

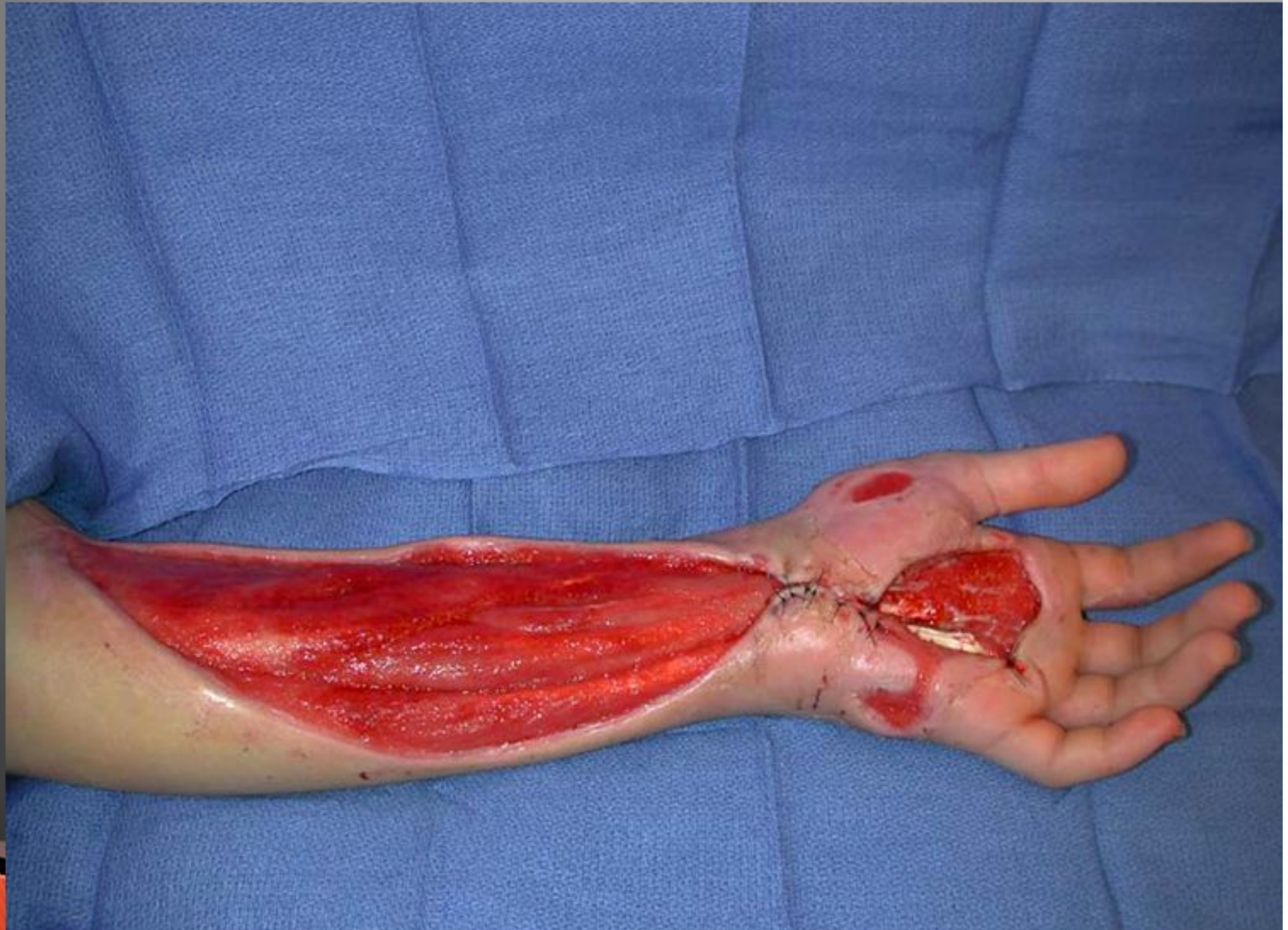
Class Voice

Review of Chapter Seven:
Muscles and Physical Balance



