

Courtesy of Laurie A. Keefer, PhD



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**Definition:** Breathing that is done by contracting the diaphragm muscles and expanding the belly to optimize air entering the lungs. Can sometimes be called belly breathing, abdominal breathing, or diaphragmatic breathing.

## Why is Chest Breathing bad for you?

More than 50% of US adults have predominantly chest breathing.

Unfortunately, our greatest lung capacity is in the lower lungs—if we are chest breathing, we are depriving this section of our lungs from oxygen, requiring us to breathe more than normal. People who chest breathe all day often end up inhaling large quantities of air when they are resting or even sleeping. This can lead to excess gas or bloating, as well as increased muscle tension.

## What can Belly Breathing be used for in GI?

- Activating the parasympathetic nervous system—signals the brain to move back into "rest and digest" mode instead of "fight or flight"
- Reversing nervous habits such as belching (pairs an involuntary behavior with a voluntary one)
- Improving gastric accommodation (how much the stomach can hold)
- Improving the pressure gradient at the lower esophageal sphincter (rumination, GERD)

## **How to teach Belly Breathing**

- Have patient sit upright in a chair (you can also do this lying down but for GI conditions, sitting up makes most sense since we often suggest patients do the breathing around eating)
- Spine should be straight, knees bent, shoulders loose and head and neck relaxed.
- Mouth can be slightly open (teeth separated)—sometimes patients think if they are breathing through their nose that they have to close mouth tight—but this can sometimes feel uncomfortable in their throat.
- 4. Have patient place one hand on their chest and one hand on their abdomen, just below the rib cage.
- 5. Notice their usual breathing for 30 seconds—you can give them feedback; "I can see that your hand on your chest is rising as you breathe, you are breathing quickly, etc." It is helpful to point out the contrast because it builds expectancy as to why this might work for them.
- 6. Then, have patient breathe in for 4 seconds through the nose and feel their stomach pushing out against their hand. Try to keep the hand on your chest from moving. Patients are sometimes self-conscious about sticking their bellies out in front of someone so you can tell them that its okay, or if you are comfortable offer to belly breathe with them.
- 7. Have them hold their stomach muscles tight and then start to let the belly deflate as they exhale 6 seconds out slowly. It helps to have their lips pursed on the exhale like they are blowing through a straw.

## **Troubleshooting**

If patients are mouth breathers and unable to inhale through their nose, you can have them breathe in controlled through their mouth (avoid gulping). However, really push the patient to breathe in through their nose first since this by definition might be why they are struggling with GI symptoms.

- ✓ Don't be afraid to correct them in real time—it sounds easy, but proper breathing technique is hard to learn. Practicing it wrong is worse than not doing it!
- ✓ Do not be fooled by patients who tell you they already know how to belly breathe—through yoga or their meditation teacher. Have them show you and provide correction or positive feedback.
- ✓ Try the technique lying down. Put a couple of books on your abdomen and breathe so that you can see them rise on your belly about an inch each time you inhale.
- ✓ In the heat of the moment (e.g. urgency) the patient can do a sharp 4s inhale, 6s exhale to slow down motility.