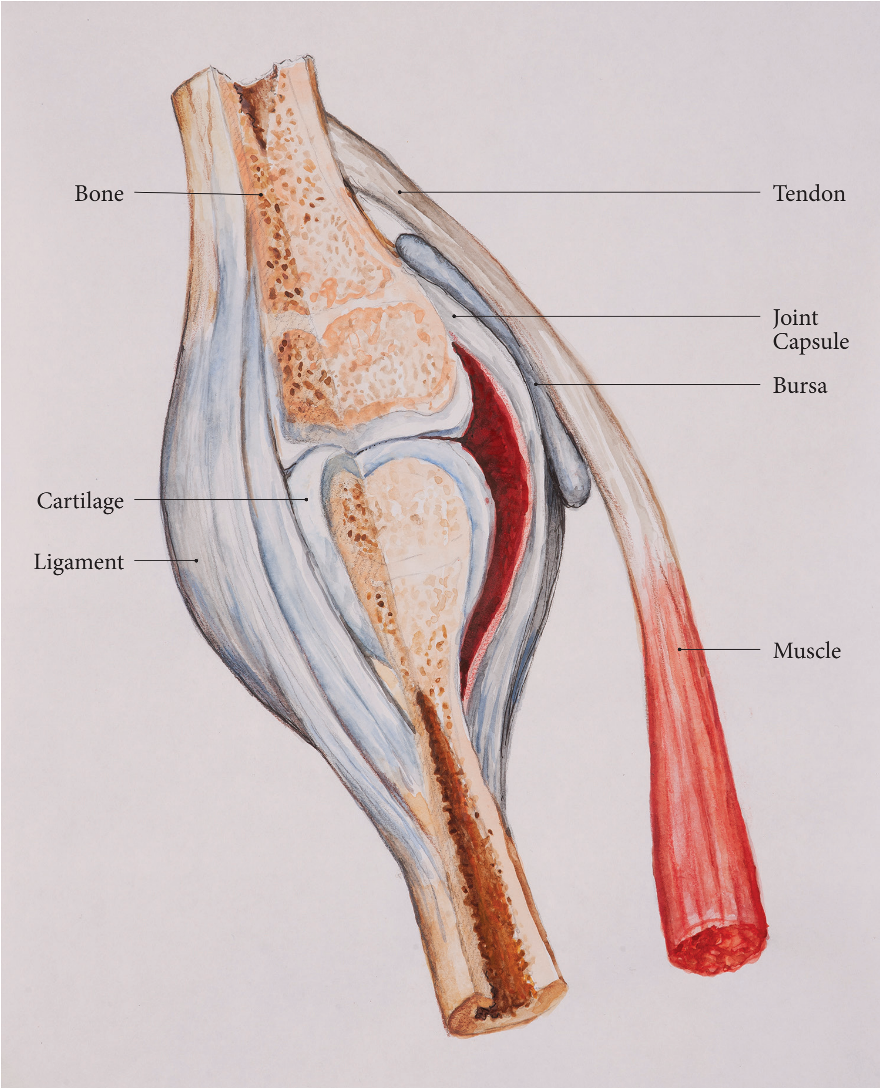


Figure 5-1. *Illustration of fascia and muscle around the joint*

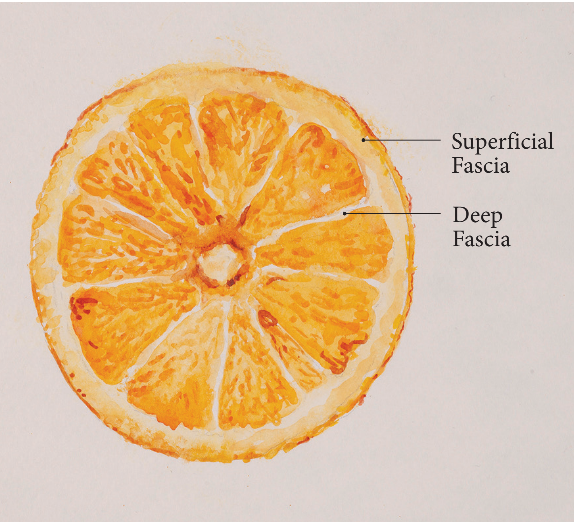


Figure 5-2.
The orange model of fascia

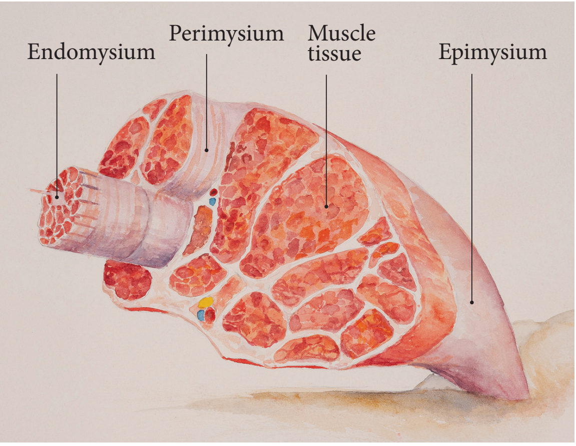


Figure 5-3.
Muscles and muscle cells reside inside pockets of fascia

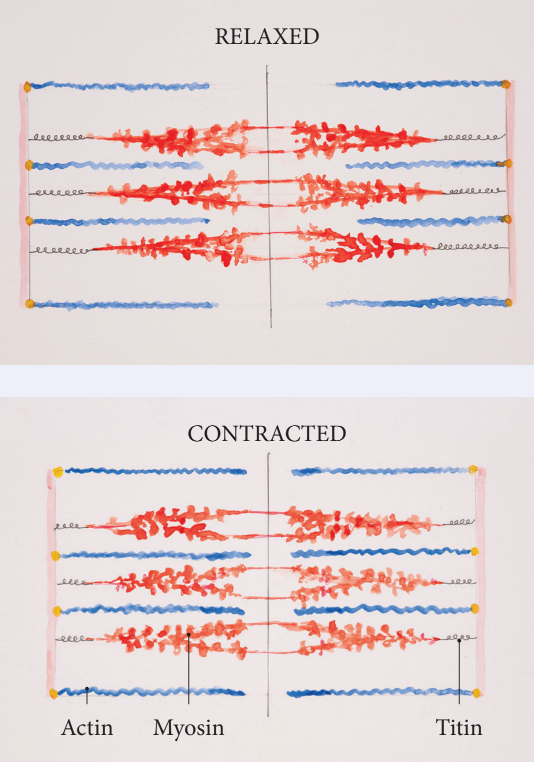


Figure 5-4.
Actin, myosin and titin within one sarcomere. Relaxed (top) shortened/contracted (bottom)

