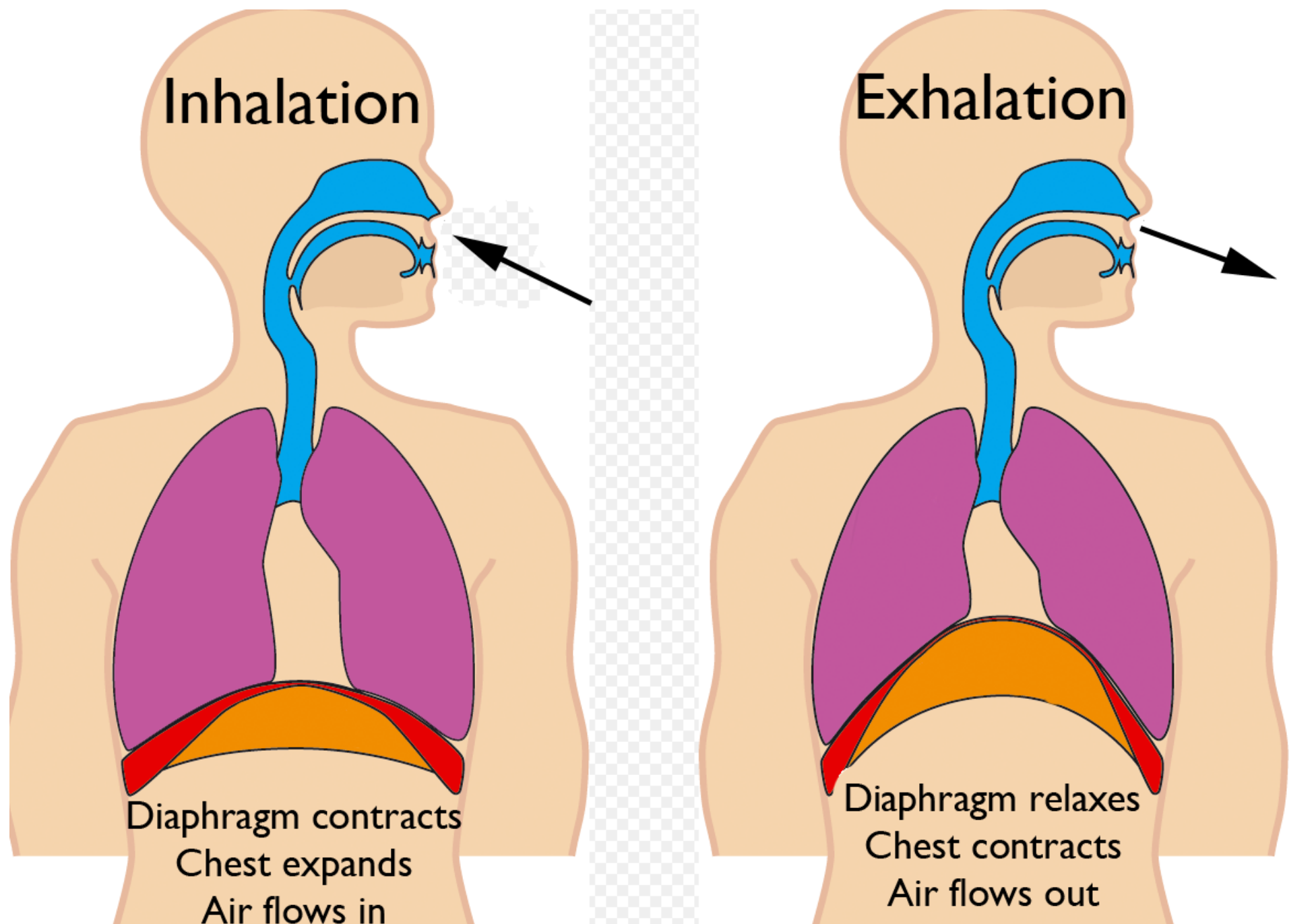


Class Voice

Review of Chapter Eight: **Breathing**



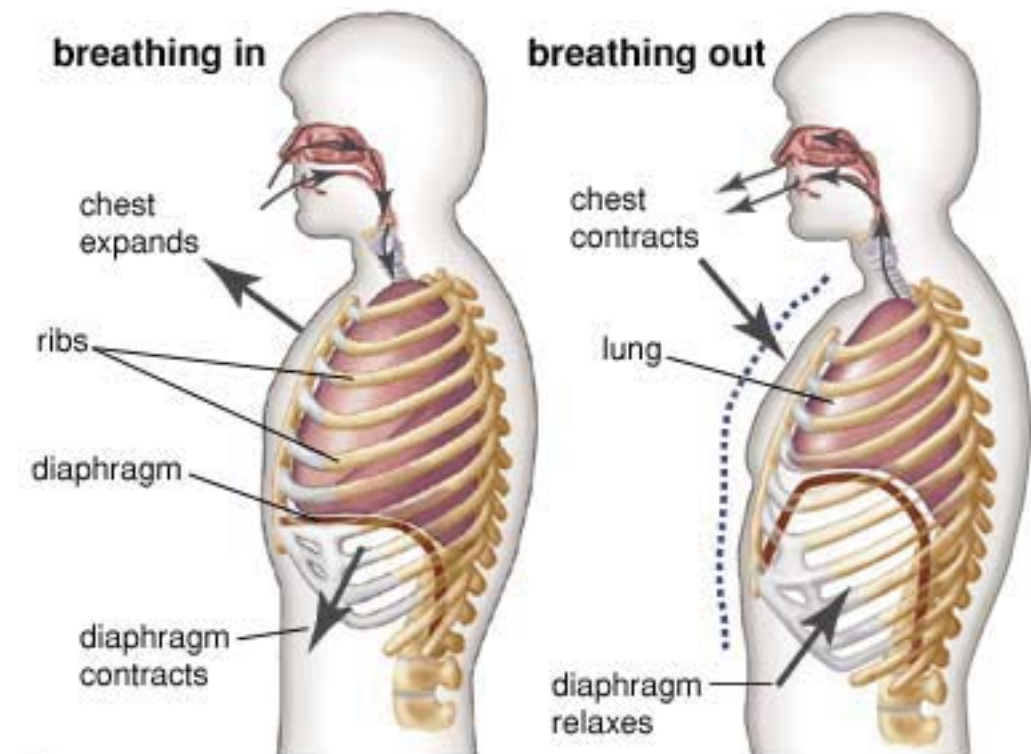
9

- Breath is the essence of life and **sound**, and normally breathing is a **subconscious** process. . . . More physical activities (like singing) require more breath, however, you may need less air than you think for singing, particularly when your **alignment** and the **balance** of **muscle use** and **airflow** are maintained.



10

- Airflow is a matter of **balance** between the pressures of air **outside** and **inside** the chest. . . . For now, remember the two most important things: (1) use the most physically and vocally **efficient** way of breathing, and (2) keep the air **moving** rather than attempting to hold it back.



11

- Subconsciously, we take about **24,400** breaths a day. When we become **conscious** of the need to take in air while singing, we can develop many **misconceptions** and worries.



12

- Efficient breathing is not just for “classical” singing; pop singers could improve immensely from work on their breathing as well. . . . People breathe in many ways according to their own physical health. However, for singing, there are only **efficient** and **inefficient** ways of breathing.