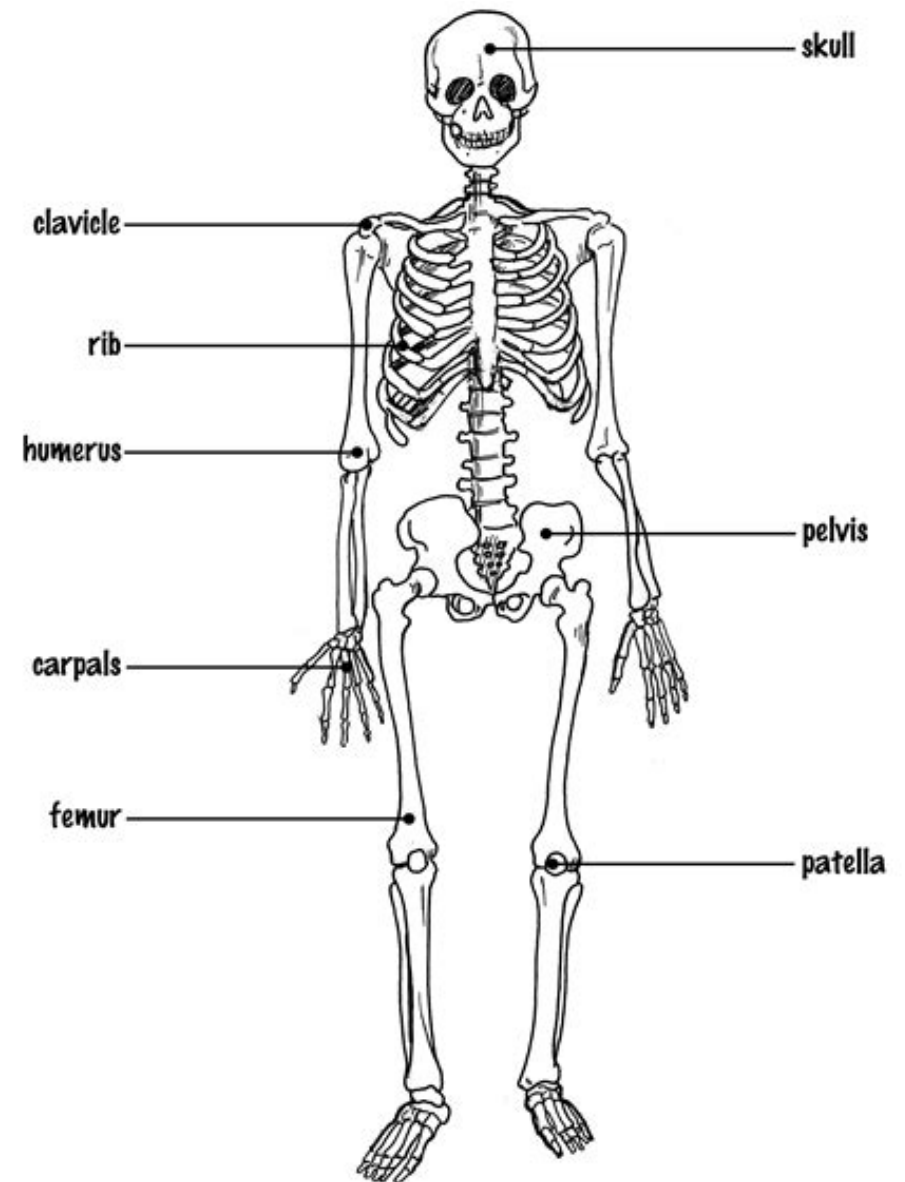
Muscles – How do they work?

- ▶ There are over 600 muscles in the human body.