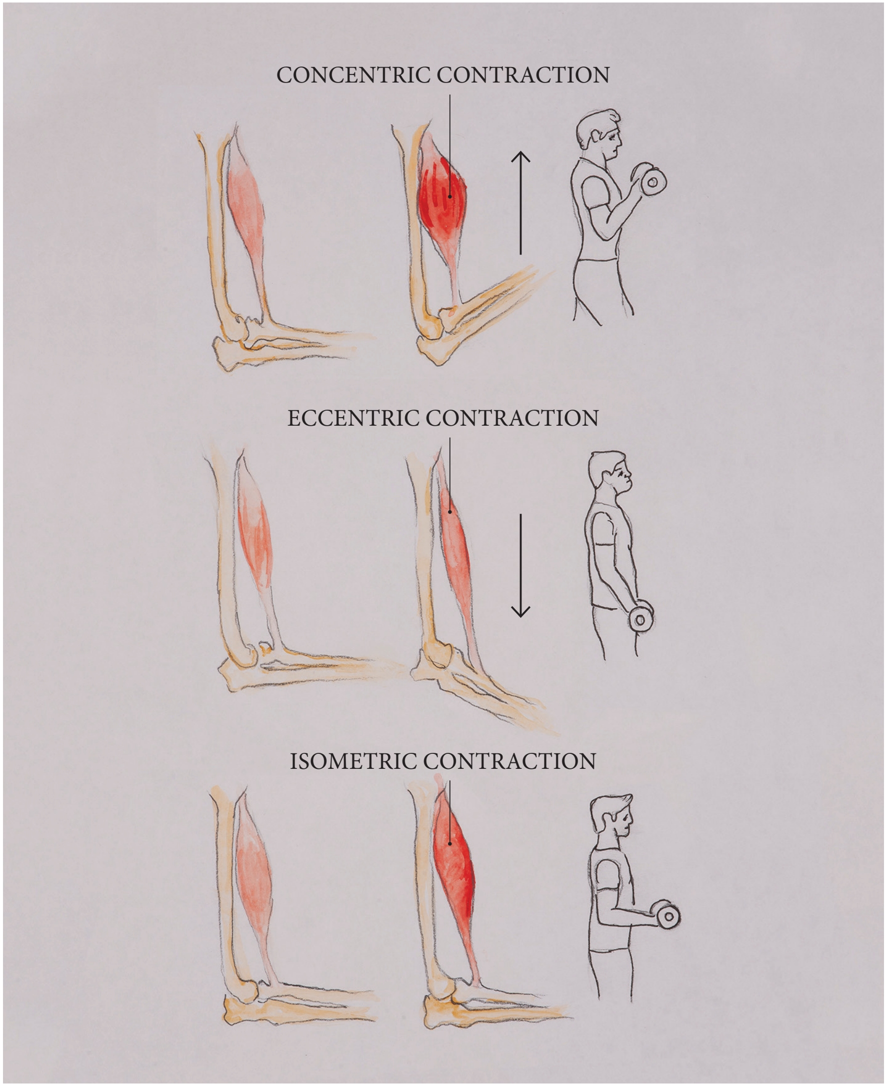


Figure 5-5. *Concentric, eccentric, and isometric muscle contraction*

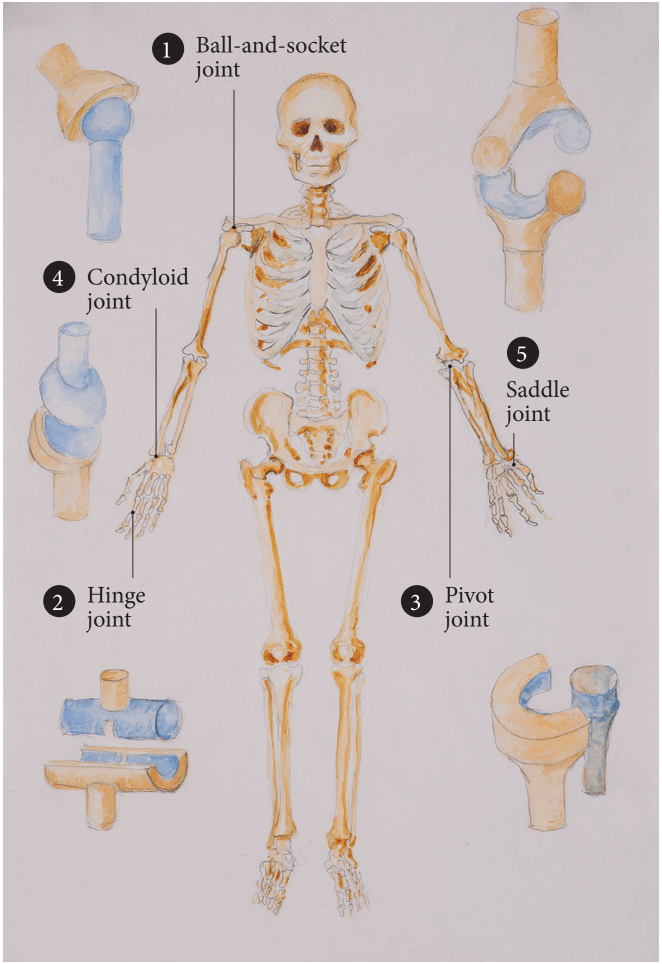


Figure 5-6.
Various types of joints

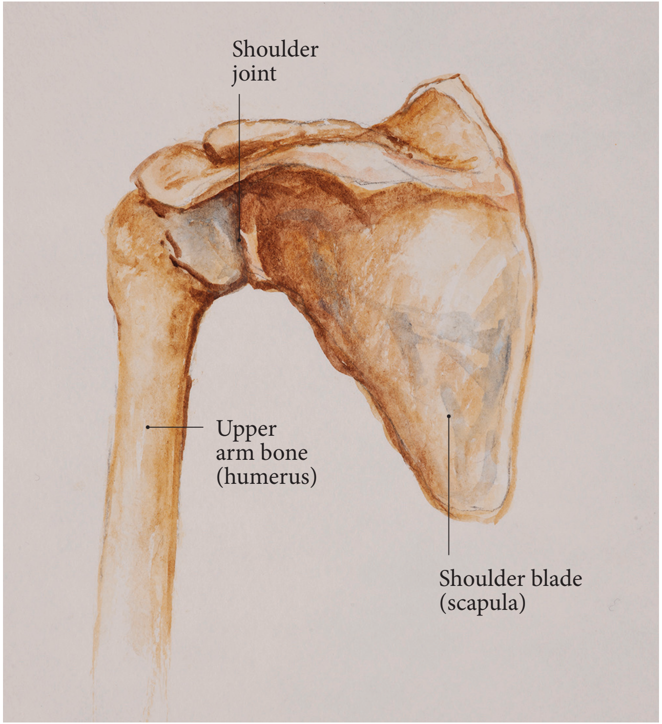


Figure 5-7.
The shoulder joint that connects the upper arm bone to the shoulder blade (left shoulder, posterior view)

Figure 5-8. *Bones and joints of the hand and the wrist, (right hand, palmar view)*

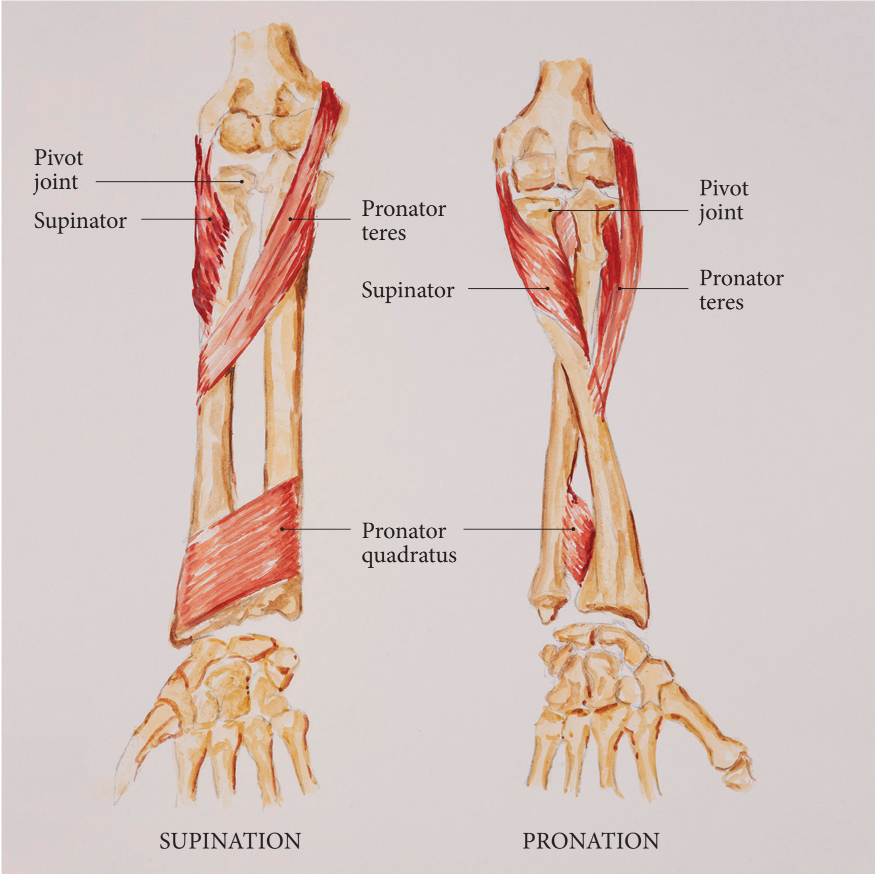


Figure 5-9. *Supination (left) and pronation (right), a movement in the pivot joint at the elbow (right hand, front view)*

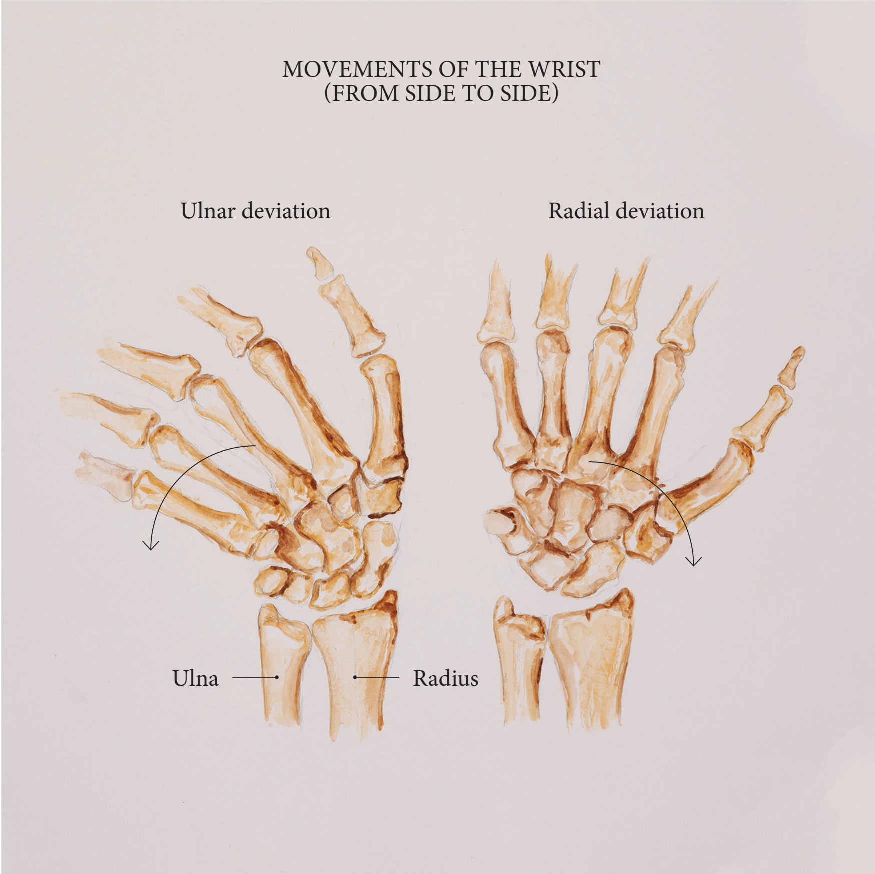


Figure 5-10. *Two of the movements of the wrist (from side to side - right hand, palmar view)*

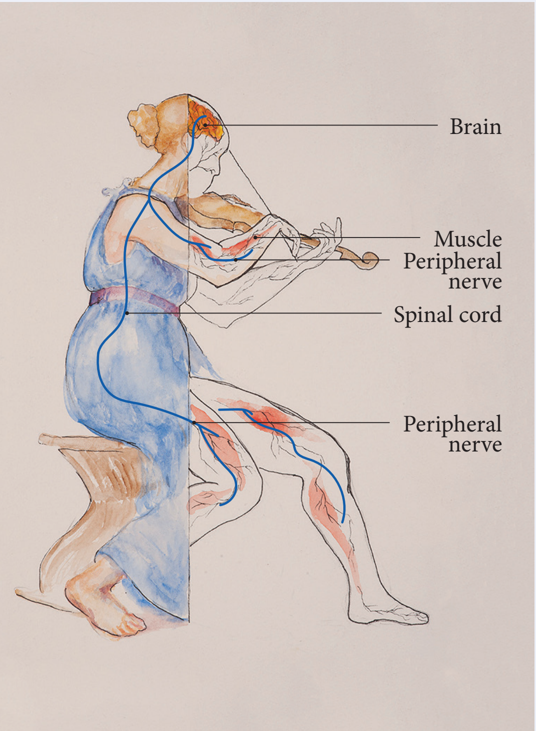


Figure 6-1.
The human nervous system simplified. The brain sends signals to the muscles to create movements, and the sensory neurons in the body send signals to the brain. This is a constant feedback loop