#13

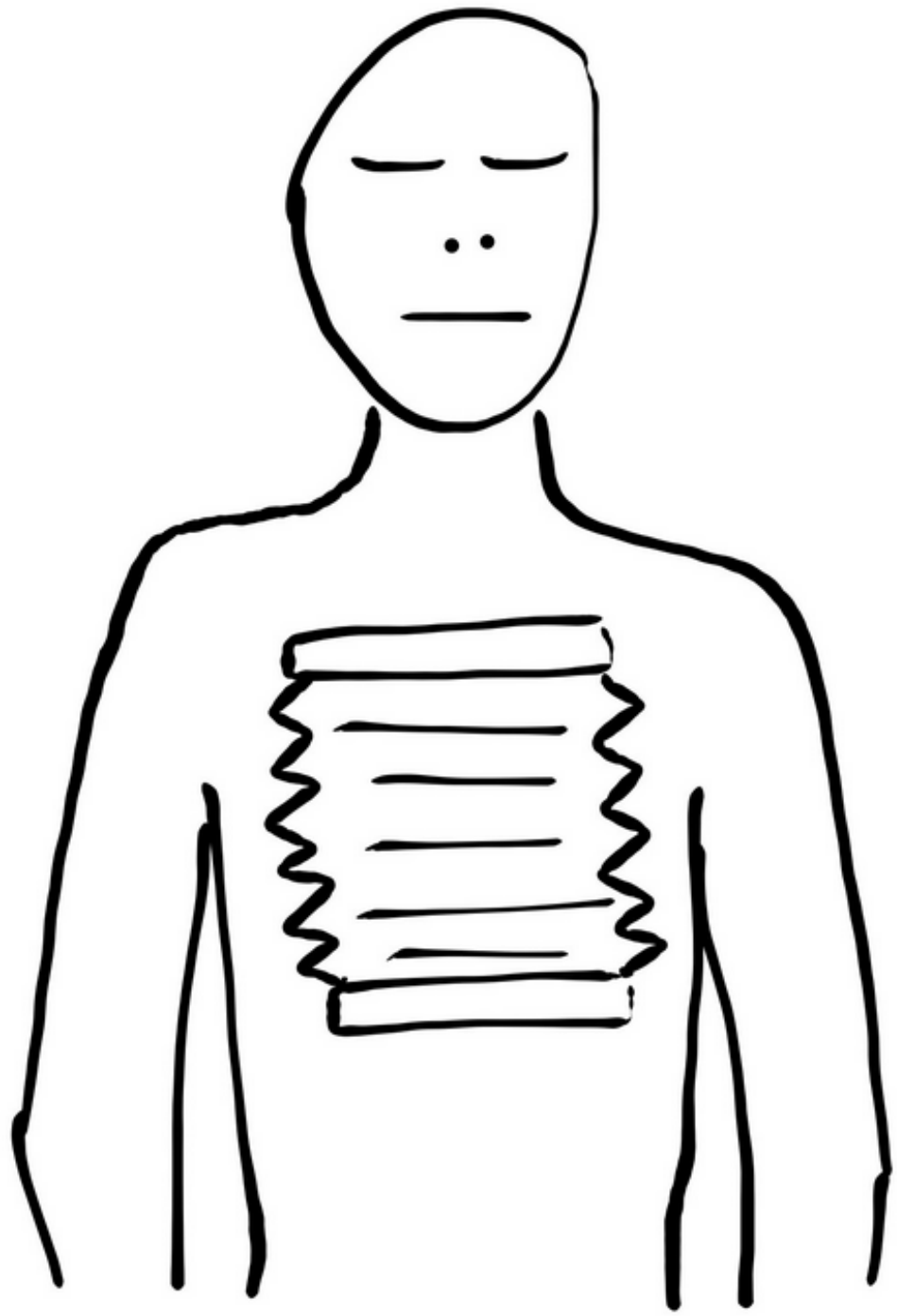
- Know the seven pointers for “Efficient Breathing” on p. 265. Also, be able to identify the parts of the skelton in Fig. 8.1 (rib cage), as well as the anatomy illustrated in Figs. 8.2A, 8.2B, and 8.3.
- Terms include: clavicle, rib, sternum, rib cage, diaphragm (as “hat”), diaphragm placed in rib cage, intercostal muscles (*Levator costarum*)

