



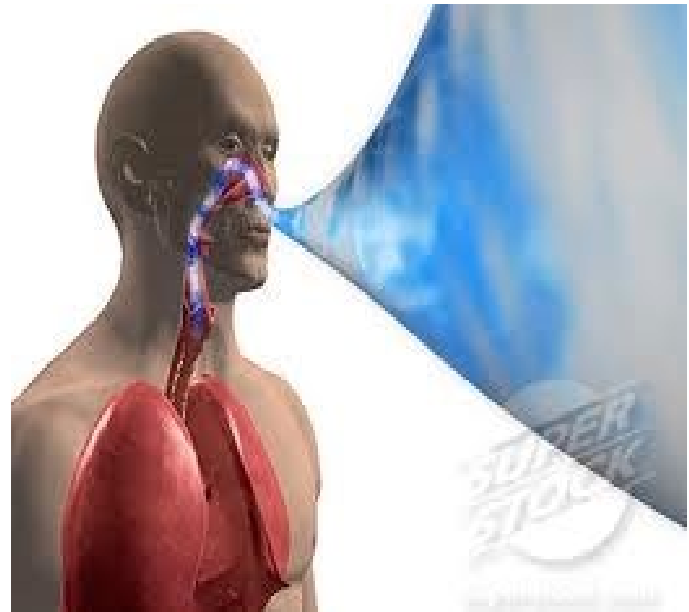
Breathing Retraining & Tips for Better Breathing



Pulmonary Strong Wellness 2020

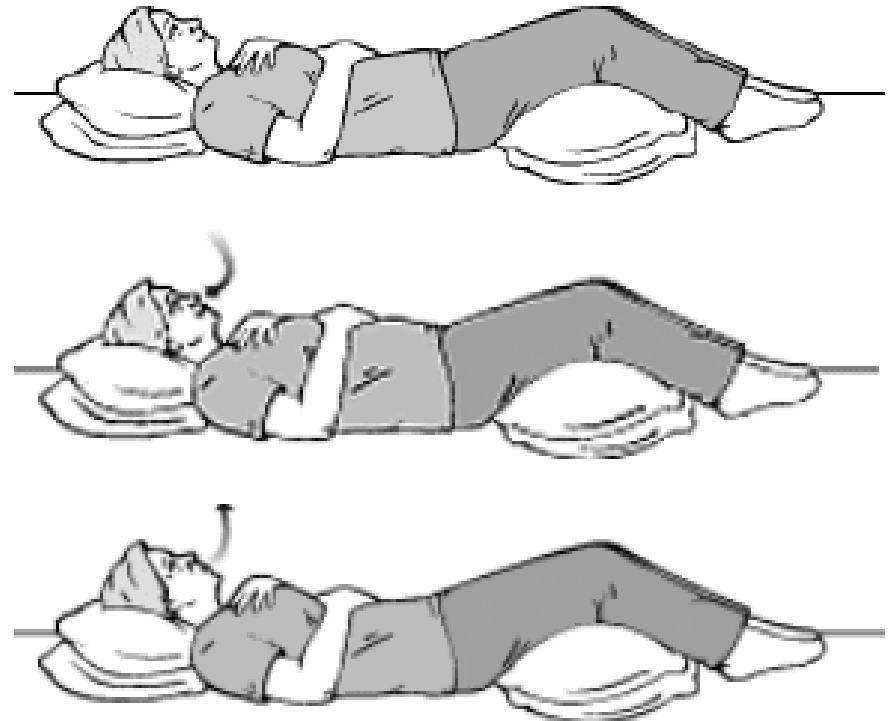
Breathing Techniques

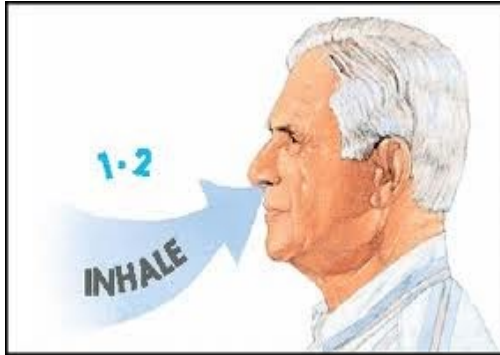
- Diaphragmatic (abdominal) Breathing
- Pursed Lip Breathing (PLB)
- Paced Breathing
- Breath-Saver Positions