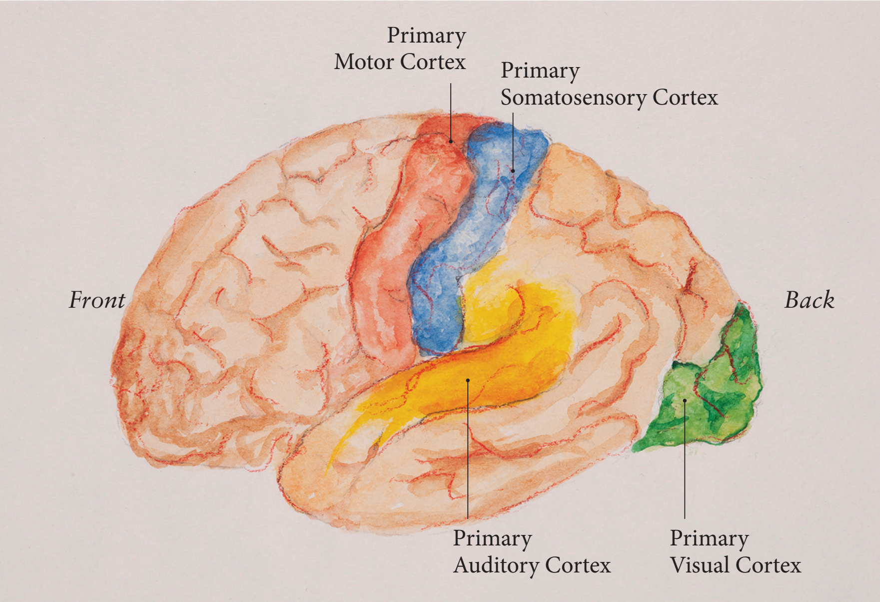


Figure 6-2. *Some of the areas of the human brain that are involved in movement and the processing of sensory input*

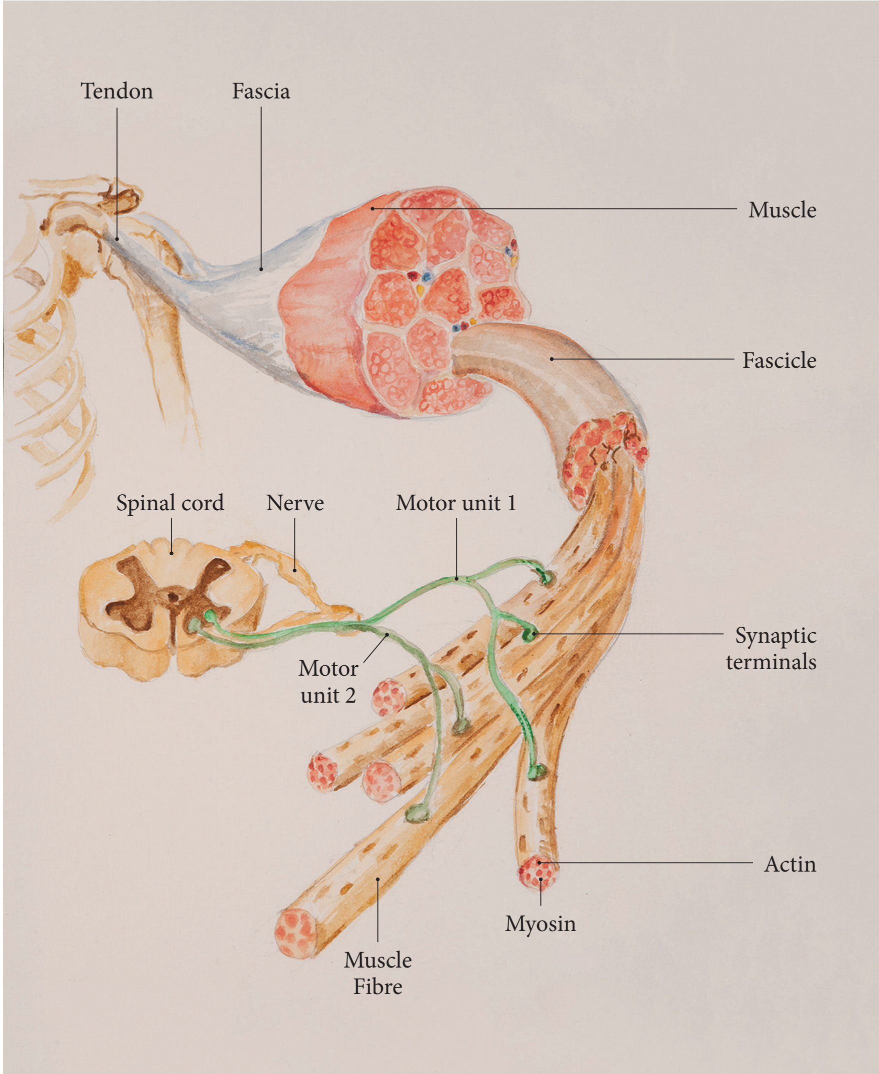


Figure 6-3. *Nerve signal transmission from the spinal cord to the muscle cells*

Figure 6-4.
The "volume control." The Type I muscle fibers are typically the first to engage when resistance is low. This is followed by the Type II and Type IIx, which are used when the body needs to apply sudden or large amounts of force

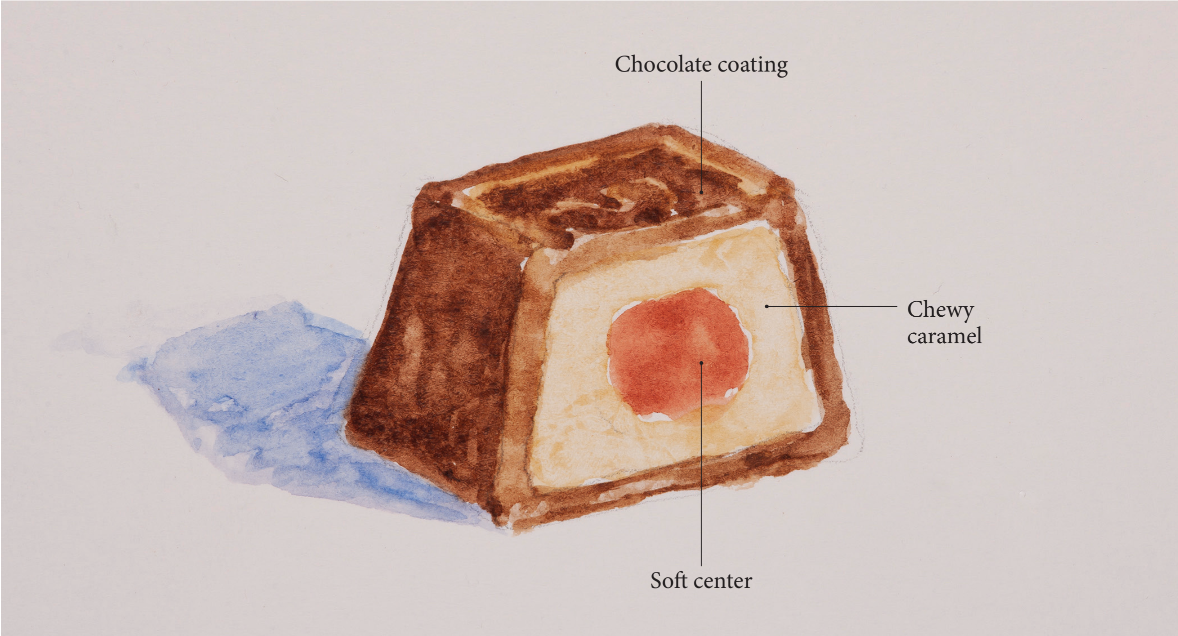


Figure 7-1. *The chocolate-covered caramel—a simplified model illustrating the different potentials that musicians can access in different parts of the body. It includes the soft center for ease of breathing; the chewy caramel for maintaining posture, balance, repetitive motions and stability; and the chocolate coating for relaxing and sensing weight*