#14

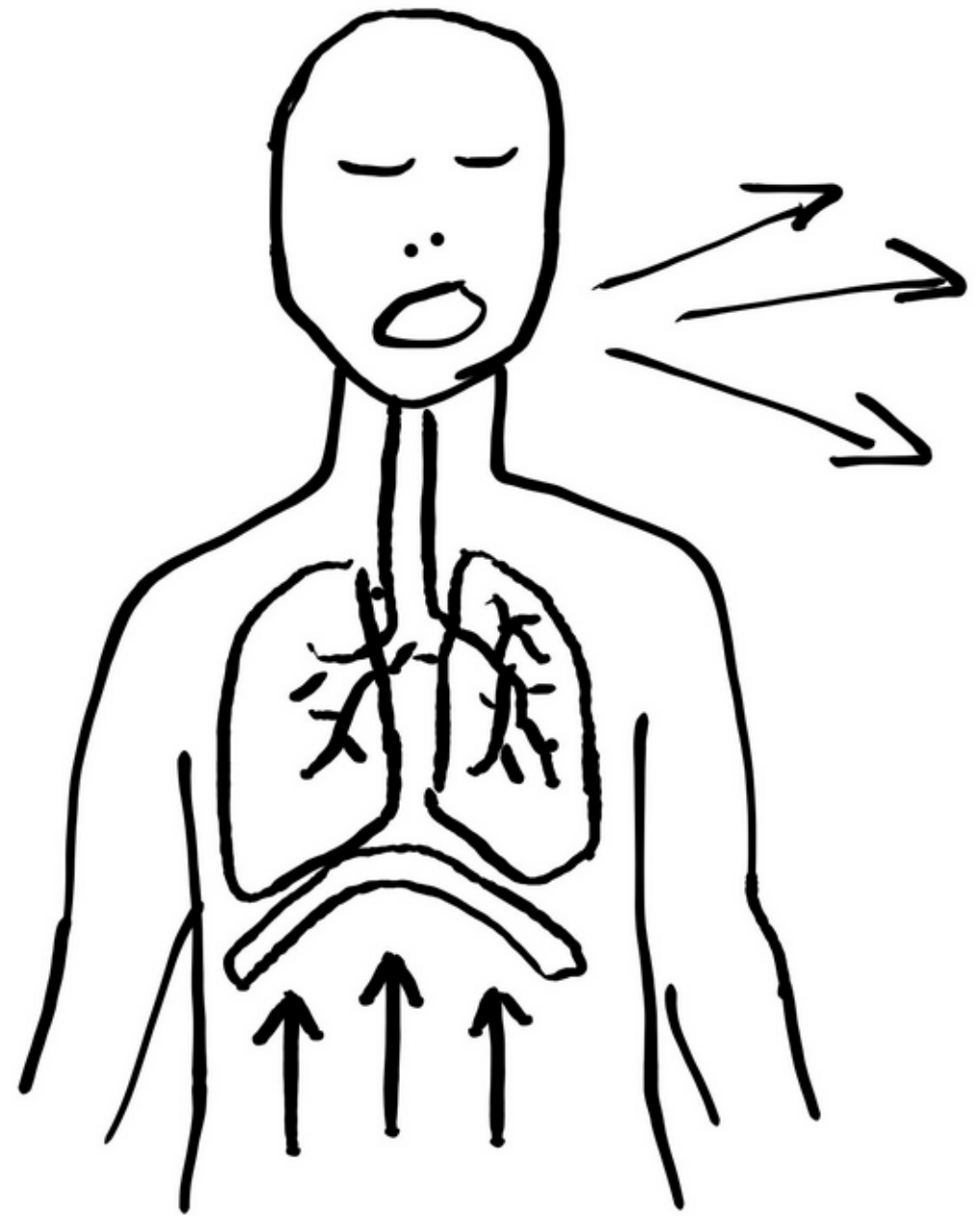
- The **diaphragm** (don't forget how to spell it!) is the most important muscle of inhalation **(inspiration)** and acts as a partition between the chest and abdomen. . . . When the diaphragm contracts, it moves **downward**, displacing the lower **ribs** and the **organs** and soft structures below it.

