

Tactical Breathing Awareness

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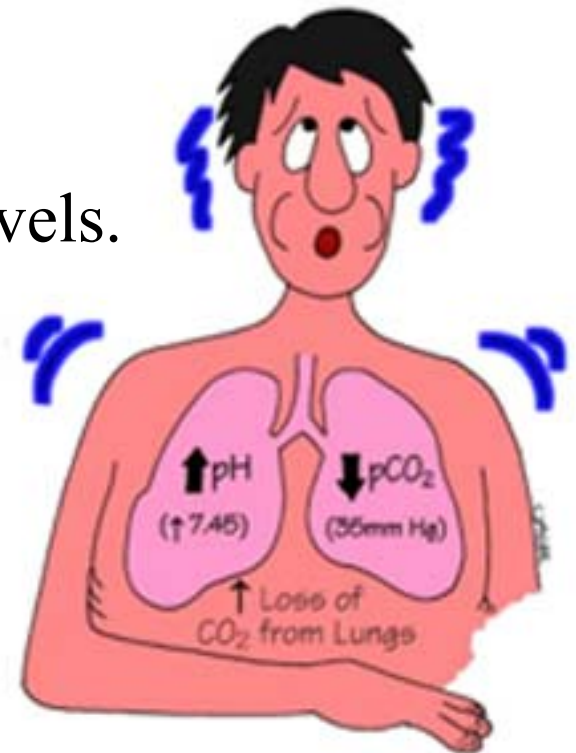
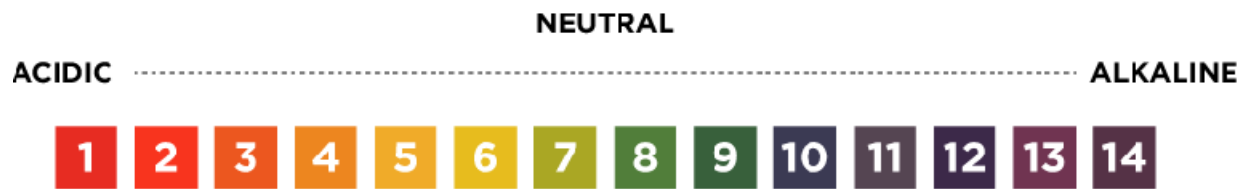
Breathing Controls Body Chemistry by the Minute?



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Breathing Controls Body Chemistry by the Minute?

- The way you breath can control your emotional health as well as physical pain.
- Breathing influences your acid base chemical axis otherwise known as PH
- Controlled breathing alkalizes the body (neutralizes acidity) by balancing blood PH levels.



Breathing Controls Body Chemistry by the Minute?

- Poor learned breathing behaviors can drive emotional anxiety and physical pain disorders like chronic fatigue syndrome.
- Over time chronic over-breathing patterns can cause organ and tissue damage and lead to long term health issues.



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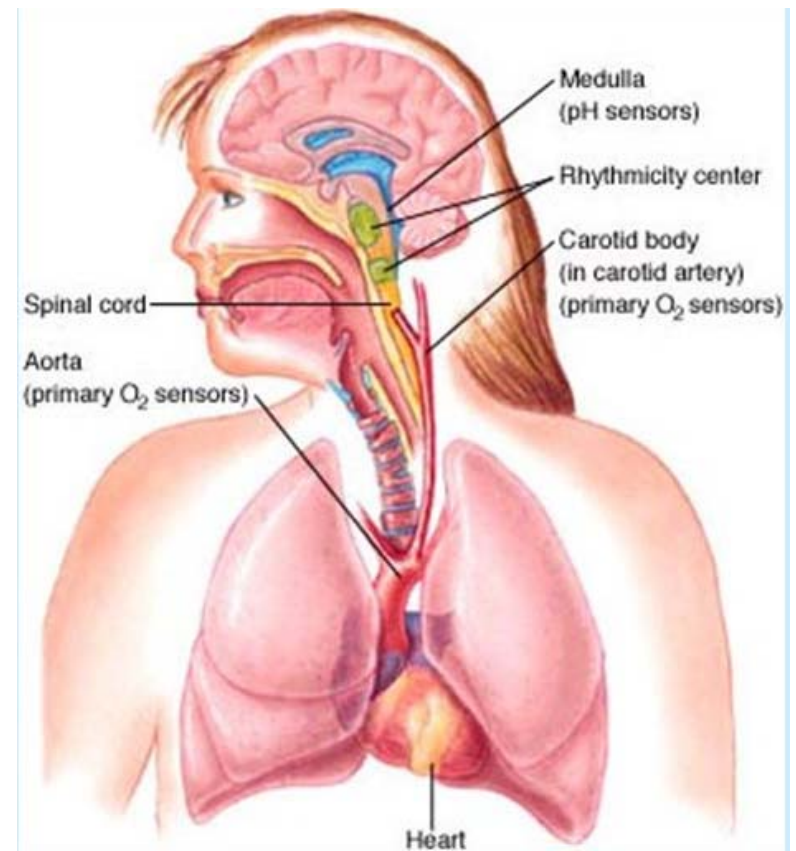
Brains Need CO₂