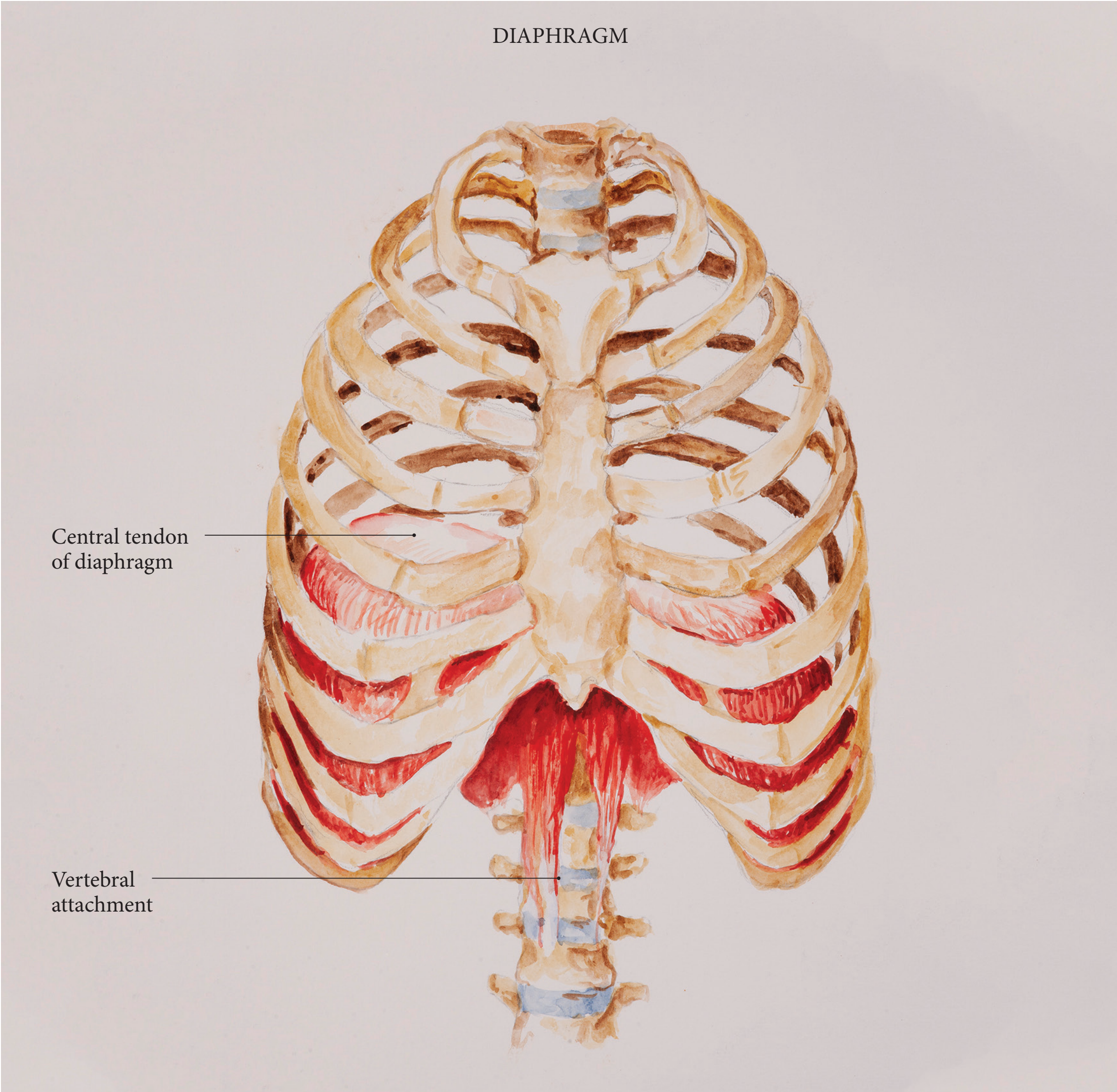


Figure 7-2.
The diaphragm situated in the chest. It separates the chest cavity from the abdominal cavity and is the main muscle for inhalation

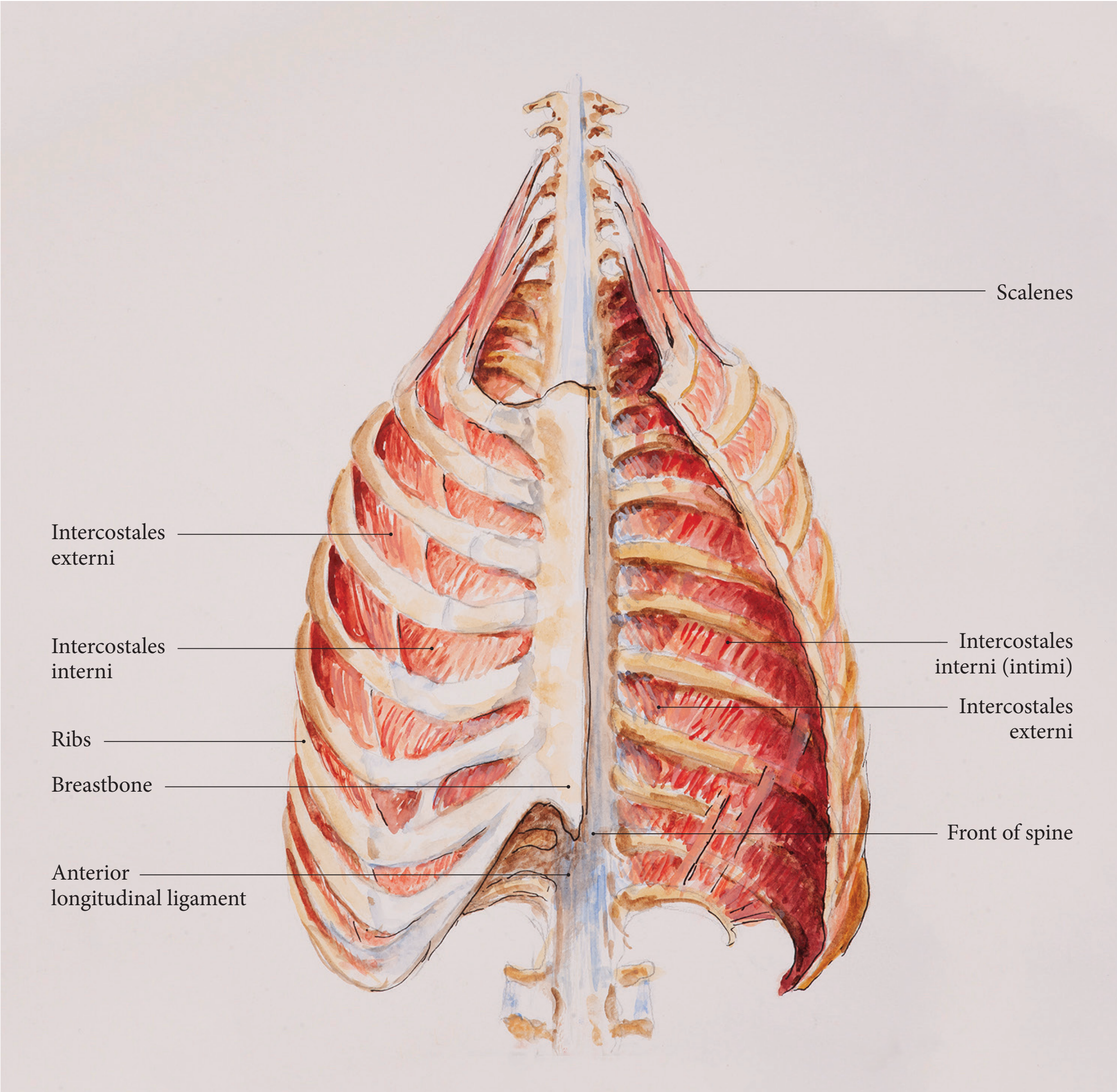


Figure 7-3. *The intercostal muscles situated in two to three layers between the ribs. They're important muscles for breathing*

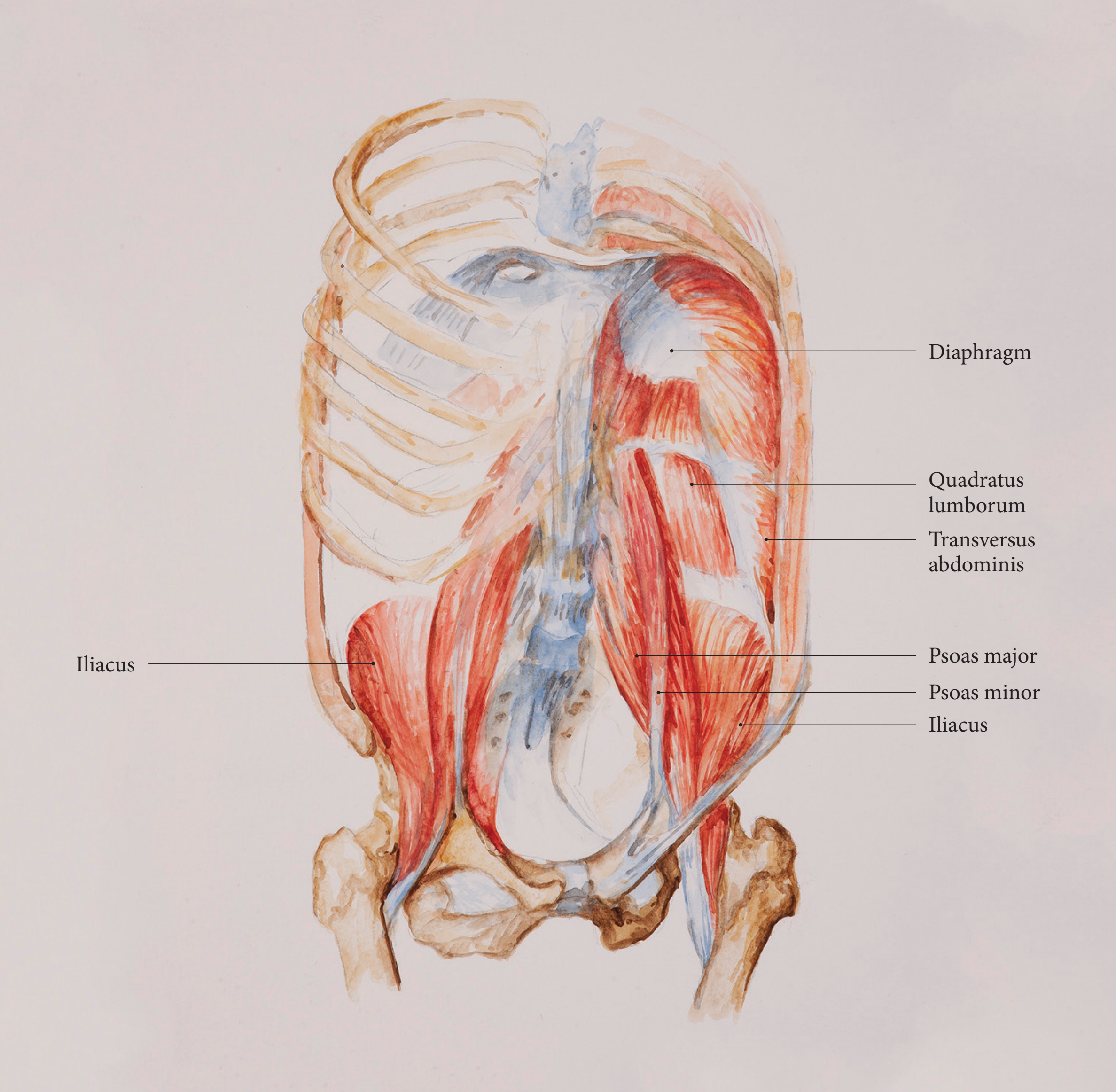


Figure 7-4. *Psoas major and the surrounding muscles in the posterior abdominal wall. View from the front. It stabilizes the spine and helps create a sense of deep breathing through the fascial connections*

