

Breathe Better

Why Breathing?

Facts

- Average adult breathes two to three times more than they have to in a given day
- Aging is associated with progressive decline in lung function
- 20 percent of the oxygen you breathe is used by your brain
- Mouth breathing leads to snoring and dry mouth
- Better breathing reduces blood pressure, anxiety and stress
- Helps the body access all the micronutrients from foods.

How To Breathe

Use Your Nose: noses are for breathing, mouths are for eating

1. Use of the nose results in 10 to 20 percent more oxygen uptake
2. It warms and humidifies incoming air and removes germs and bacteria
3. It is a reservoir for nitric oxide, an essential gas for maintenance and good health.

Belly Breathing: think horizontal not vertical

1. Abdominal breathing is slow, gentle, calm, regular and silent - activates parasympathetic
2. Upper chest breathing activates the fight-or-flight response, which raises stress levels and produces even heavier breathing
3. Upper chest breathing limits the amount of oxygen that can be transferred.

Soft Light Breathing: breathe light to breath right

1. Softly enough so that the person standing next to you does not hear your breathing
2. Softly enough to where you don't hear your own breathing
3. Softly enough so that you do not feel yourself breathing.

Types Of Breathing Practices

Resonant (Coherent) Breathing

A calming practice that places the heart, lungs and circulation into a state of coherence, where the systems of the body are working at peak efficiency. There is no more essential technique.

- Inhale softly for 5.5 seconds, expanding the belly as air fills the bottom of the lungs
- Without pausing, exhale softly for 5.5 seconds, bringing the belly in as the lungs empty
- Feedback: use a small weight on the belly or wrap a yoga strap around the belly.

Buteyko (Cadence) Breathing

To train the body to breathe in line with its metabolic needs. For the vast majority of us, that means breathing less. There are a number of different cadences to choose from.

- Inhale for 4 seconds, hold for 7 seconds, exhale for 8 seconds
- Inhale for 3 seconds, hold for 9 seconds, exhale for 6 seconds as breathing improves. This cadence could be adjusted to 4IN:12H:9EX then to 5IN:15H:10EX.

Key Screenings

Blood Oxygen Level Test (BOLT): measures how much CO₂ your body is able to tolerate. A higher BOLT score means you're able to hold calmer breathing during rest and lighter breathing during exercise. As BOLT score improves so does your VO₂ Max which is a standard measurement of your endurance and stamina. Accurate tool for measuring volume.

How to perform:

- Make sure you have been resting for about 10 minutes
- Take a small breath in through the nose and then out through the nose, plug your nose and hold your breath
- Relax into the breath and at the first sign of definite desire to breathe check the time
- Ideal breath score for a healthy individual is about :40
- Lower the BOLT = greater the breathing volume = the more breathlessness you'll experience during exercise.

Carbon Dioxide Tolerance (CDT): quick way to understand the stress levels in your body. Used as a tool to see how rested and or recovered you might be and aids in the prescription of breathing cadences for faster improvements and developments.

How to perform:

- Take a small breath in through the nose and once you start exhaling start your timer
- Exhale all the air entirely out from your body as slow as possible
- The amount of time it takes you to exhale is your score; a healthy individual is about :40.

Shoulder Mobility: breathing has a deep connection with lymphatic drainage (the body's sewage system) which drains waste materials and excess fluid in the body. If your breathing mechanics are incorrect it typically leads to stiffness in the upper back and neck. Improvements to your breathing change your mobility.

Recommendations

- *Breath, the New Science of a Lost Art* by James Nestor (2020)
- *The Oxygen Advantage* by Dr. Patrick McKeown
- *Breathe* by Dr. Belisa Vranich
- How Breathing and Metabolism are Interconnected, Ruben Meerman (2019)
<https://www.youtube.com/watch?app=desktop&feature=share&v=nM-ySWyID9o>
- Breathing Application: Apnea Trainer
<https://apps.apple.com/us/app/apnea-trainer/id391269557>
- Breathing Application: iBreathe
<https://apps.apple.com/us/app/ibreathe-relax-and-breathe/id129660580>
- Amazon: Somifix or 3M Micropore Tape