15

- The action of the diaphragm causes the abdomen to **expand** and the lower ribs to move outward. This abdominal expansion is caused by the organs being displaced and has often cause people to **mistake** it for the diaphragm itself. When the body is in good alignment, this action will happen easily without specific attention being paid to the diaphragm.



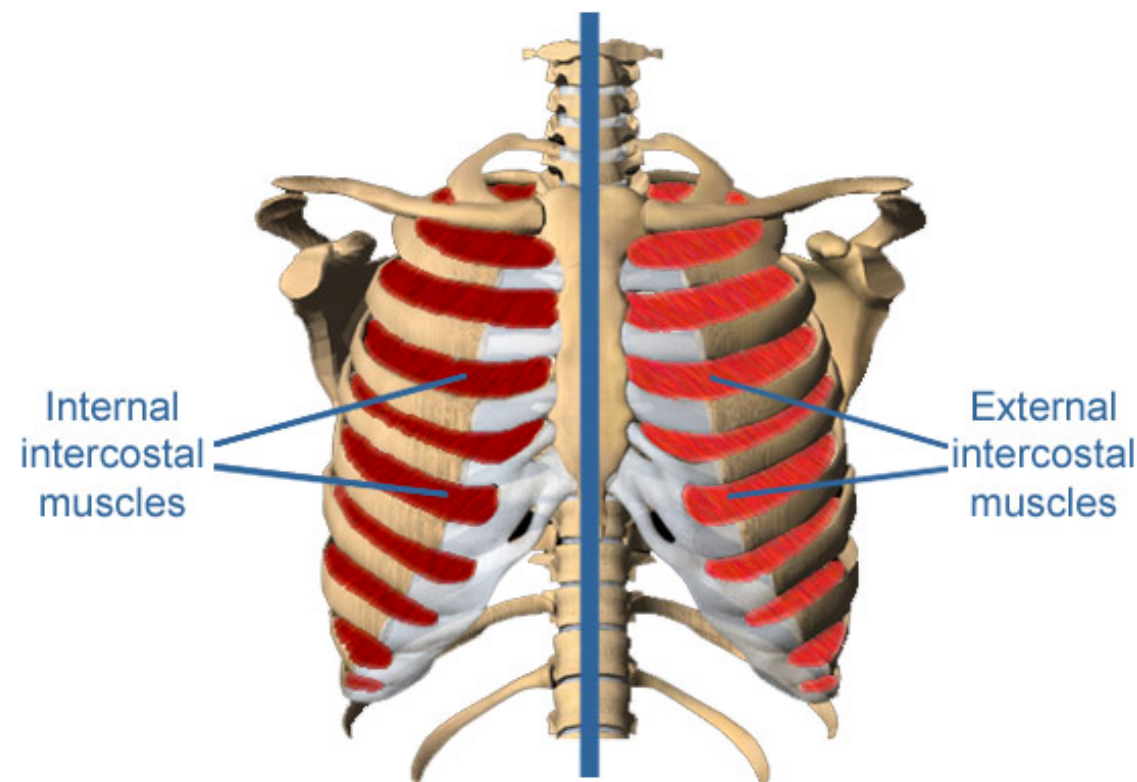
at rest



exhalation

16

- The muscles between the ribs **(intercostals)** are often mentioned as contributing to inhalation and exhalation. However, they are most effective as **stabilizers** of the ribs. All these muscles seem to work very well when they are **aligned** well.



