

BREATHING

Breathing lower, slower, softly and gently helps to calm and relax the mind and body, **reducing tension and anxiety**, and improving concentration and memory. Shallow, fast breathing increases feelings of stress, anxiety and panic. Diaphragmatic, abdominal, or belly breathing is the core skill for stress management. It is the fastest, most effective way to become calmer and more relaxed.

This type of breathing becomes easier and more natural when practiced in a quiet place 5 or more minutes a day for a week or so. Throughout the day, take a few slow breaths each hour to help prevent stress build-up or in response feelings of stress and anxiety. Practice breathing on the go—while walking or driving, in class or meetings, or while studying—to make it a natural defense against stress.

Technique Lie on the floor or sit up straight in a chair and place one hand on the center of your chest and the other on your abdomen, right at the waistline.

Take a few breaths and notice if the hand on your chest or stomach moves more. Chest breathing makes it difficult to breathe slowly and smoothly.

For improved abdominal or belly breathing, relax your shoulders and chest and push your stomach muscles up and out gently and slowly as you inhale, creating a natural vacuum in your lungs for just the right amount of air. Pause. Keep your hand on your stomach if it helps. Gently and slowly relax your stomach muscles in and down as if slowly letting air out of a balloon.

To shift from chest to abdominal breathing, make one or two full exhalations that push out the air from the bottom of your lungs – this creates a vacuum that will pull in a deep, diaphragmatic breath on your next inhalation.



TIP

6 breaths per minute is ideal for practice.

Inhale for **5** seconds
Exhale for **5** seconds



Inhale gently and slowly through your **nose** as if slowly filling a balloon with air. Pause.



Exhale slowly through your **mouth**, pursing your lips as though blowing through a straw to slow your breathing down. Pause and repeat.

Counseling & Psychological Services



Stress Management &
Biofeedback Services

Brigham Young University

Healthy Breathing vs. Overbreathing

What is Overbreathing?

- Overbreathing is a behavioral mismatch of the rate and depth of breathing
- Breaths can be too fast, deep, and full OR too quick and shallow

What Happens When I Overbreathe?

- Ventilating out too much carbon dioxide
- Lowering blood levels of CO₂ (hypocapnia)
- Reduction of O₂ and glucose reaching organs and tissues
- Electrolyte imbalances, affecting muscle and brain function

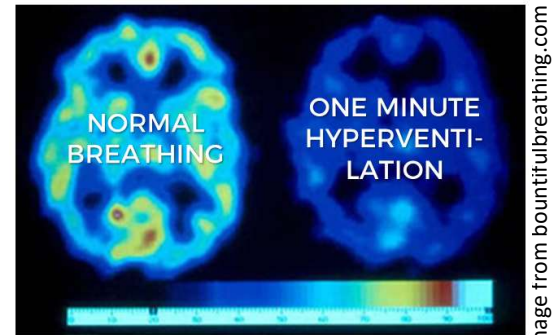


Image from bountifulbreathing.com

High Blood Flow

Low Blood Flow

Moderate overbreathing can reduce oxygen delivery to the brain by 30%-40%

Severe overbreathing can reduce oxygen delivery to the brain by 60%

Overbreathing Symptoms are Similar to Panic Attack Symptoms

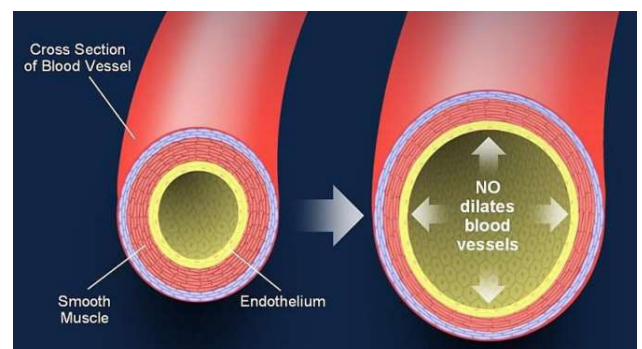
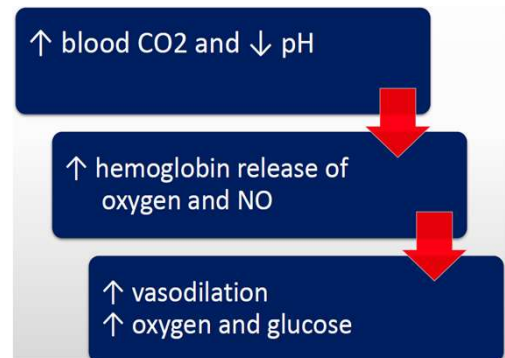
- Hyperventilation, shallow breaths, chest tightness, increased heart rate; chest (thoracic) breathing results in incomplete ventilation of the lungs
- Can trigger anxiety, headaches, asthma, anger, chronic pain, GI distress, panic attacks, chest discomfort, etc.

What Does Healthy Breathing Do For Me?

- A proper balance of inhaling and exhaling provides an optimal level of CO₂ in the blood.
- Releases oxygen to body tissues for gas exchange.
- Promotes nitric oxide (NO) release to blood vessels for vasodilation and glucose release for energy.

Tips for Learning Healthy Breathing

- Use the techniques listed on the other side of this handout
- Make an appointment with Stress Management and Biofeedback Services, or come to Walk-In Hours, to use biofeedback equipment to monitor your breathing and find your optimal breathing rate.
- Use a breathing pacer (see suggested apps on our website).
- Practice daily!



Blood Vessels During Healthy Breathing