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Brains Need CO₂

- When breathing we need to retain 60 to 80% of CO₂ that is converted from O₂.
- Breathing rate and depth to maintain O₂ and CO₂ levels in the blood which are by in the medulla oblongata and the bodies (found in the carotid and aortic arteries)



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Brains Need CO₂

- This graph shows what individuals will see during a breathing training session.
- The graph is a representation of optimal breathing as well breathing under distress.



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Biofeedback / Capnometry Demonstration



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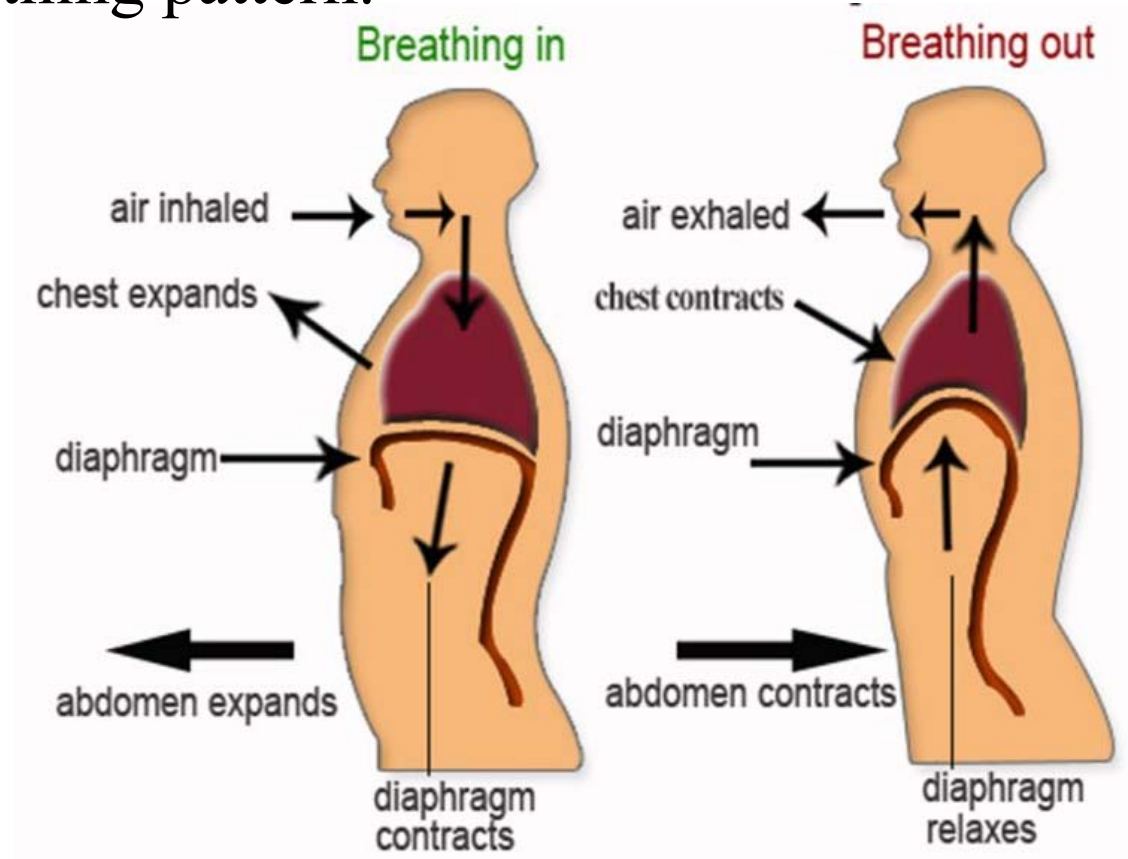
No One Has Perfect Breathing



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No One Has Perfect Breathing