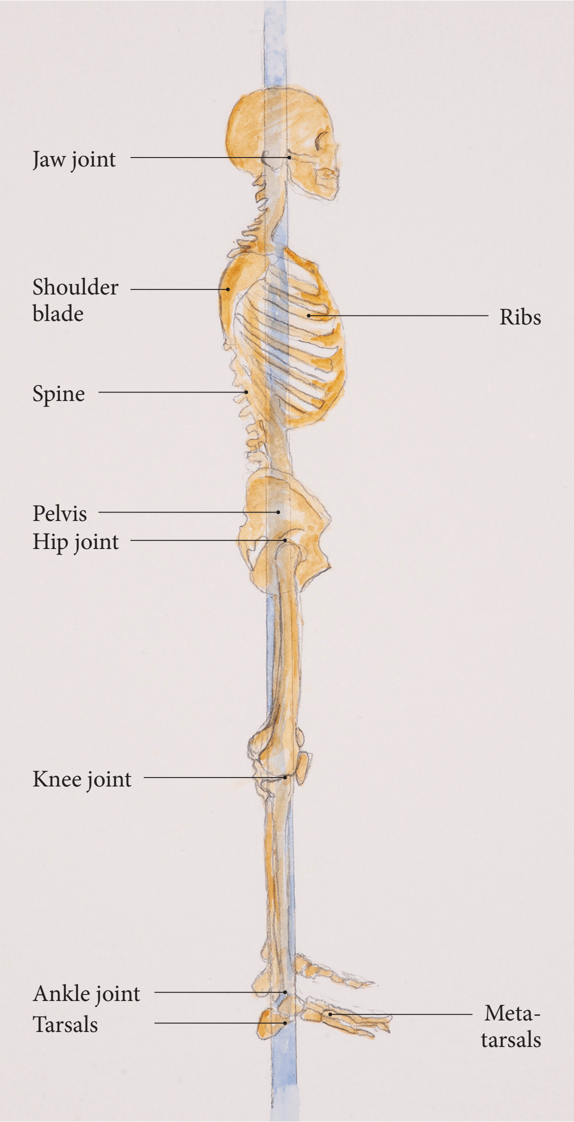


Figure 7-5.
The skeleton aligned
in a plumb line

Figure 7-6.
The transverse abdominis muscle (left side), forming the innermost layer of the abdominal wall

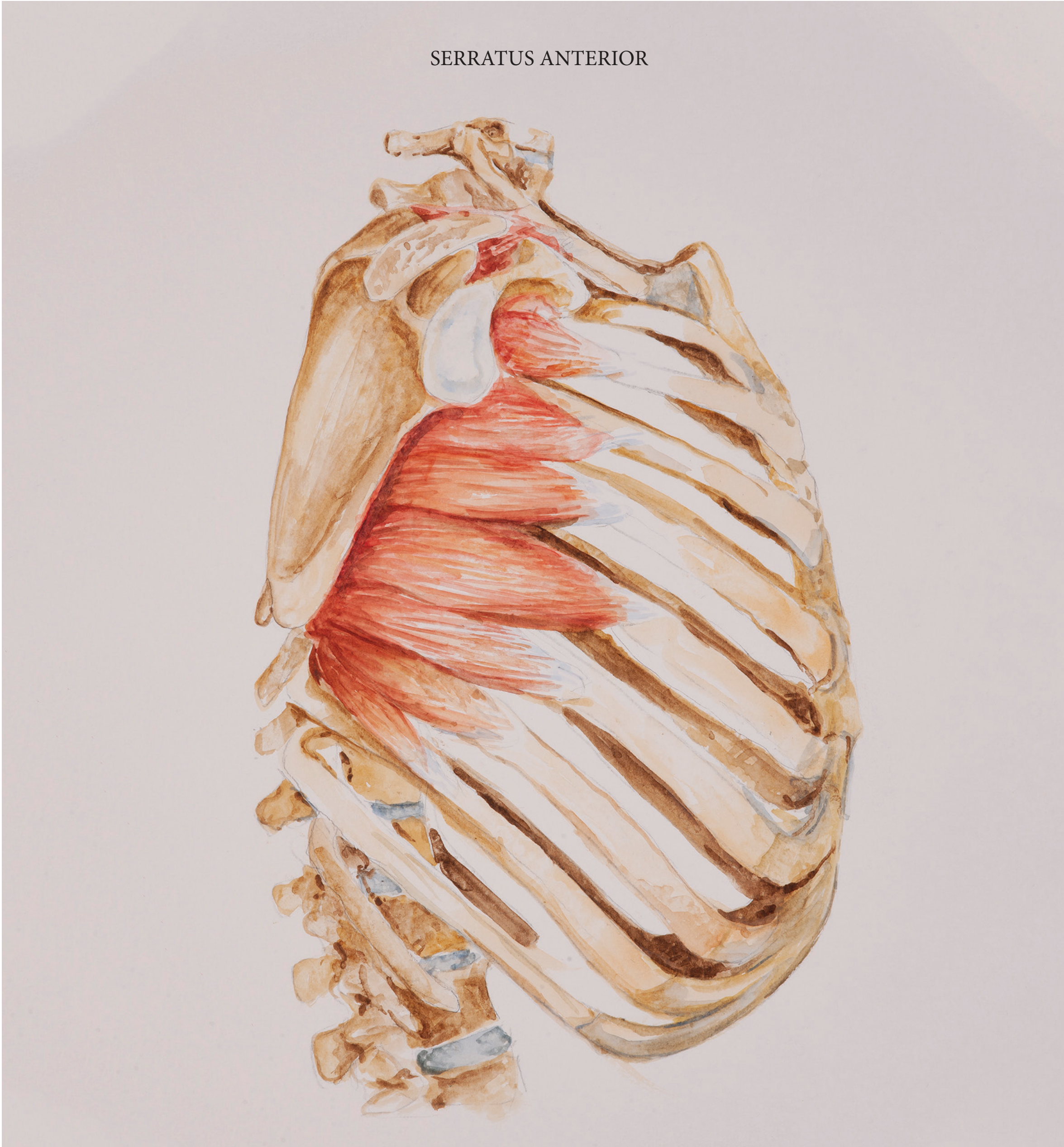


Figure 7-7.
The serratus anterior muscle, important for shoulder blade mobility, stability and breathing

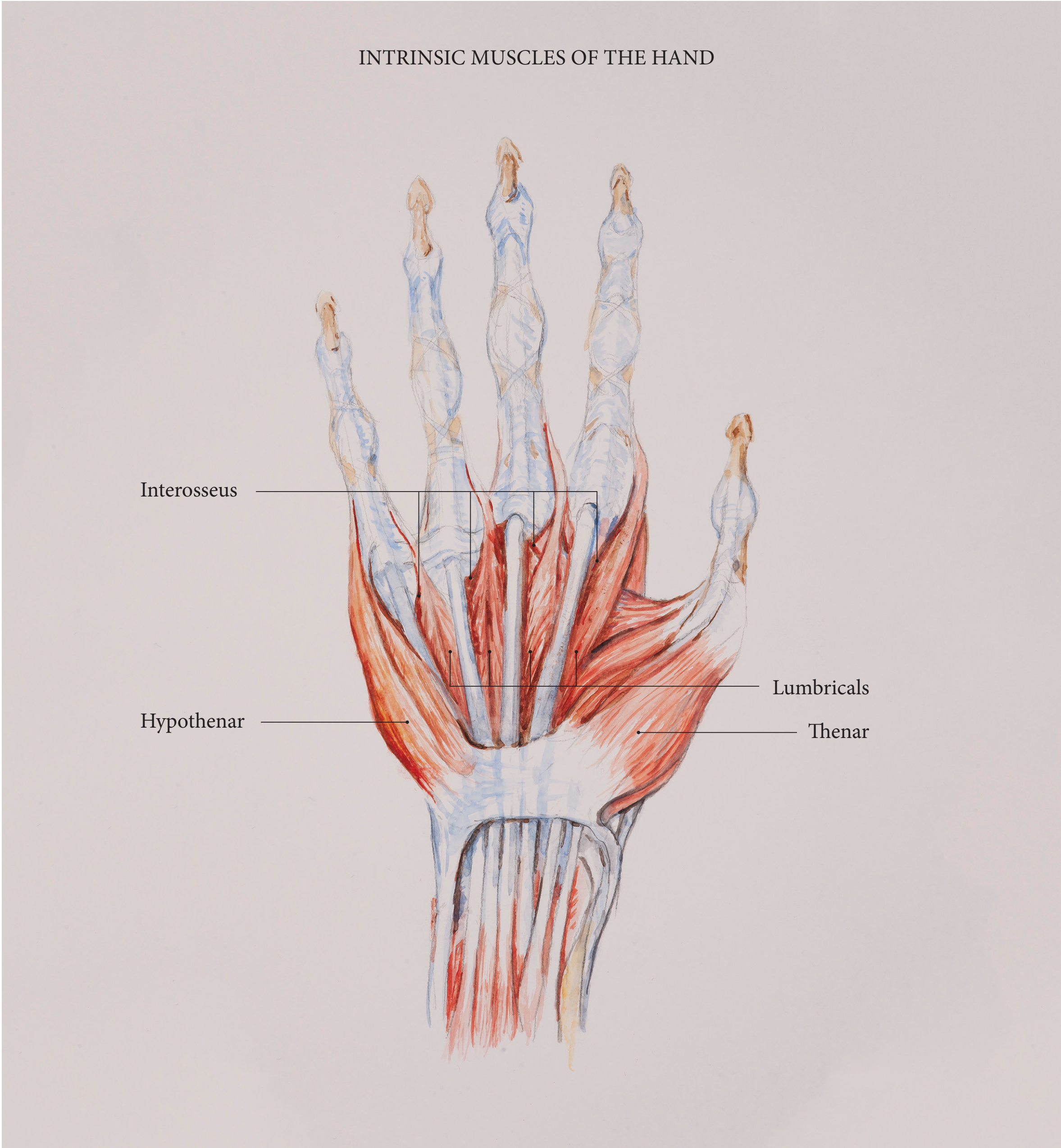


Figure 7-8.
The intrinsic muscle groups of the hand for controlling finger movements. The interosseus lie deeper than the lumbricals between the metacarpals

