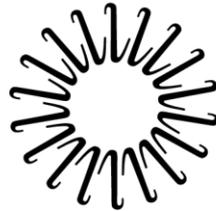


Bronchial Hygiene

Keeping your lungs clear



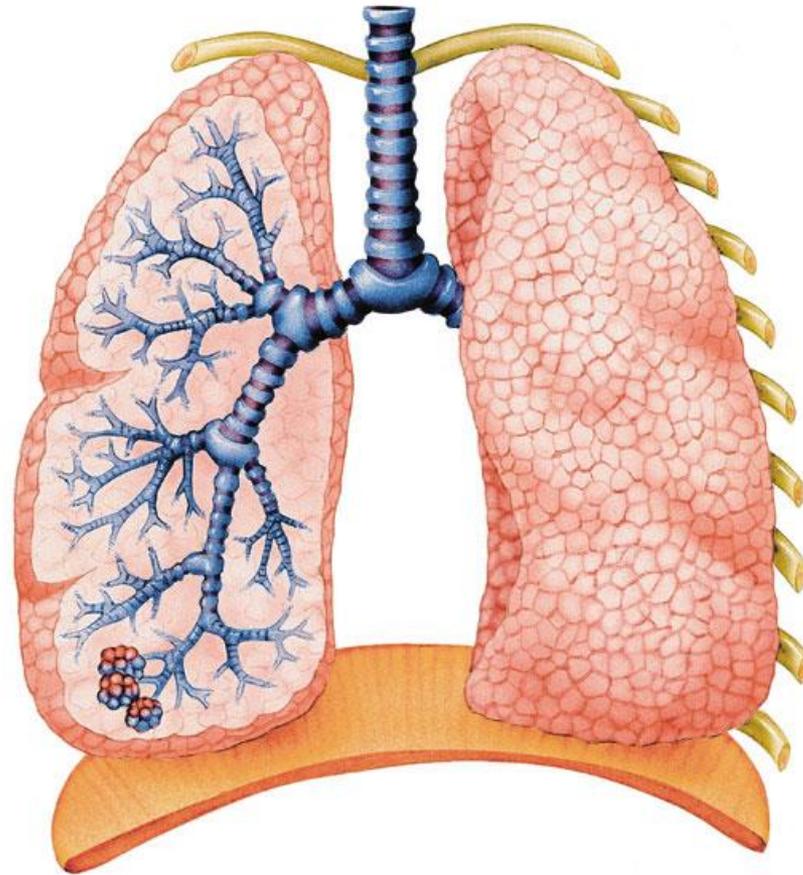
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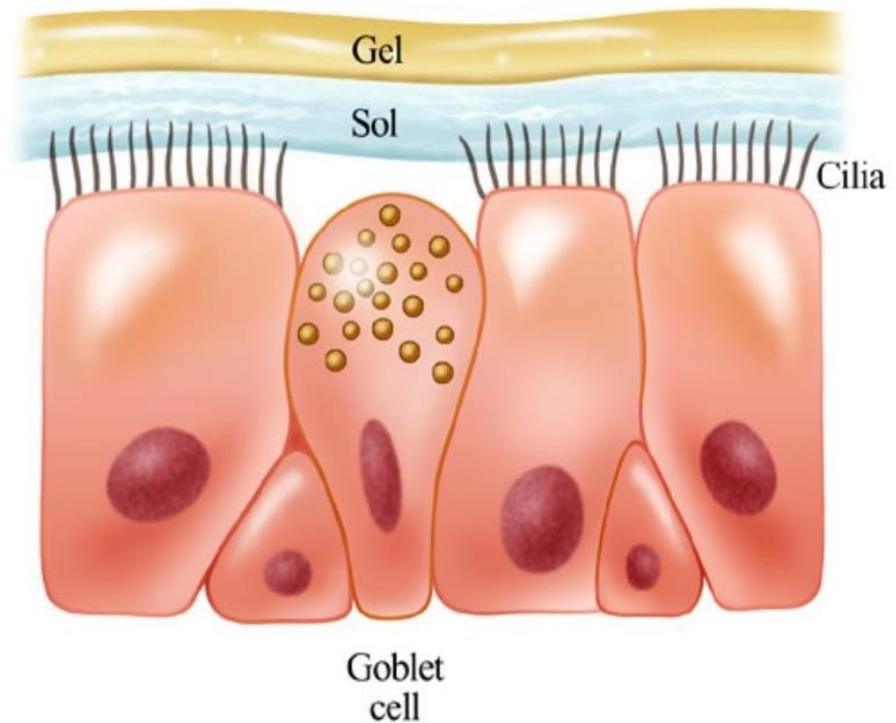
Basic Anatomy



Airway clearance

- Your airways or breathing tubes have a natural defense mechanism
 - A thin layer of mucus
 - Small hairs called cilia

The mucus layer and cilia work together to help sweep irritants out of your lungs



Who typically has problems with too much mucus?

- Increased mucus can clog up your airways making it harder to breathe
- Trapped mucus also promotes infection
- Typically people with COPD, asthma, Cystic Fibrosis, and bronchiectasis tend to have more trouble with mucus

What is “Normal”? Amount

- A healthy person without lung disease would still produce a small amount of mucus in their airways, but wouldn't really be aware of any mucus
- A half-dollar sized amount of mucus would generally be considered a large amount

Amount:

- What is your baseline amount of Mucus?
- Try to be as objective as you can-ie:

“a dime-sized amount usually in the morning”

versus

“A little bit once in a while”

Color

- Mucus should generally be clear-whitish in color
- If the color is darkening-you may be developing an infection (yellow, green, brown)
- Again-know what color your mucus usually is at baseline so that you know when there is a change

Color

- Irritated airways can bleed a little-especially if you are coughing frequently
- This may lead to some red or brownish streaks in your mucus.
- Call for help immediately if you are coughing a large amount of blood

Consistency

- Mucus is made up mostly of water. It should be thin and easily coughed up.
- Thicker mucus is harder to cough out and can get so thick that it can form a plug
- Know what your mucus is like at baseline (when you feel well)!

How can you get rid of extra mucus?

- Make sure that you are drinking enough water. If you are dehydrated-your mucus will be thicker
- Talk to your doctor about medications that may help ie: mucinex
- Avoid allergens and irritants
- Postural drainage
- Breathing techniques
- Devices
 - Flutter valves
 - Percussion vests

Possible symptoms of lung infection

- Darker, thicker, more frequent mucus
- Fatigue
- Increased SOB, cough or wheeze
- Fever
- Loss of energy
- Weight loss

The Bottom Line:

- Know what is “normal” for you
 - Color
 - Amount
 - Consistency
- Get plenty of fluids
- Monitor your other symptoms
 - Fatigue, Shortness of breath, fever
- Call your doctor if there are any changes-don't wait until the problem is severe!

Techniques to help clear the lungs

- Stacked breathing:
 - Take a small breath in –don't exhale
 - Take another small breath in- don't exhale
 - Take a third breath in an hold for 3-5 seconds (if you can)
 - Exhale all of the air out

Active Cycle of Breathing

- Do some diaphragmatic (belly) breathing for a few minutes
- Take in a deeper breath of air and hold for 3 seconds.
Repeat 4 times
- Go back to light diaphragmatic breathing
- Repeat the deeper breaths with the hold
- Try to cough out the mucous using a “Huff”
- To Huff – blow out the air keeping your mouth open in a small “O” shape
 - Blow out the air like you are trying to fog up a window or mirror
 - Or-pretend that you have a ping pong ball in your mouth and you are trying to shoot it across the room