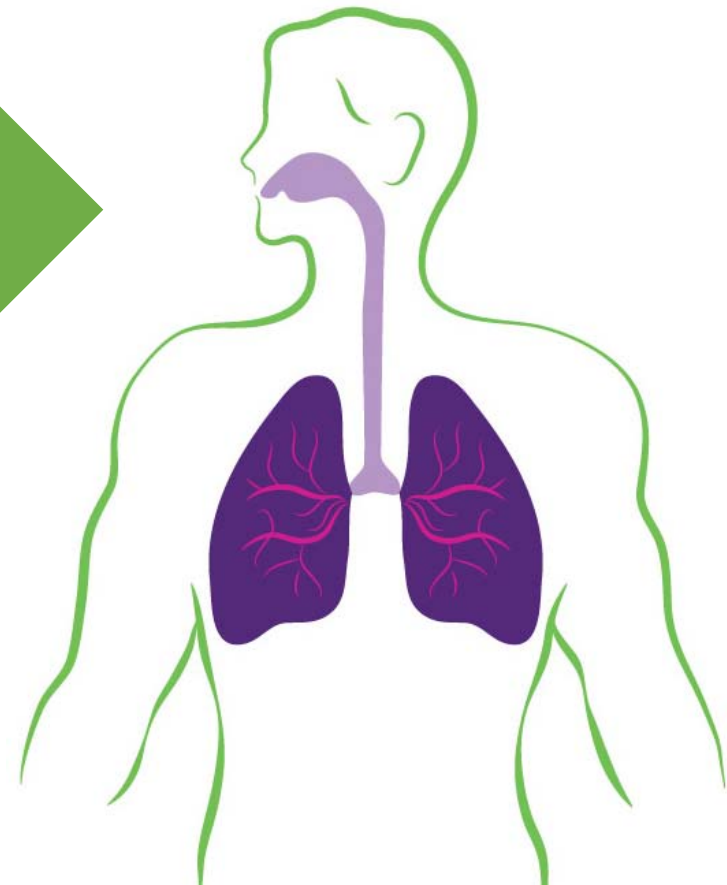
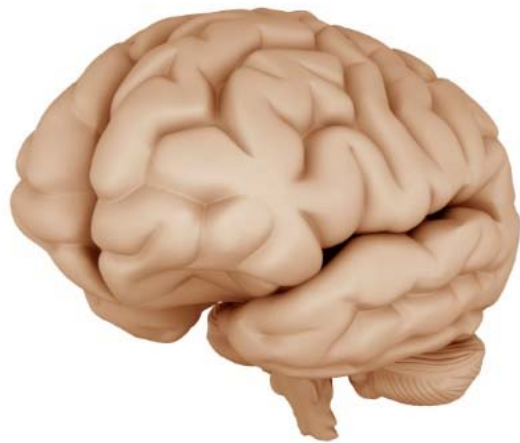
- Each person has breathing that is unique to them, and therefore there is never a perfect breathing pattern.
- Breathing can vary by
 - Rate
 - Intensity
 - Posture



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No One Has Perfect Breathing

- Breathing mechanics are controlled by a regulatory reflex between the brain and the diaphragm.



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What is Negative Practice?



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What is Negative Practice?

- Negative practice helps the individual learn how they are breathing when they having an episode of anxiety “panic attack”
- Or the body’s Fight or Flight response



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What is Negative Practice?

- It also helps the person learn how they are breathing when the “flames” aren’t there, to teach them how to control breathing.



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What is Negative Practice?

- Tactical breathing awareness can help with both emotional distress as well as physical ailments such as:
 - Anxiety / Depression
 - Anger
 - Chronic Fatigue Syndrome
 - Fibromyalgia
 - Chronic Muscle Pain
 - Make better use of medications



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Hypo Capnia = Low CO₂



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Hypo Capnia = Low CO₂

Emotional / Cognitive Effects of Hypo Capnia

Trigger (whether internal or external)