Note: the external muscles are a layer on top of the internal muscles, but for the purposes of illustration the diagram has been split to show the inner layer on the left and the outer layer on the right.

17

- Ideally, singers think first of **exhaling**, and then of allowing the **inhalation** to be a **reflex** action. . . . Exhaling during the introduction of a song and then allowing a **reflex** breath a beat or two just before you sing is a more secure approach.

18

- Exhalation during minimal physical activity is a simple matter of releasing the muscles of inspiration (such as the **diaphragm**) and letting the **elastic recoil** of the lungs and gravity do the rest (accomplished subconsciously). For singing, we need to use more **muscular effort**, and it is best accomplished by muscles of the **abdomen**.

19

- The abdominal muscles form a kind of **girdle** around the abdomen and are located in the best place to facilitate breathing without interfering with the **vocal tract**. . . The muscles that form the abdominal **girdle** tend to work as a **unit** for breathing. They **contract** and cause the abdominal contents (**viscera**) to move toward the back and the diaphragm **from below**, thus helping the diaphragm to **return** to its original position and to send air **out** of the lungs.

Pectoralis major

Tendinous intersections

Rectus sheath

Umbilicus

Linea semilunaris

Linea alba

Aponeurosis of external abdominal oblique

Latissimus dorsi

Serratus anterior

Rectus sheath (cut edges)

Transverse abdominal

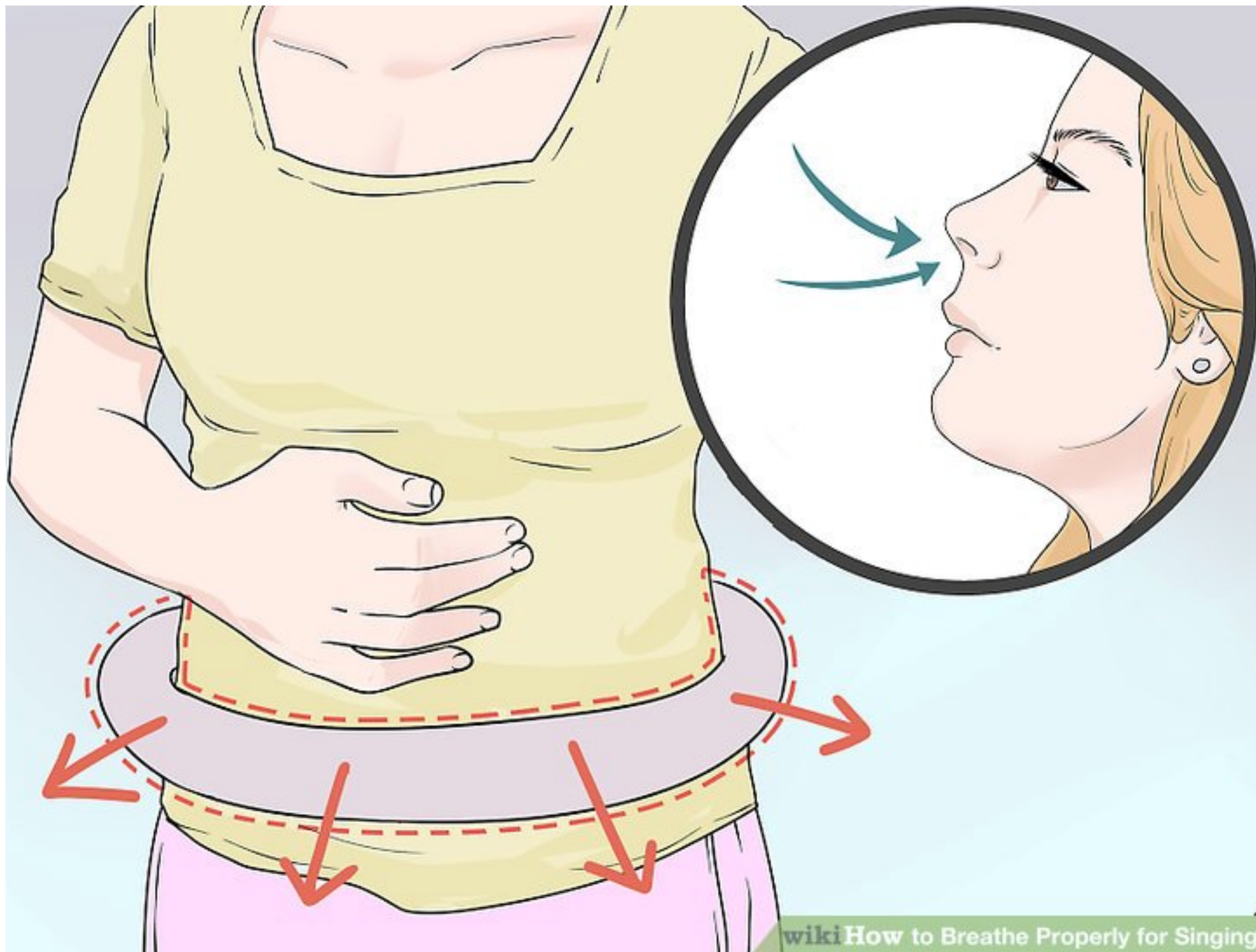
Internal abdominal oblique (cut)