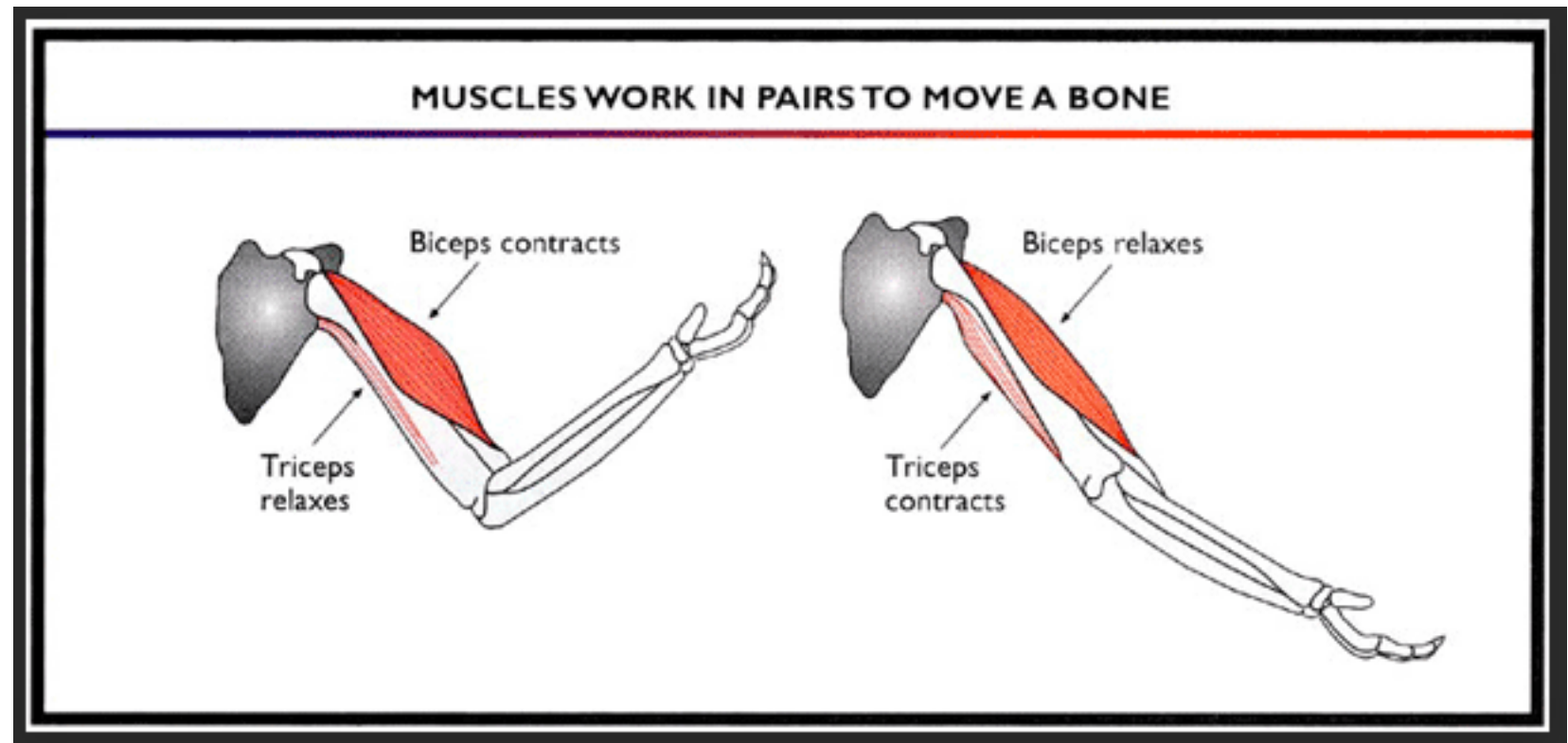
1.

- Always look at the skeletal structure first to give you vital clues to how the body functions



2.

- Skeletal **muscles** create movement of the body — not ligaments and membranes. When a muscle **contracts**, a joint changes position. Any move we make takes a **signal** of intent from the brain. . . . The muscle then **shortens** or **contracts**. . . . The body needs to replace **tension** with appropriate muscle use.