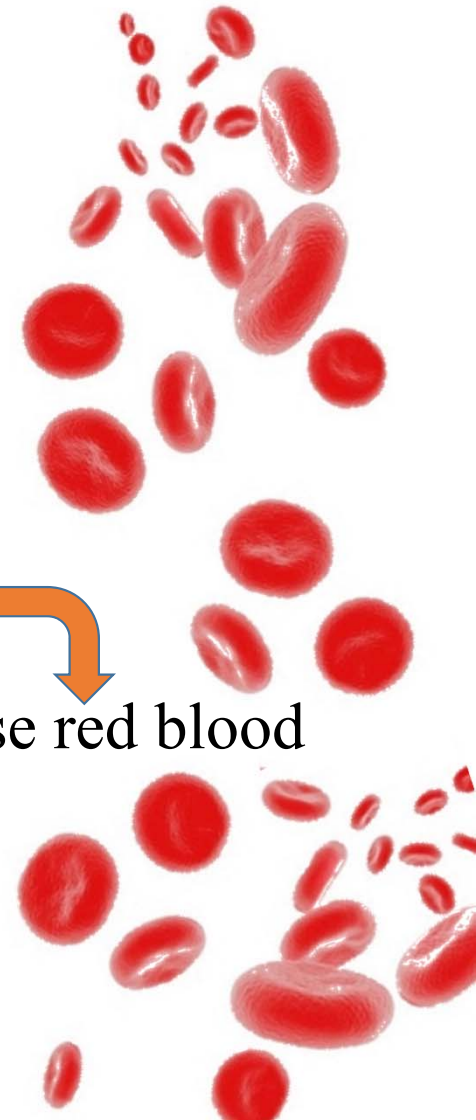
Drop in CO₂ reading (even as little as 3 points)



20% reduction in blood flow to the brain's cerebral cortex



Denaturing hemoglobin (binding of O₂ and glucose) because red blood cells become greedy for O₂



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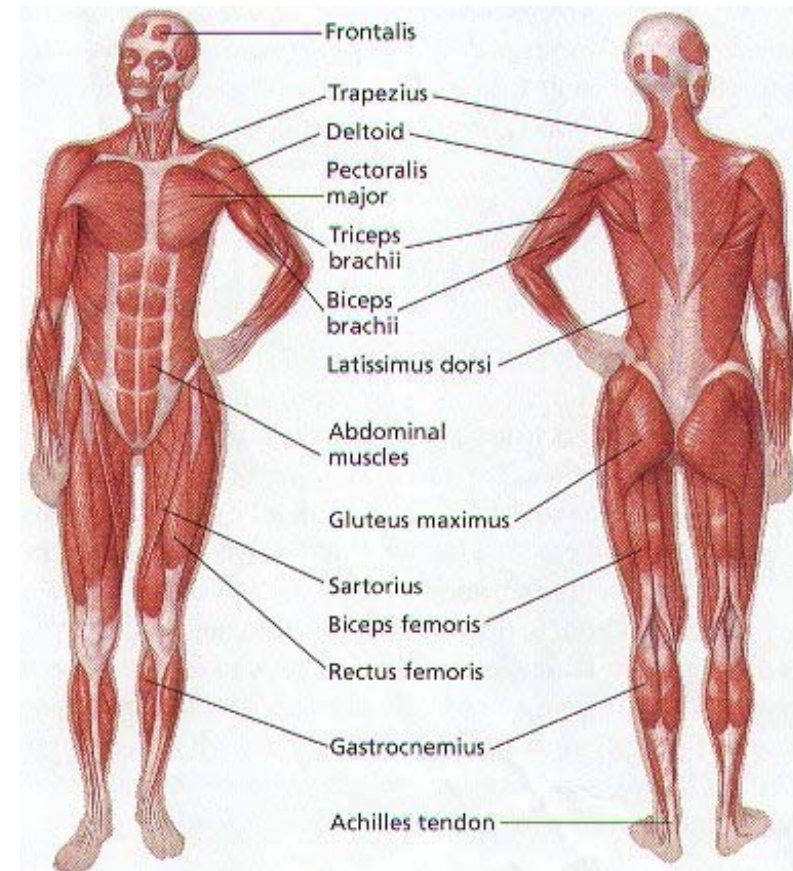
Hypo Capnia = Low CO₂

Physical Effects of Hypo Capnia

- Physical and Muscular pain caused by a decrease in “food” getting to the muscle.
- Food for muscles is made up of ATP or Adenoreine Triphosphate
- This 3 part compound is
O₂ + Glucose + Phosphocreatine



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**The Good News is... WE CAN
Help!**



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The Good News is... WE CAN Help!

With the study of Capnometry, we can determine CO₂ retention levels using real-time biofeedback.

This real-time assessment will help you become more aware of your “bad” breathing and modify your breathing mechanics to support your body in the best way possible!



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Questions?



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**For more information on Biofeedback /
Capnometry visit
www.biofeedbackinternational.com**