External abdominal oblique (cut)

Rectus abdominis

Inguinal ligament

(a) Superficial



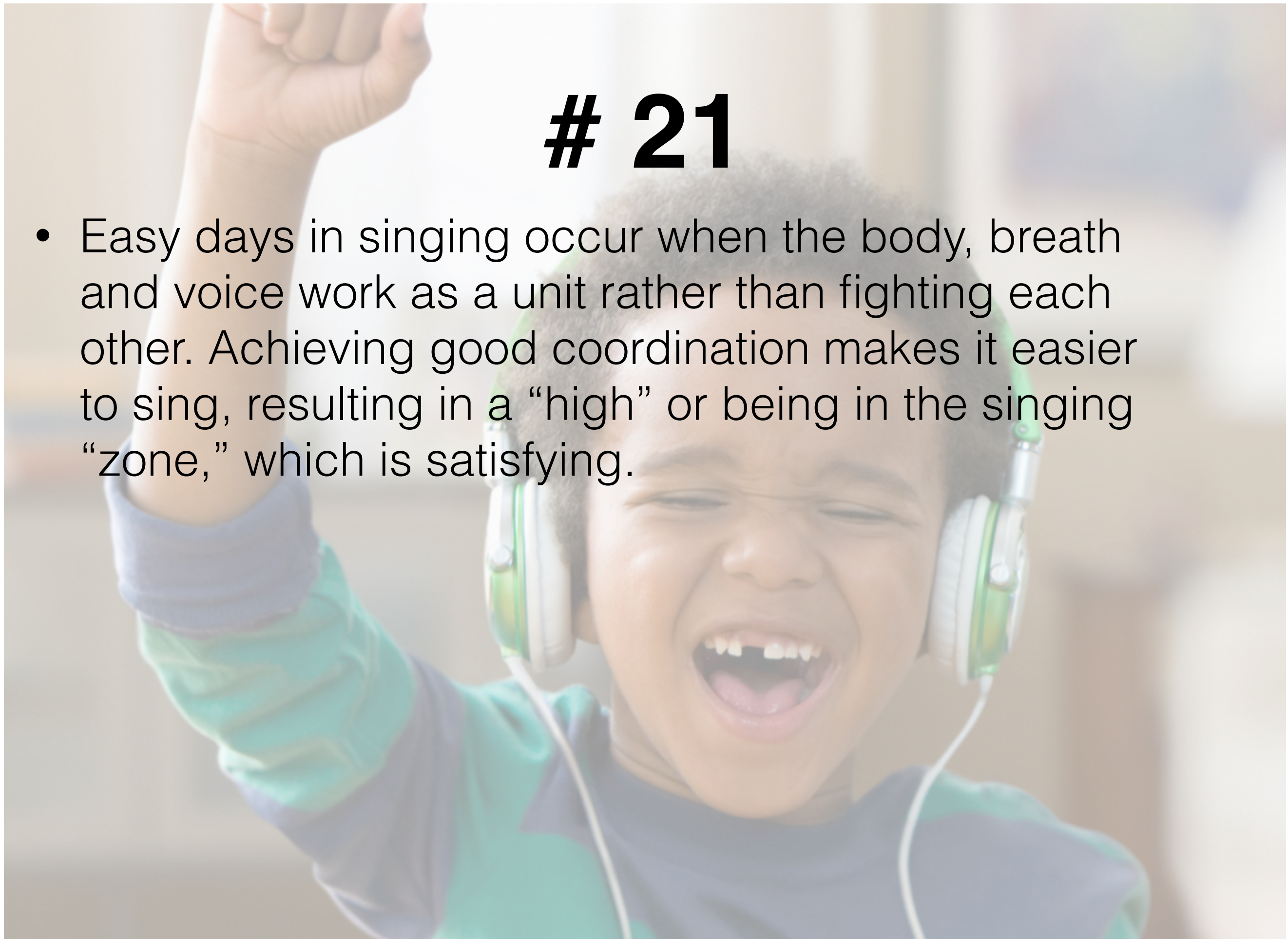


20

- *Where* the singer chooses to activate the abs is very important. The most efficient area is the **lowest** one near the pelvis. Contracting the muscles in this area sends pressure toward the **diaphragm** and **lower back ribs** from below. . . . Inefficient use of the muscles of exhalation can cause unwanted **tensions** to transfer to the **neck, throat, and jaw**. The better you maintain your alignment, the easier it will be to use the more effective lower part of the abdomen for **exhaling**. Collapsing the body will cause the air to release too quickly and you will pay the price by **running out** of breath.