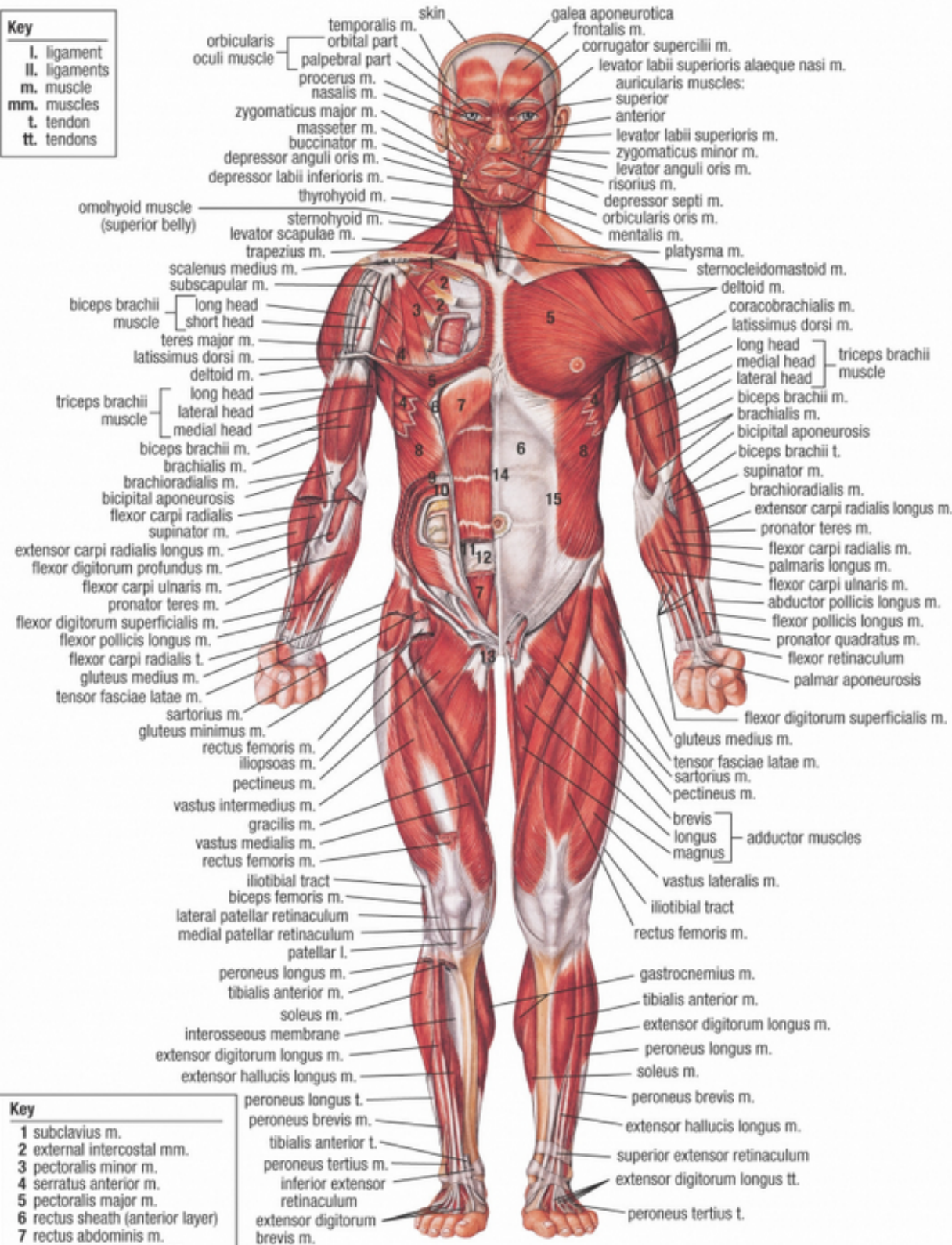


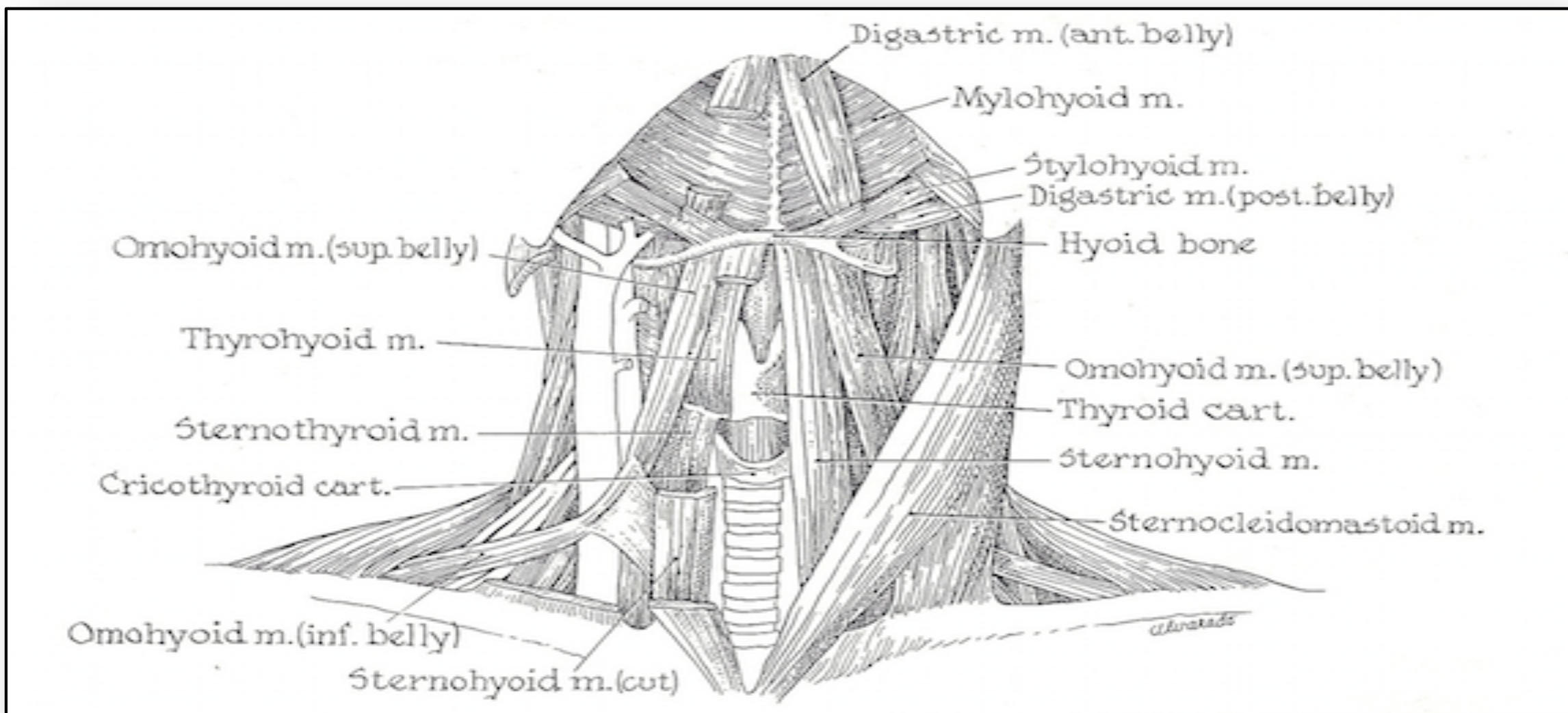
3.

- To determine the action of a muscle, you need to know where it is **attached** and in which direction the fibers are running. Again, muscles only **contract** to create action. (They do **not** push or expand.) In general muscles are named according to where they are **located** in the body, their **shape**, or their **actions**.