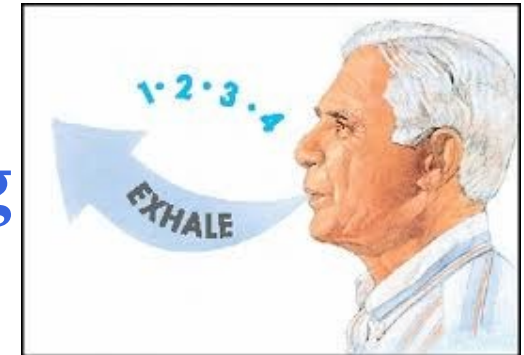
Diaphragmatic Breathing

- Purpose- this exercise helps relax your breathing and strengthens your lungs.
- Technique
 - 1) Put one hand on your stomach, just below your rib cage. Put the other hand on your chest.
 - 2) Breathe in and out slowly through your nose, using your stomach muscles. The hand on your stomach should rise and fall, but the hand on your chest should hardly move.
- Breathing out should take 2 times longer than breathing in.





Pursed Lip Breathing



Purpose-Helps to open airways, slow your breathing down and push out air trapped in your lungs.

Technique

- 1) Breathe in slowly through your nose (count while you inhale), keeping your mouth closed.
- 2) Blow out slowly through **PURSED LIPS**, like you are whistling.
(blow out twice as long as you inhale).
- 3) Make sure your shoulders and neck muscles are relaxed.



Paced Breathing

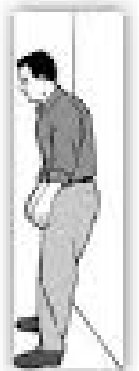
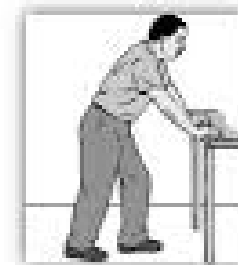
- Purpose- to coordinate breathing with exercise or exertion.
- Technique
 - 1) EXERTION is done on EXHALATION, the “relaxation” phase of breathing.
 - 2) During INHALATION, you should be at REST, the “active” phase of breathing.
- Tips- paced breathing should be done with stair climbing, walking, lifting, etc. While exercising the work is done on exhalation: inhalation is done during the resting phase of exercise. When stair climbing, climbing is done on exhalation only.

Breath-Saver Positions

Purpose-positions to help recover from shortness of breath (SOB) and increased work of breathing by optimizing the diaphragm muscle.

Positions

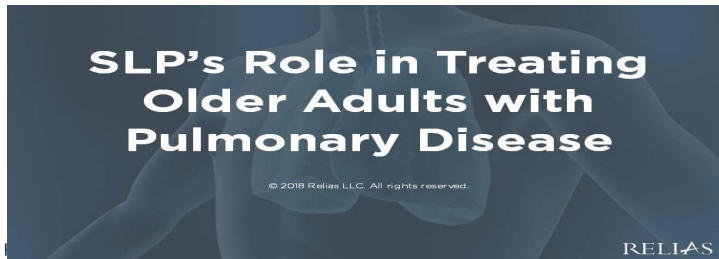
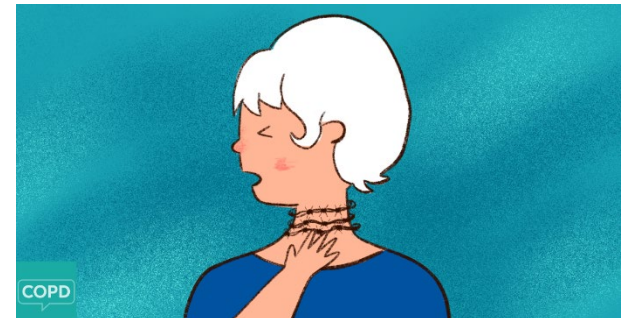
- 1) sitting slightly forward, elbows resting on thighs.
- 2) leaning against wall, bent slightly forward at waist with hands resting on thighs
- 3) In bed- head up about 45 degrees with propped pillows under head, arms and knees.



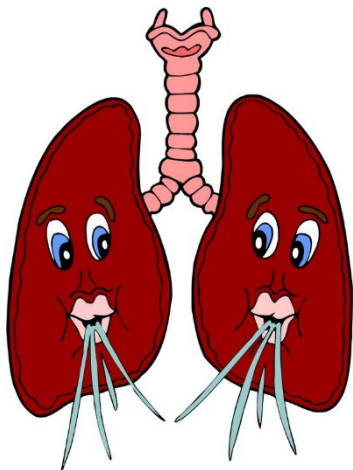
Breathing, Swallowing and Talking with COPD

According to the American Speech-Language-Hearing Association, these and other COPD symptoms can cause havoc on the throat and vocal cords causing problems or changes in voice, difficulty talking (communication) and swallowing.