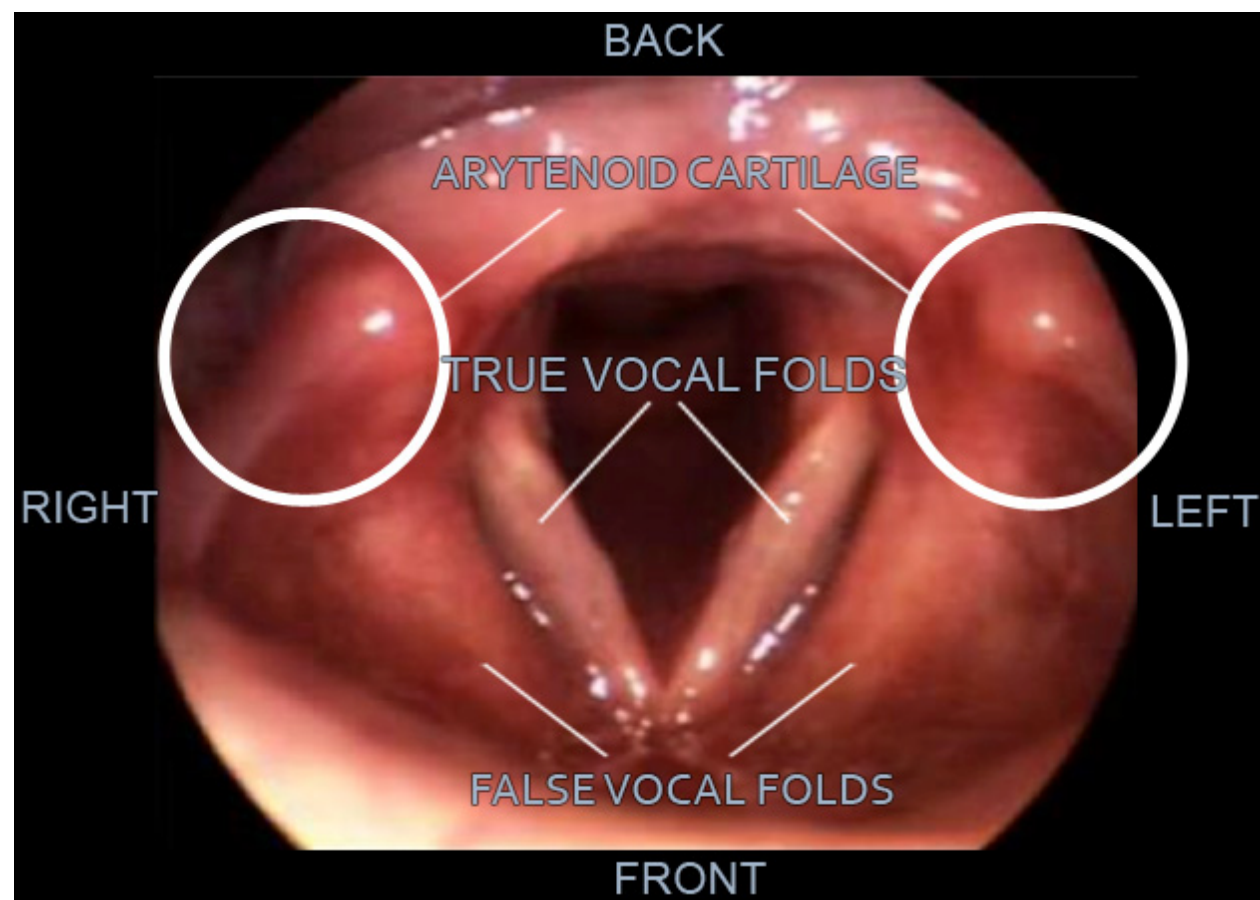
21

- Easy days in singing occur when the body, breath and voice work as a unit rather than fighting each other. Achieving good coordination makes it easier to sing, resulting in a “high” or being in the singing “zone,” which is satisfying.



22a.

- A number of things are happening when the coordination is good: There is a **balance** of pressures in the abdomen, chest, at the level of the vocal folds (**vocal cords**), and in the mouth that help the singer maintain steady **airflow** appropriate to the music and phrasing of text.

