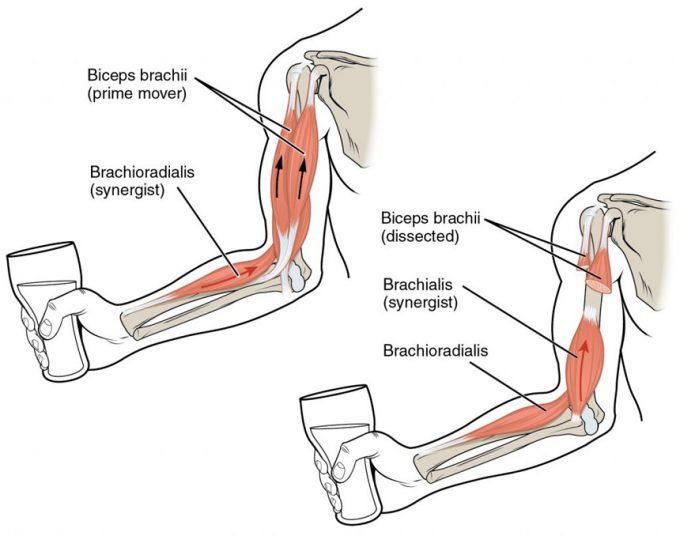
Skeletal Muscles



**Figure 11.11 – Prime Movers and Synergists:** The biceps brachii flex the lower arm. The brachoradialis, in the forearm, and brachialis, located deep to the biceps in the upper arm, are both synergists that aid in this motion.

Fascicle Arrangements

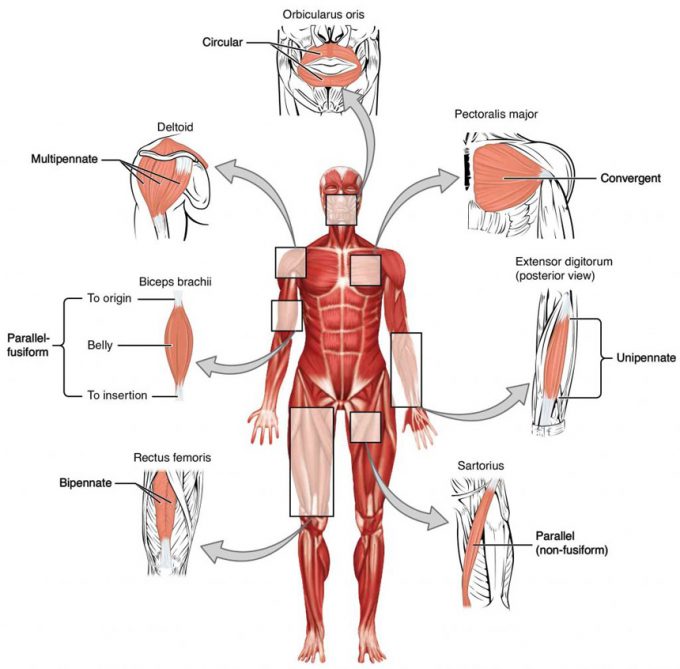


Figure 11.21. Muscle Shapes and Fiber Alignment. The skeletal muscles of the body typically come in seven different general shapes.