MUSCULAR SYSTEM (ANTERIOR VIEW)

Key	
I.	ligament
II.	ligaments
m.	muscle
mm.	muscles
t.	tendon
tt.	tendons

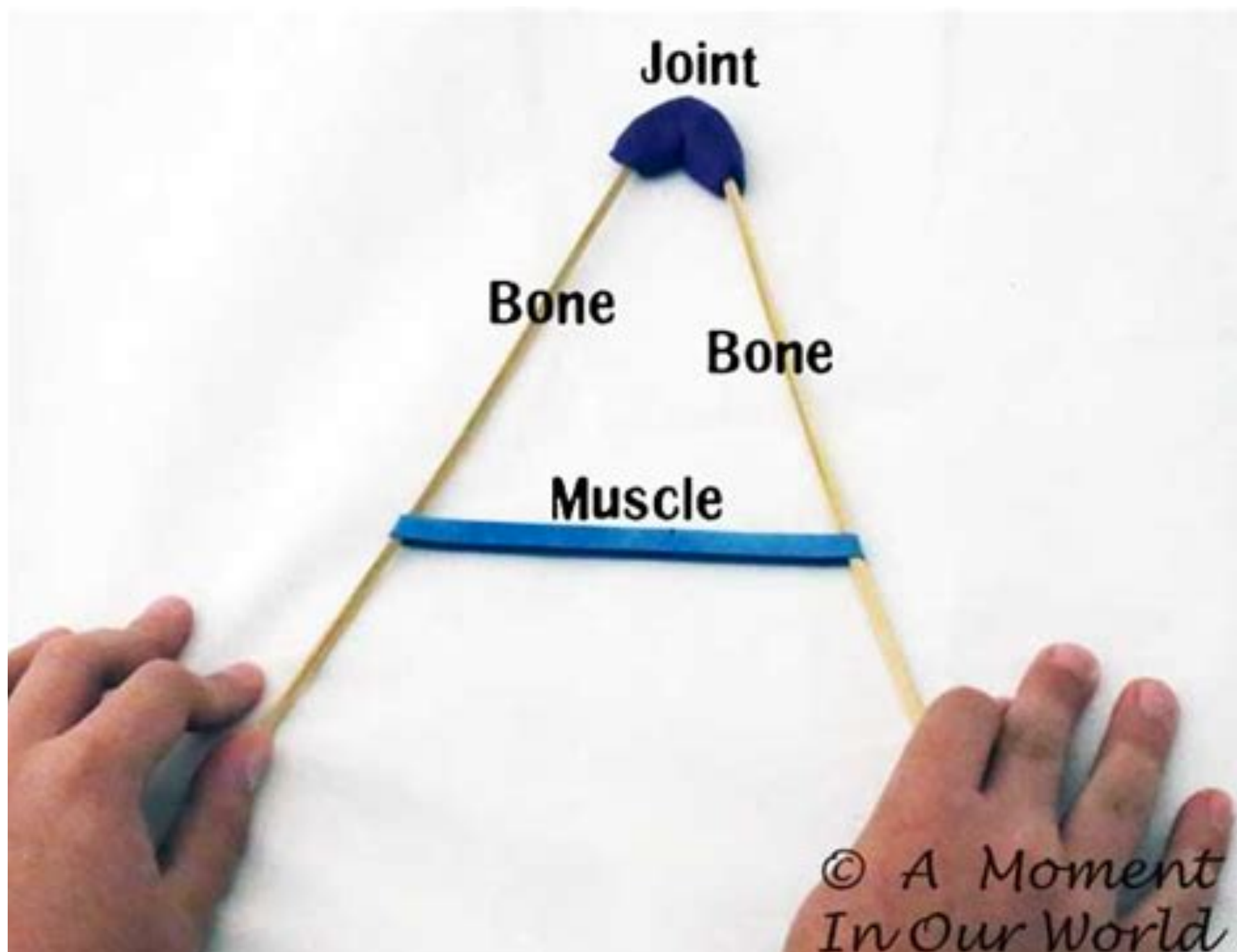




Extrinsic muscles of the Larynx.