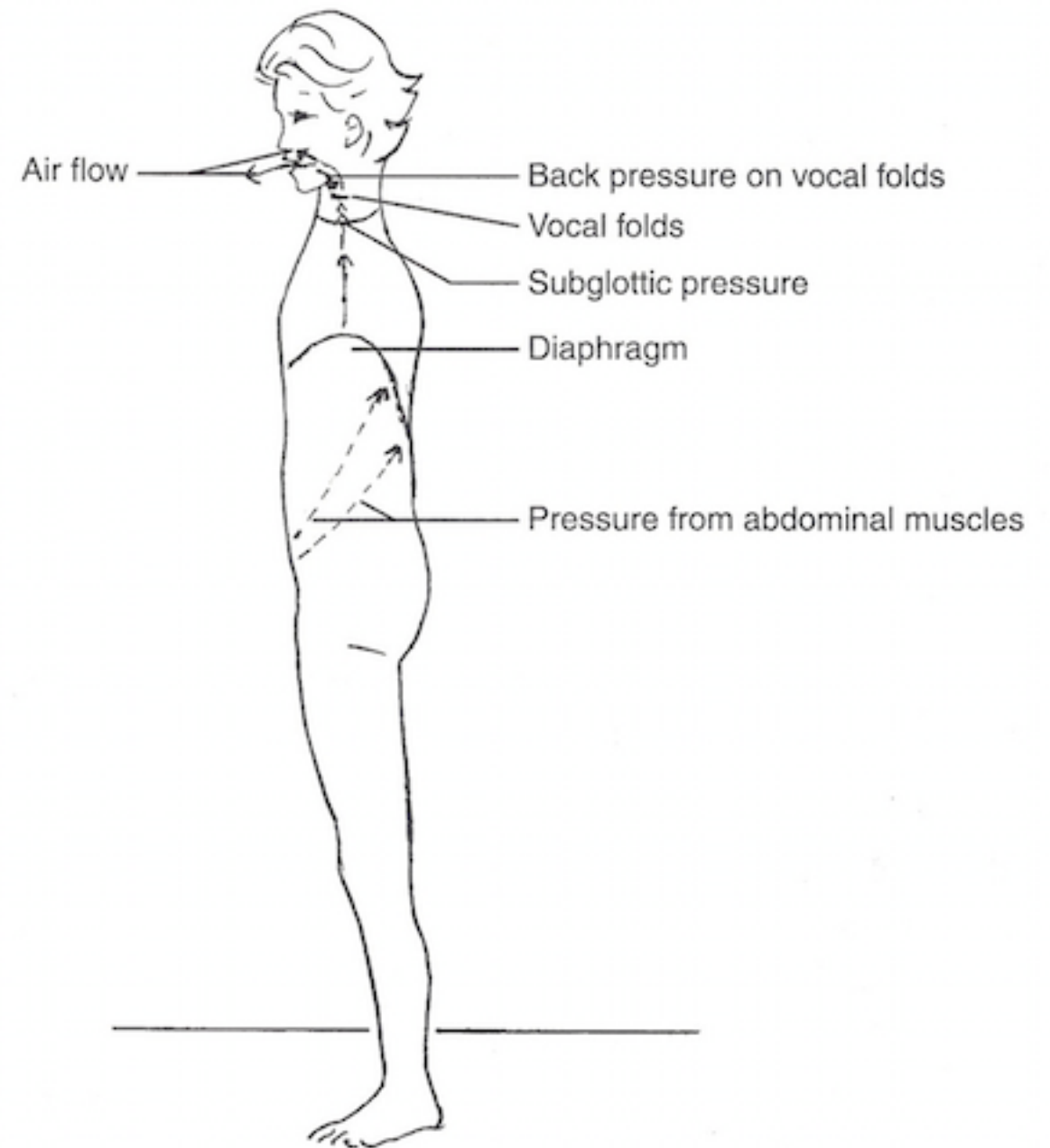


22b

- These pressures include: (1) the lower **abdomen** contracting up toward the lower **ribs** at the back, slowing the return of **diaphragm** and ribs; (2) the flow of air meeting resistance of the **vocal folds** as they close for phonation, keeping a certain amount of pressure in the chest and resistance to the diaphragm; and (3) the exhaled air hitting the **palate, teeth** or even **lips** and moving back toward the vocal folds to create **back pressure** in the mouth.

22c

- These pressures are the product of coordinated **muscle action** and **breath**.
(Understand Fig. 8.5?)
All of these pressures need to work well together (think of Functional Unity Fred) and it will give you a sense of the physical **buoyancy** that happens when you sing well.



23

- Avoid **collapsing** by maintaining the thought of an **energy channel** from the upper back to the ceiling. Don't gasp. . . **widen** your breathing pipe. Take in just as much air as you need and use all of it. Remember to do all of "Finding Out for Yourself) activities!!!