Biomechanics

Naming of Muscles

Sartorius

Gastrocnemius

Platysma

Biceps femoris

Biceps brachii

Brachioradialis

Gluteus maximus

Trapezius

Sternocleidomastoid

Deltoid

Epicranius

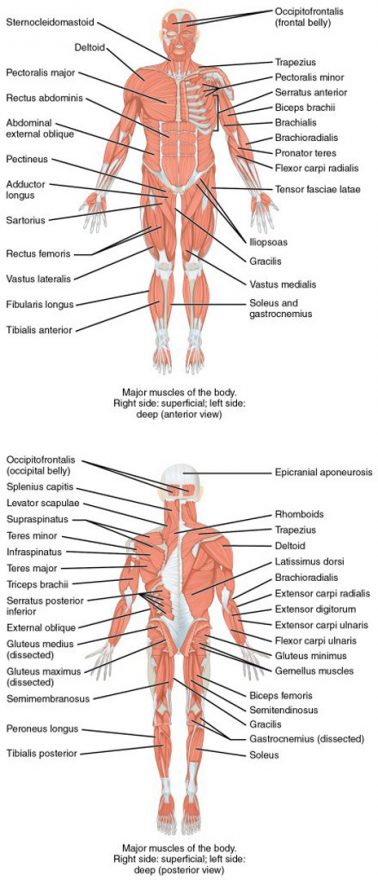
Triceps bachii

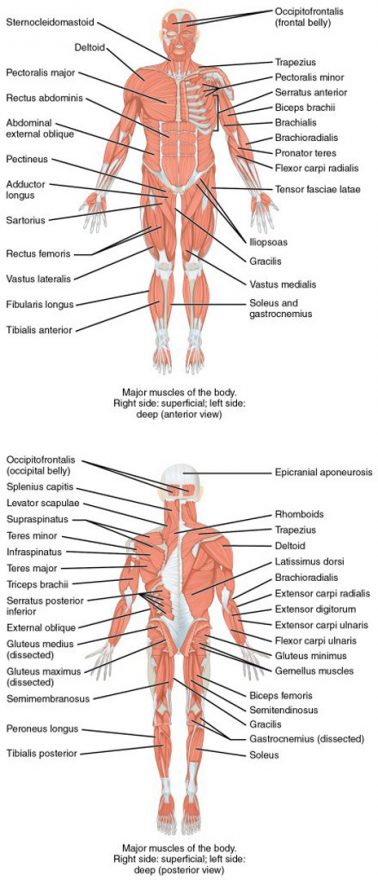
Latissimus dorsi

Orbicularis oculi

External oblique

Rectus abdominus





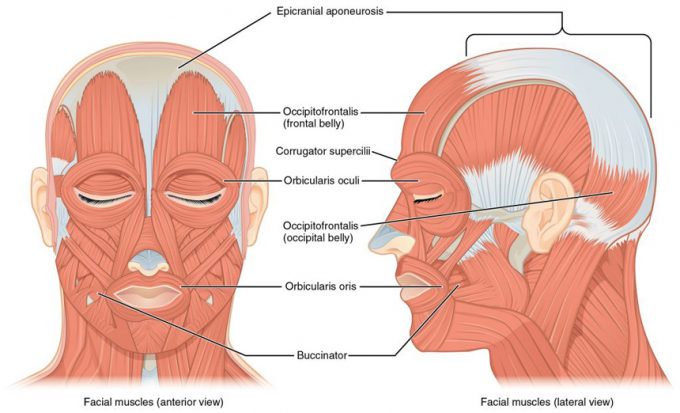
**Figure 11.31 – Overview of the Muscular System:** On the anterior and posterior views of the muscular system above, superficial muscles (those at the surface) are shown on the right side of the body while deep muscles (those underneath the superficial muscles) are shown on the left half of the body. For the legs, superficial muscles are shown in the anterior view while the posterior view shows both superficial and deep muscles.

| **Mnemonic Device for Latin Roots (Table 2)** | | |
| --- | --- | --- |
| **Example** | **Latin or Greek Translation** | **Mnemonic Device** |
| ad | to; toward | ADvance toward your goal |
| ab | away from | n/a |
| sub | under | SUBmarines move under water. |
| ductor | something that moves | A conDUCTOR makes a train move. |
| anti | against | If you are antisocial, you are against engaging in social activities. |
| epi | on top of | n/a |
| apo | to the side of | n/a |
| longissimus | longest | “Longissimus” is longer than the word “long.” |
| longus | long | long |
| brevis | short | brief |
| maximus | large | max |
| medius | medium | “Medius” and “medium” both begin with “med.” |
| minimus | tiny; little | mini |
| rectus | straight | To RECTify a situation is to straighten it out. |
| multi | many | If something is MULTIcolored, it has many colors. |
| uni | one | A UNIcorn has one horn. |
| bi/di | two | If a ring is DIcast, it is made of two metals. |
| tri | three | TRIple the amount of money is three times as much. |
| quad | four | QUADruplets are four children born at one birth. |
| externus | outside | EXternal |
| internus | inside | INternal |