4.

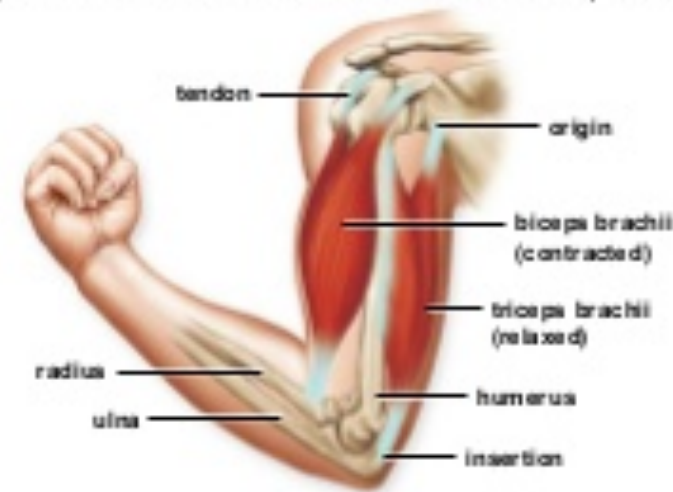
- In order for muscles to **contract** and move a joint in one direction, muscles on the opposite side of the joint must **relax**. When muscles don't let go (relax) when they're supposed to, there is restriction of movement. A tug-of-war between opposing muscles creates pushing muscular **antagonism**. When this kind of antagonism is used to stabilize a joint to help its performance, it is known as **synergy**. It is unwanted **antagonism** that creates problems.



How do skeletal muscles work?

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- Antagonistic – muscles that work in opposite pairs
- Synergistic – muscles working in groups for a common action



#5

- Freeing your body is not just for singing; it has a direct relationship to your physical **alignment**, **energy**, **health**, **voice**, **breathing**, and image. . . .
A balanced, free, and **flexible** body is fundamental to efficient vocal production and lovely vocal quality. The alignment of the breathing mechanism — the **chest**, the voice box (**larynx**), and the throat (**resonator**) — is the starting point for healthy singing.



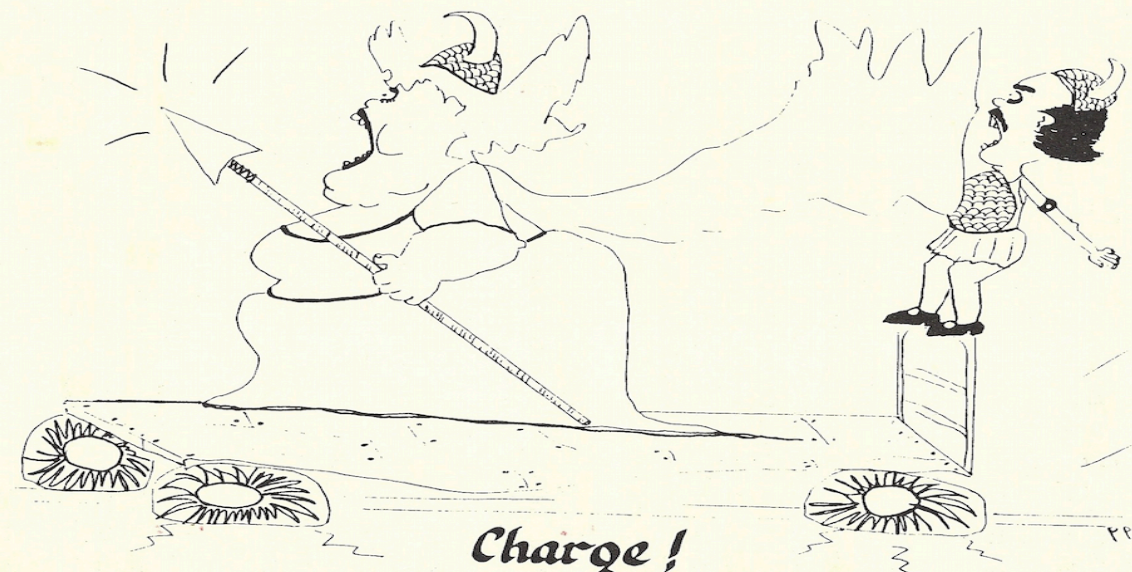
Stand up!