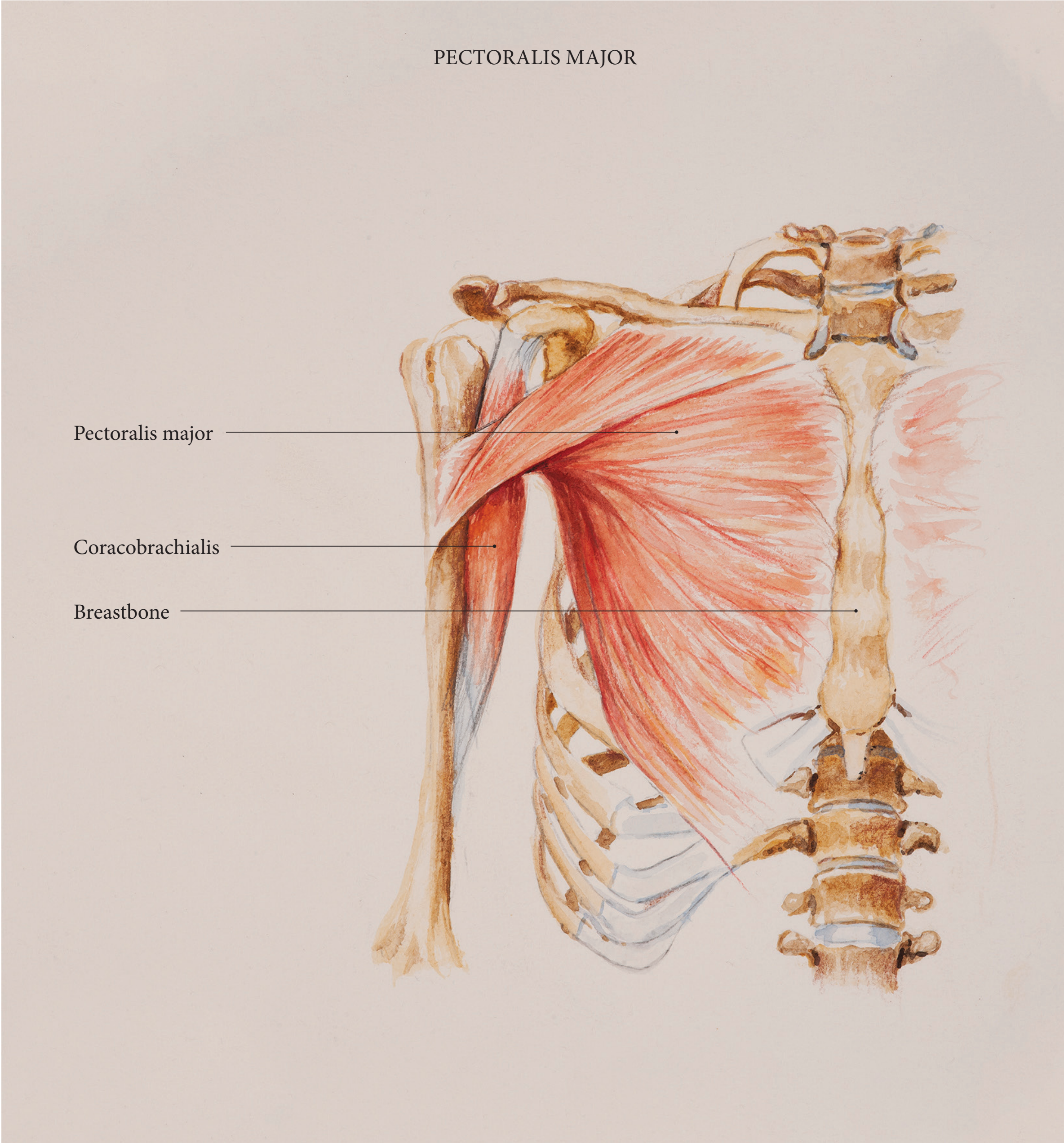


Figure 7-9.
The large chest muscle, pectoralis major, mainly responsible for various arm movements

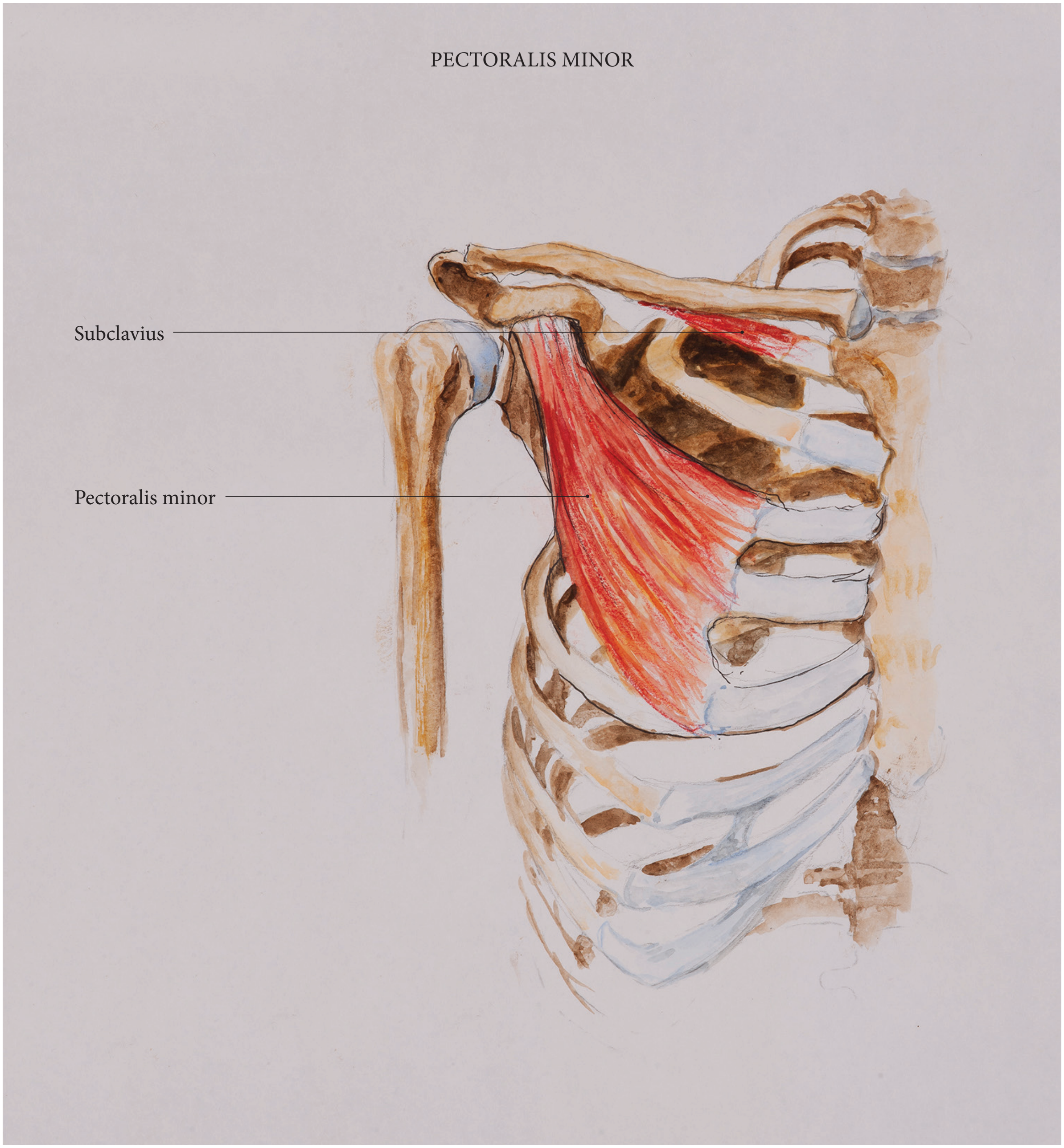


Figure 7-10.
The small chest muscle, pectoralis minor, situated under the pectoralis major, is responsible for shoulder blade movements and assists in inhalation

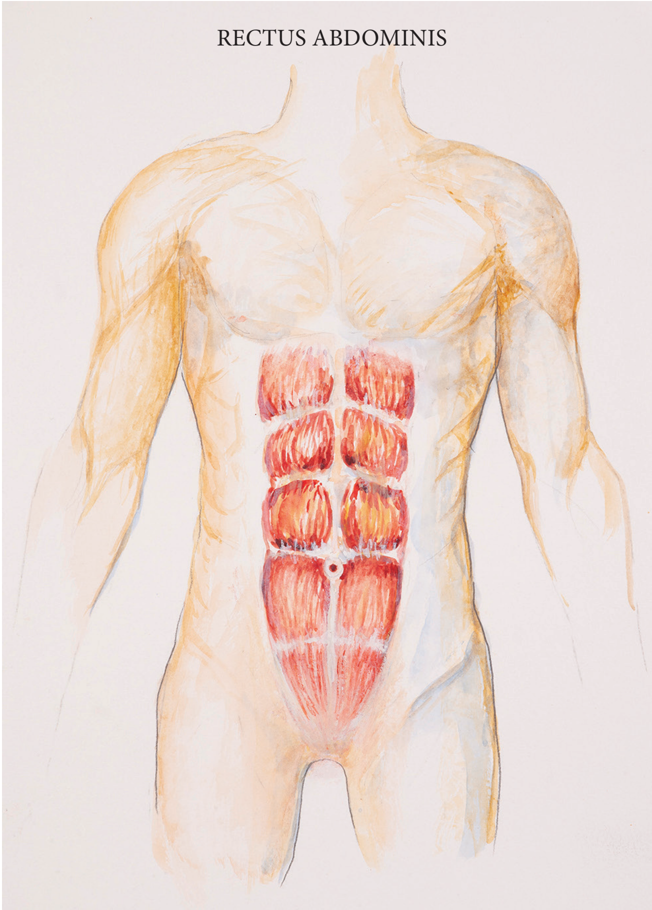


Figure 7-11.
The rectus abdominis muscle, known as the "six-pack". It flexes the spine and contributes during forced exhalation (exhalation against resistance)