- Voice changes are not a direct symptom of COPD (Chronic Obstructive Lung Disease), but many COPD patients experience voice changes.
- As many as 20-40% people with COPD experience aspiration, or breathing food/liquids into the lungs esp during a flare (exacerbation).
- Energy Conservation & Self Awareness are important tools needed for breathing & speaking task.
- Speech Language Therapist/Pathologist can help in the evaluation of swallowing, breathing and voice issues.

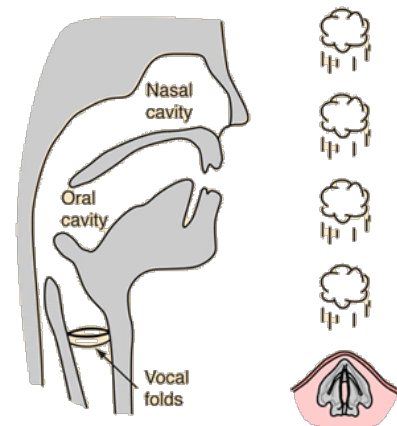


Energy Conservation for Speaking



Components of Speech Production Include:

1. Respiration- Breath Support/Breath Control- determines how loud you can be and how long you can talk. Lungs are the power behind your voice.
2. Phonation-sound production through vibration of air over vocal cords: this determines sound (pitch, vocal quality).
3. Articulation- sound formation through movement of tongue and lips as air vibrates through and out your mouth.



People with decreased/reduced lung function (COPD) and/or Vocal Cord Dysfunction/Inducible Laryngeal Obstruction (VCD/ILO) may have some periods of time or situations where it is difficult to breathe or speak.

Importance of Self-Awareness

Improving your ability to speak easily and be understood without becoming fatigue is **Self-Awareness** of your **physical status and environment**



Modify physical status

- Take slow deep breaths before speaking
- Speak slowly & in short concise phrases/sentences
- Schedule “rest periods” especially on days/situations when you use your voice more frequently
- Follow breathing treatments, exercises, & medical suggestions provided to increase your respiratory lung support and health

Modify your environment

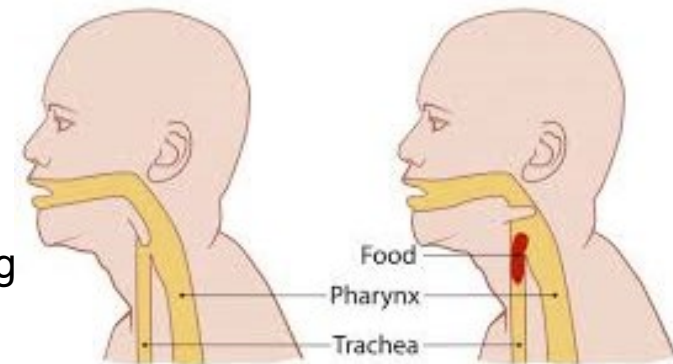
- Reduce excess noise (background noise)
- Decrease distance between you and the person your speaking with
- Stay in a well lit area so people can see your face
- Let people know it’s okay to tell you they can’t understand you
- Let others know how they can help when you might have trouble being understood.
Examples: making sure their hearing is as good as it can be; by not asking you to talk while your performing physical activities; not talking over you or for you; not rushing you or requiring you to speak quickly

Swallowing Problems with Decreased/Reduced Lung Capacity (ex:COPD)

Structure and Function: The first two routes that air takes into your lungs (mouth-throat-trachea [windpipe]) is the same route food and drink gets to your stomach (mouth-throat-esophagus [food pipe]). Therefore, some people with decreased/reduced lung function/capacity have difficulty eating and drinking.

Problems can include:

- Short of breath when eating or drinking
- Food getting stuck in throat or goes down the wrong way into the lungs (aspiration)
- Frequent throat clearing, coughing while eating or drinking
- Frequent temperatures, congestion, flares, and/or possible pneumonias caused by food or drink going into lungs (aspiration)
- If you have GERD (gastro esophageal reflux disease)-make sure you are being treated.



Tips to Improve Safety While Eating

- Cut up your food, take small, single bits and sips of fluids (no chugging or stuffing!)
- Avoid sticky and tough to chew foods
- Don't talk with a full mouth
- Medications-take one pill at a time
 - use applesauce or pudding to swallow if water makes you cough/choke
 - always ask MD first if pills can be crushed or cut up-if you trouble swallowing them whole (some medications are time released or have special coating and cannot be crushed or cut)
- Always eat sitting straight up and don't drink from large glasses/cups (reclined positions increases likelihood of food going down into your airway/lungs ie aspiration)
- People who frequently have food go into airway, find relief by swallowing with chin down, to keep food in mouth until they are ready to swallow

