


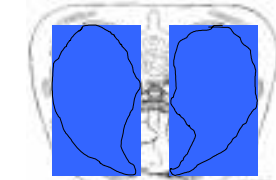
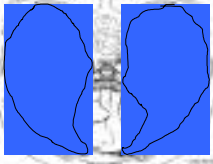


# Breathing Myths & Misconceptions

By Vanessa Breault Mulvey, rev.2008

MYTHS	REALITY	MAP	
“Breathe into your stomach!”	Air goes only as low as the bottom of the lungs. The lungs reside in the space within the ribs and above the diaphragm. Breathing movement does occur in the abdomen below the diaphragm, though the movement is not a result of air filling the space. As the diaphragm muscle flattens out it pushes the viscera (organs) in the abdomen which move the abdominal wall (360° around.)	The full space of the lungs in the body.	
“The shoulders shouldn’t move when you breathe.”	The area commonly called “shoulder” is actually part of the arm structure. When the ribs move up & out the arm structure moves too. The arm structure is suspended over the ribs because of the shape of the bones, and the connective tissue & muscle which is elastic and resilient. Therefore, the shoulder region moves in response to rib movement. This happens without effort and is different than hoisting up the shoulders or chest to take a “deep breath.”	The arm structure and its effortless suspension over the ribs and core.	
“Keep the abs tight to support the air stream.”	If the abs are held tight the viscera has nowhere to go and movement of the diaphragm is limited. Support comes from a balanced, grounded body that is organized around the core of the spine. Balance allows the movements of breathing to happen freely and naturally and supports the breathing process. The rate at which air is expelled can consciously be controlled by the descent of the ribs.	The abdominal muscles that surround the lower torso and their sympathetic movements to diaphragm movement.	
“The lungs are like empty bags.”	The lungs fill the space inside the ribs and above the diaphragm; they share this space with the heart. The lungs are made of spongy tissue with millions of air sacs. Even in the exhaled state, the lungs do not entirely deflate.	The space the lungs occupy in the chest.	
“The throat muscles are part of inhalation.”	The muscles of the throat are for swallowing food & drink, <i>not air</i> . Air naturally rushes into the lungs through the wind pipe (trachea) during inhalation. Because the trachea is made of firm cartilage it is always open for air to pass through.	The throat muscles for eating food & drinking. The trachea in the front of the neck for air movement.	
“Top-off your air supply whenever you can to prepare for playing the long phrase.”	If you continually top off the lungs as you play you are taking “forced breaths” that require effort and create tension. Inhalation is naturally triggered by a low oxygen level in the blood. Information from sensory receptors in the nose and mouth allow you to match the volume of air you inhale to the volume of air you need for the phrase. Balance through the core allows you to take full advantage of the lungs’ capacity.	The movements that contribute to breathing.	

## Breathing Myths & Misconceptions (Continued)

MISCONCEPTIONS	CLARIFICATION	MAP
“The diaphragm.”	The diaphragm is responsible for 75% of the work of breathing. It is a dome shaped muscle that attaches to the bottom of the ribs and to the spine. Because it is an involuntary muscle with no sensory receptors its movement is only felt through the sympathetic movements in the space below it. Muscles fibers from the diaphragm attach into the spine and continue down through the torso and pelvis becoming major leg muscles. Tension in the legs or in the spine compromises full movement of the diaphragm. Rib movement makes up the remaining 25% of breathing work. The rate of inhalation and exhalation can be controlled by the intercostal, abdominal and pelvic floor muscles.	The location & movement of the diaphragm.
“Breathe into your back!”	We do “breathe into our backs” because air fills the space in the lungs behind the spine. The lungs fill the space in front of, next to and behind the thoracic spine. Movement of the lower back also takes place as the viscera move out in space during inhalation.	Breathing movements in the back, including the portion of the lungs in the back, rib movement in the back, and the muscles surrounding the abdomen.
“Sensory receptors in the oral cavity are for food.”	Sensory receptors in the mouth provide valuable information on the amount of air you are taking in. They can help you match your inhalation volume to the volume needed to play a phrase.	The mouth and tongue.
“Breathing takes place in the chest.”	Breathing is a full body experience. Limiting it to the chest requires tension throughout the body which limits every aspect of breathing.	The movements of breathing throughout the body.

### *Learn more about breathing in these books:*

Calais-Germain, Blandine. **Anatomy of Breathing**. Seattle: Eastland Press, 2006.

Conable, Barbara. **What Every Musician Needs to Know About the Body**. Portland: Andover Press, 2000.

\_\_\_\_\_. **The Structures and Movements of Breathing**. Chicago: GIA Publications, 2000.

Malde, Allen, Zeller. **What Every Singer Needs to Know About the Body**. Plural Publishing, 2008.

Pearson, Lea. **Body Mapping for Flutists**. Chicago: GIA Publications, 2006.

Kapit, Wynn; **The Anatomy Coloring Book**. San Francisco: Benjamin Cummings, 2002.

**Download a Breathing Lesson Plan: [http://web.mac.com/flutibia/FLUTIBIA/Resources\\_files/Breathing%20lesson%20plan.doc.pdf](http://web.mac.com/flutibia/FLUTIBIA/Resources_files/Breathing%20lesson%20plan.doc.pdf)**

*Vanessa Breault Mulvey*

*A Balanced Approach to Making Music*

*Instruction & Performance 781-942-9641*



www.flutezone.com

vaness.breault.mulvey@longy.edu