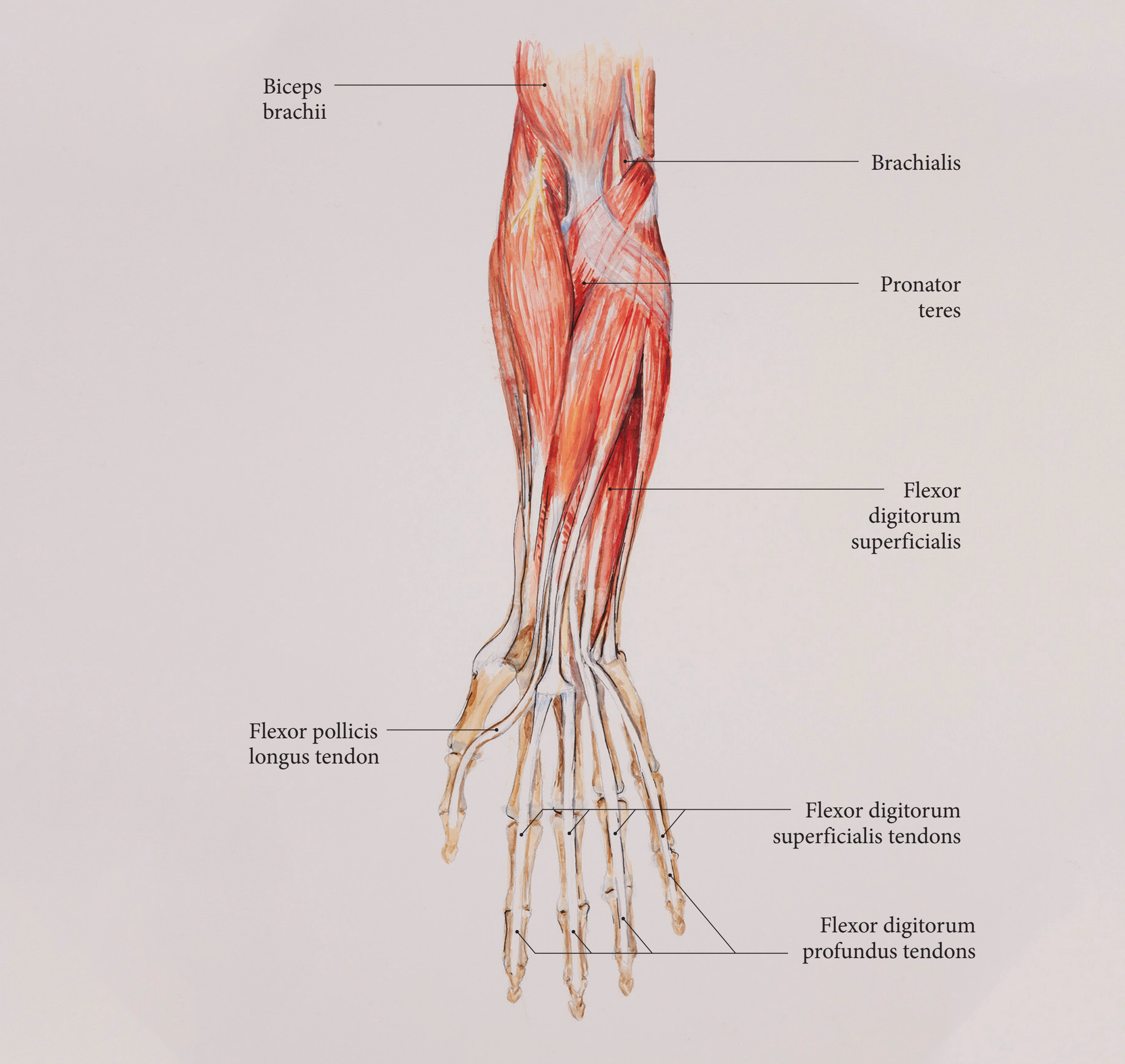


Figure 7-12. *Muscles in the forearm (right hand, palmar view)*

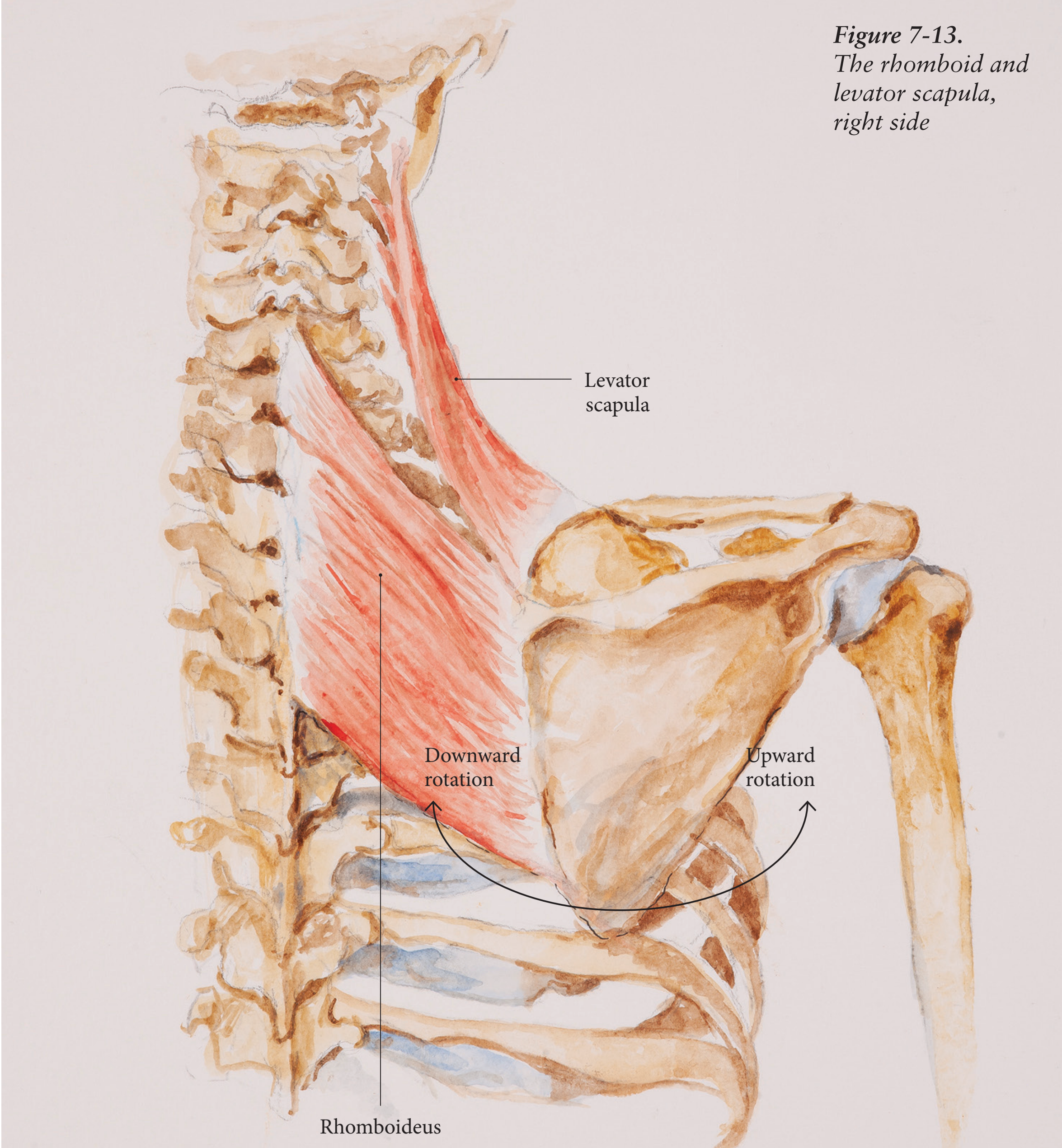


Figure 7-13. *The rhomboid and levator scapula, right side*

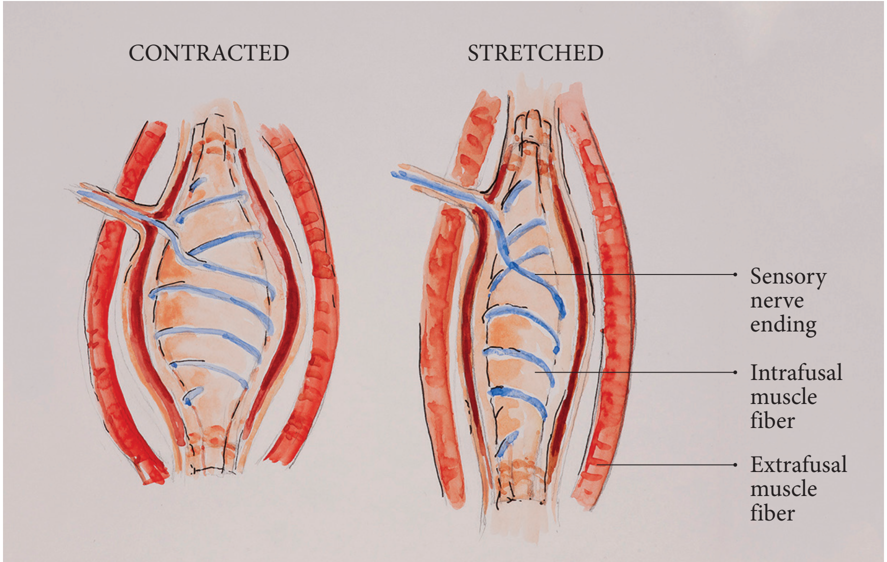


Figure 8-1.
A muscle spindle, which detects if the muscle is contracted or stretched by sensing the amount of stretch in the muscle through the sensory nerve endings