Eager Beaver



Keep your chest up!



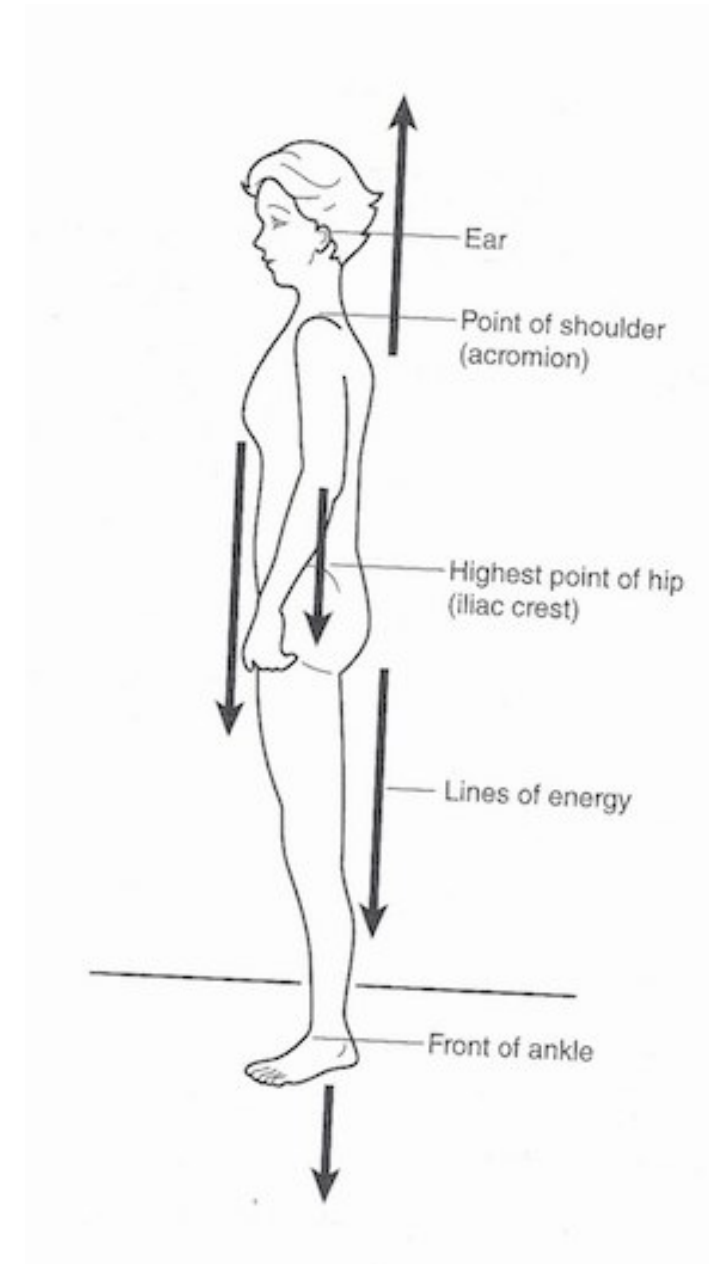
Charge!



Kathleen Battle, soprano

6

- One habit that drains energy is **pushing** the head forward rather than aligning it over the shoulders....Experts in physical function...have agreed on the following description of good posture. When a plumb line is dropped beside you, it falls through the **ear**, the point of the **shoulder**, the highest part of the **hip-bone**, just behind the **knee cap** and barely in front of the **ankle**.



7

- Know the “Guidelines for Good Physical Balance” on p. 262.

8

- Always do all of the “Finding Out For Yourself” activities, as well as there “More Ways to Improve Your Alignment” on p. 263.