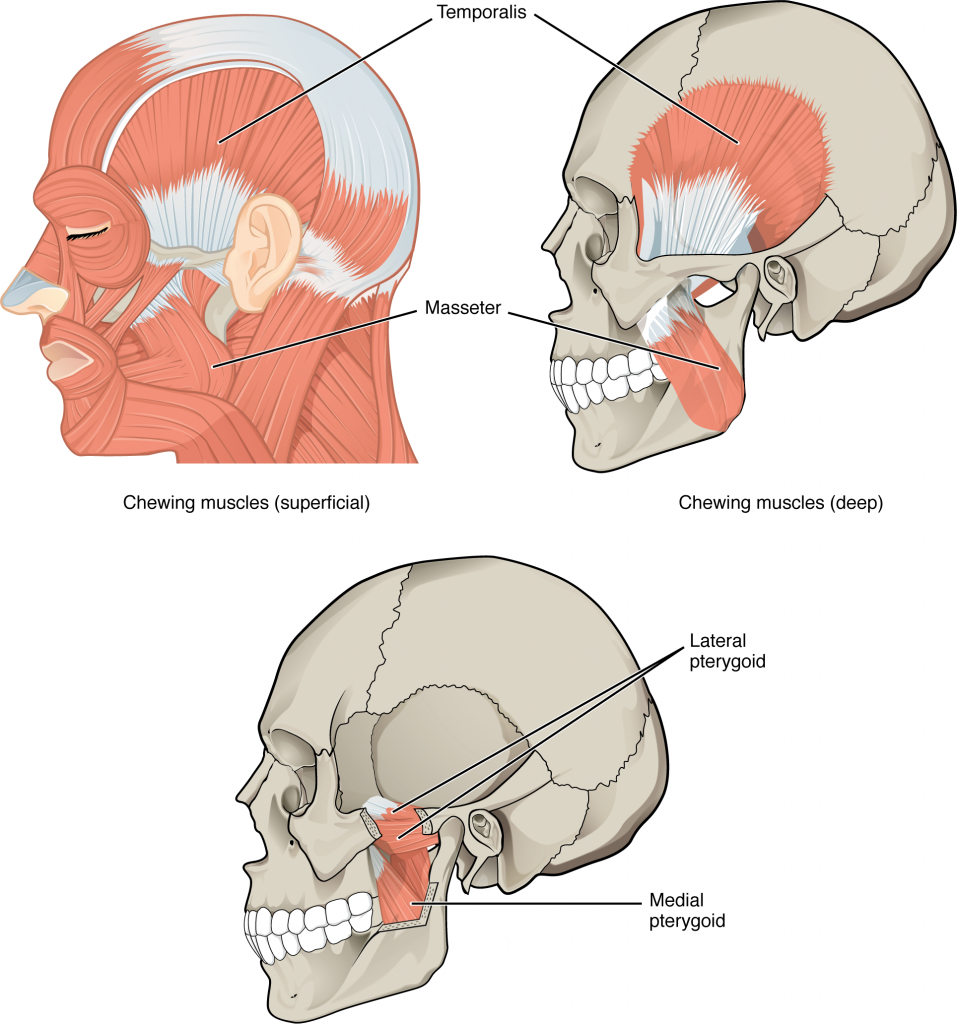
**Table 11.31**

Movement

Muscles of the Head

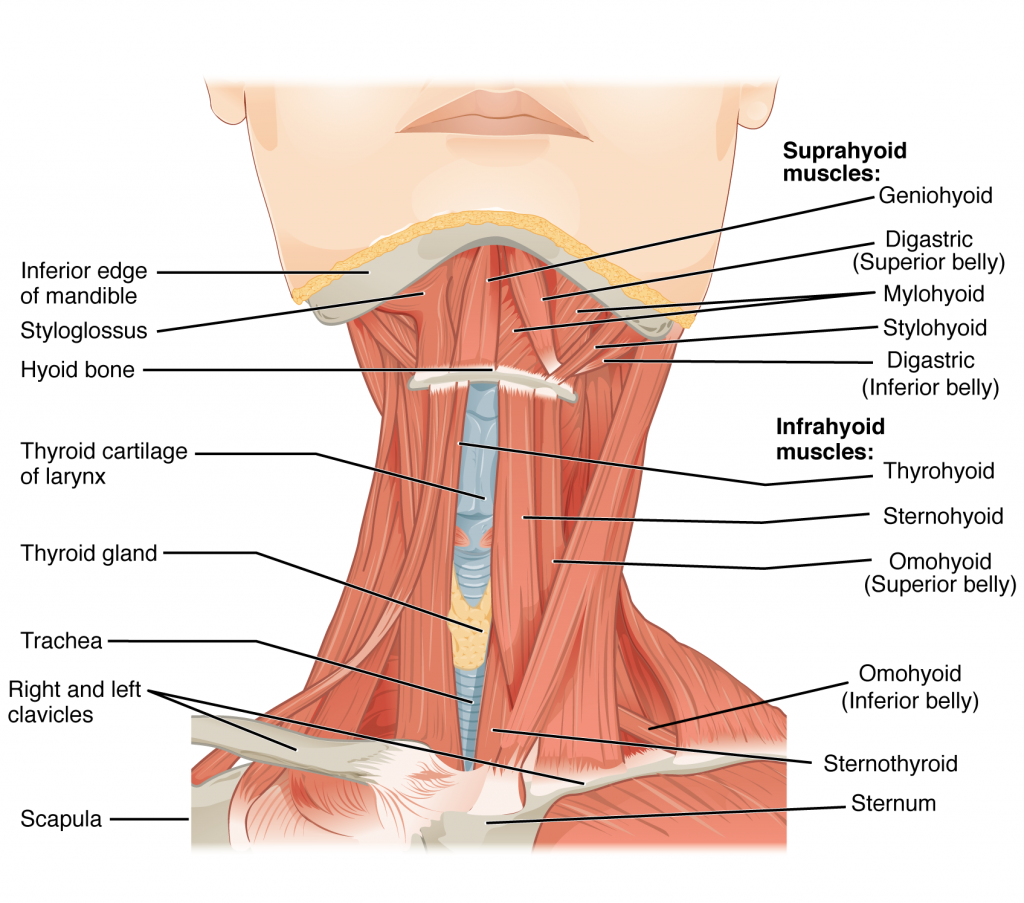


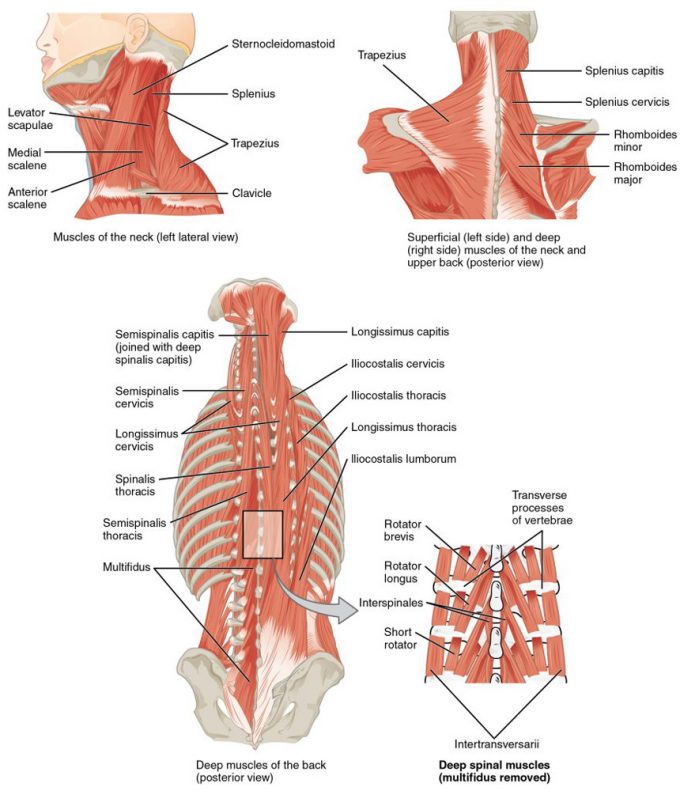
**Figure 1. Muscles of Facial Expression.** Many of the muscles of facial expression insert into the skin surrounding the eyelids, nose and mouth, producing facial expressions by moving the skin rather than bones.



