principle: **when the exhale is longer than the inhale, it will calm you down**. When the exhale is shorter than the inhale, it will wind you up.

Here are a few of the techniques I’ve found to be the most accessible:

- **Physiologic sigh** – to induce calm
 - Take a full inhale.
 - At the top of the inhale, pause, then take another short inhale on top of the air that’s already in your lungs (that you thought were full)
 - Let out all the air very slowly
- **Box breathing** – to maintain state of mind, avoid getting anxious, popular with Navy SEALs
 - Inhale, hold, exhale, hold. The duration of each of these ‘four sides of the box’ is generally equal but can be modified, for example, if you want to prolong the exhale for a calming effect
 - The more your CO2 tolerance (see below) the longer the box (4 seconds for low tolerance, 5-6 for medium, 8 seconds for high tolerance).

- **'Perfect breath'/Resonant breath/Coherent breath:** to put cardio-respiratory systems in coherence and optimize efficiency
 - 5.5 seconds in, 5.5 seconds out, in a cyclic fashion
 - Results in about 5.5 breaths per minute
 - I've found this one a good one to use during meditation
- **Cyclic hyperventilation:** to stress the body so that it is activated to deal with other stresses (infection, autoimmune disease, cold, etc.)
 - Popularized by Wim Hof, this is more activating (sympathetic) and should not be practiced by those with heart or blood pressure issues, or in water, while driving and like activities
 - Take 30 very deep, very fast breaths
 - At the end of the last exhale, hold breath for the retention phase
 - When you feel air hunger, take a big inhale and hold it for 15 seconds
 - Repeat 3 times

Breathing: Measurement

Carbon dioxide tolerance test: assesses not only ability to handle CO₂ but stress and anxiety

- Breathe in and out normally 3-5 times
- Exhale over 10 seconds
- Take one deep inhale
- Start the timer
- Exhale as slowly as possible
- Record time to fully exhale.
 - 30 seconds or less: low tolerance
 - 30-50 seconds: medium tolerance
 - Greater than 60 seconds: high tolerance

Breath hold walking: Designed to increase CO₂ (and thus oxygen delivery to the muscles)

- On soft ground, exhale completely and then hold the breath
- Walk slowly, counting your steps
- When you feel the need to breathe, do so and breathe calmly through the nose
- Recover at least a minute
- Repeat as desired
- Compare your step count to previous counts

Further listening

Huberman Lab:

[How to breathe correctly for optimal health, mood, learning & performance](#)

- If you're going to listen to one podcast episode, I would go with this one

[Dr. Jack Feldman: Breathing for Mental & Physical Health & Performance](#)

Kwik Brain:

[Breathe your way to calm & clarity with Dr. Trisha Smith](#)

[Practice controlled breathing to experience stress safely with Dr. Chuck McGee III](#)

Further Reading

[Breath: The New Science of a Lost Art](#), by James Nestor

- This is comprehensive and puts an array of diverse breathing traditions in an understandable context

[The Oxygen Advantage: Simple, Scientifically Proven Breathing Techniques to Help You Become Healthier, Slimmer, Faster, and Fitter](#), by Patrick McKeown

[The Wim Hof Method: Activate Your Full Human Potential](#), by Wim Hof

- A good starting place for cyclic hyperventilation

[The Wedge: Evolution, Consciousness, Stress, and the Key to Human Resilience](#), by Scott Carney

- Chapters 4 and 5 deal with breathing

[Peace is Every Step: The Path of Mindfulness in Everyday Life](#), by Thich Nhat Hanh

- A Buddhist spiritual perspective

[Unbeatable Mind: Forge Resiliency and Mental Toughness to Succeed at an Elite Level](#), by Mark Divine

- Focus on the box breathing technique as applied by Navy SEALs