**Figure 4. Muscles That Move the Lower Jaw.** The muscles that move the lower jaw are typically located within the cheek and originate from processes in the skull. This provides the jaw muscles with the large amount of leverage needed for chewing.

Muscles of the Neck and Shoulders

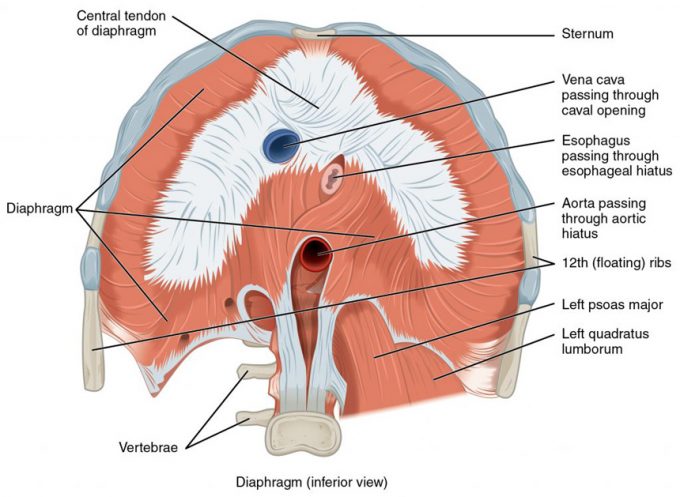


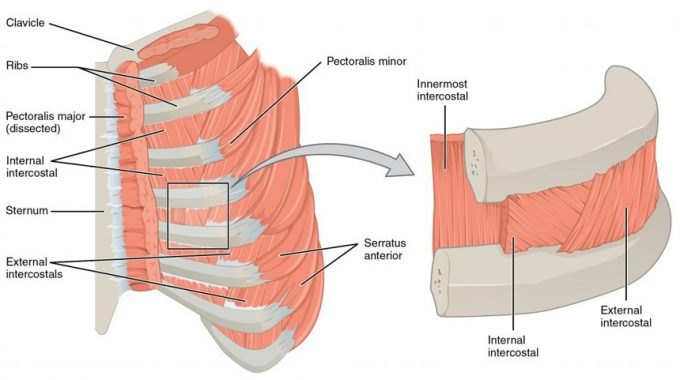
**Figure 7. Muscles of the Anterior Neck.**The anterior muscles of the neck facilitate swallowing and speech. The suprahyoid muscles originate from above the hyoid bone in the chin region. The infrahyoid muscles originate below the hyoid bone in the lower neck.

Muscles of the Abdomen

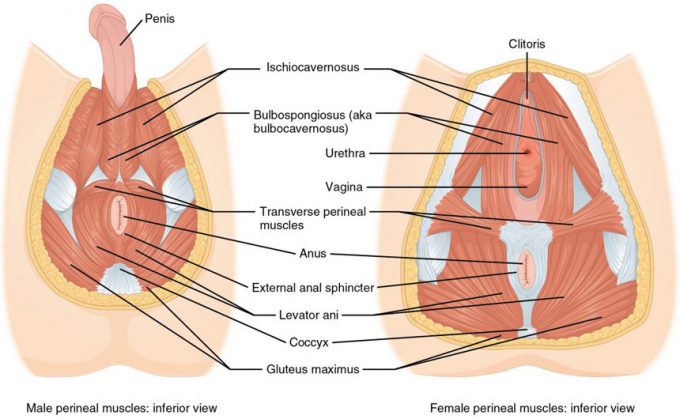


Respiratory Muscles





Pelvic Floor

Muscle of Arm and Leg