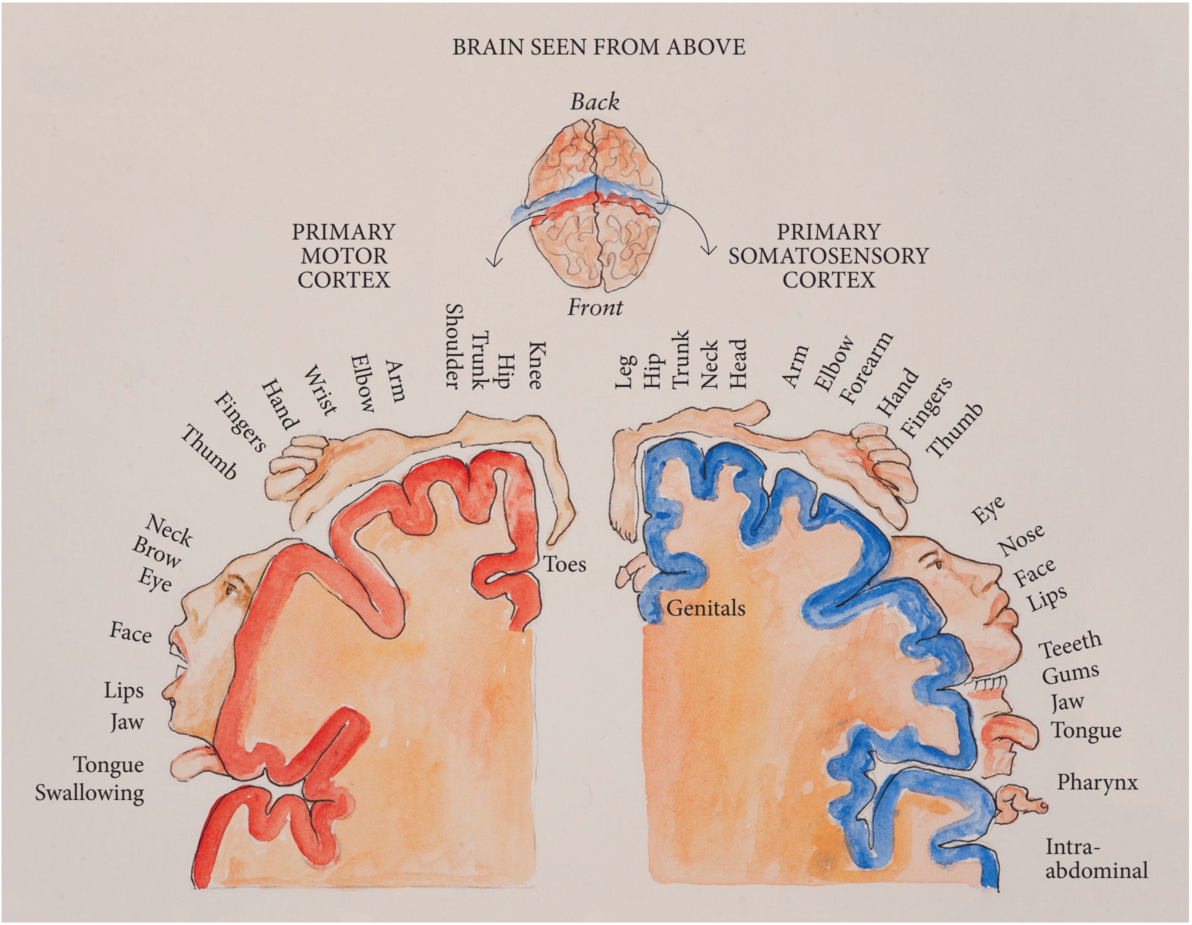


Figure 8-2.
The primary motor cortex (in red), showing the representation of the body parts and where the organization of their movement tasks is coordinated in the brain, and the primary somatosensory cortex (in blue), showing where the sensory input reaches the brain

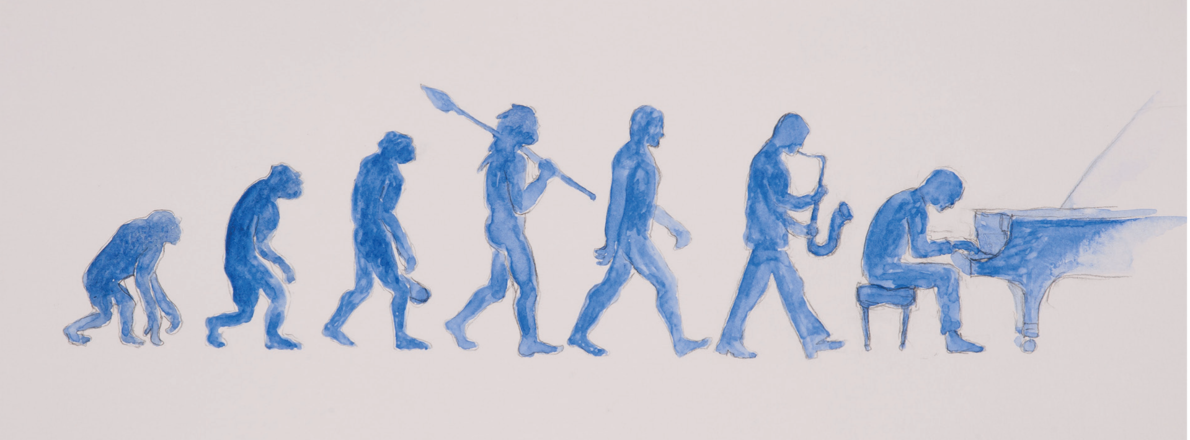
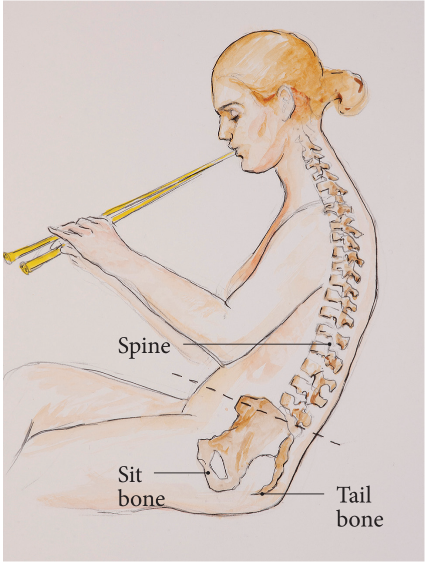


Figure 10-0-1. *Left: Position of the pelvis when slouching*

Figure 10-0-2. *Right: Position of the pelvis when sitting balanced*



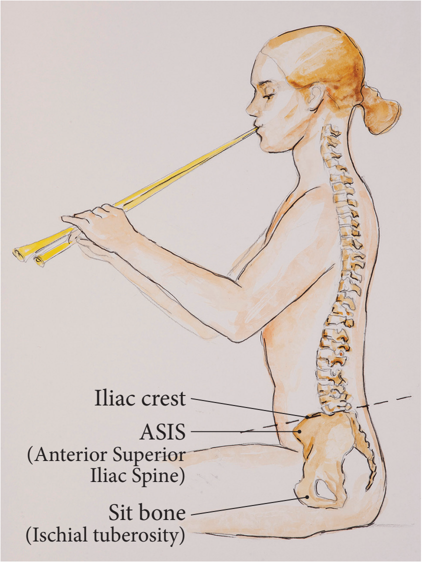


Figure 10-2-1.

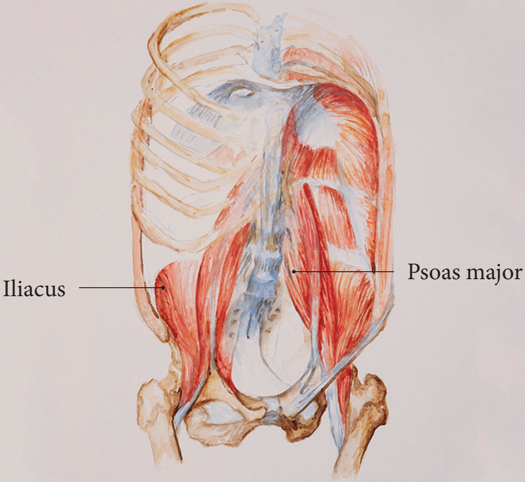
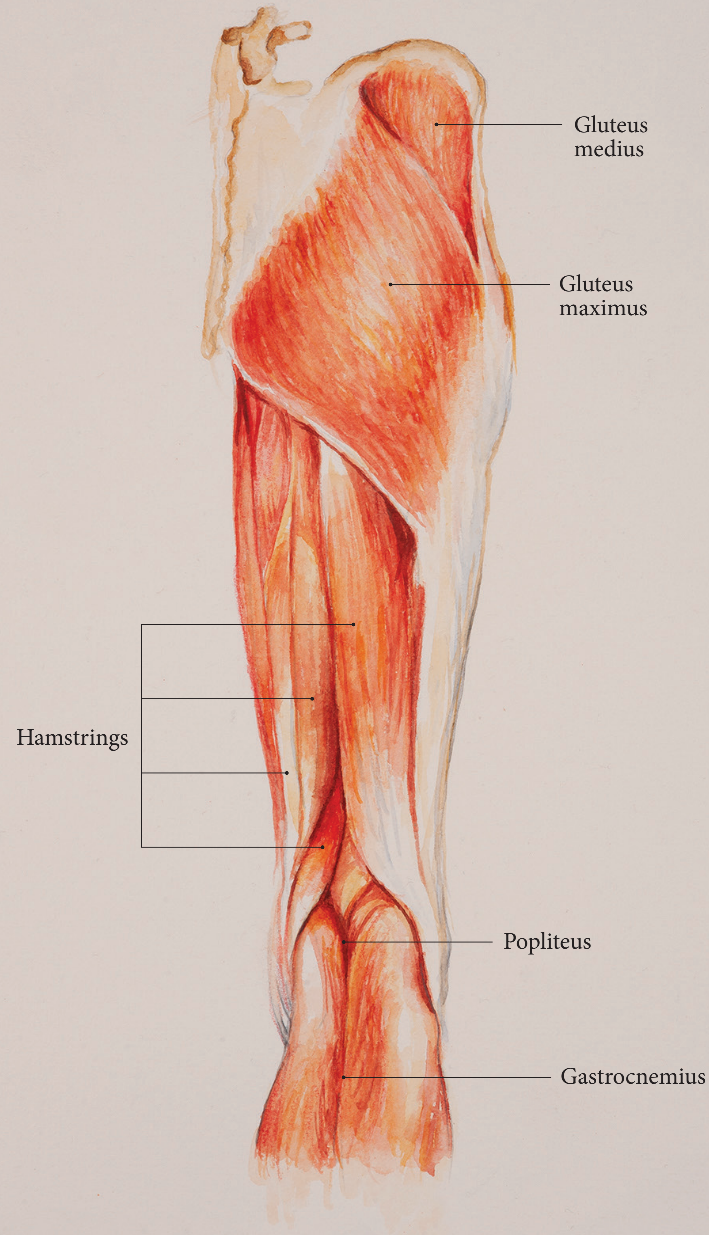


Figure 11-0-9.



Gluteus medius
Gluteus maximus
Hamstrings
Popliteus
Gastrocnemius

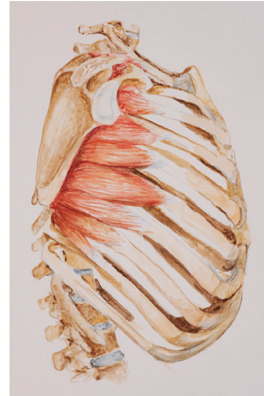


Figure 12-0-1.
Serratus anterior

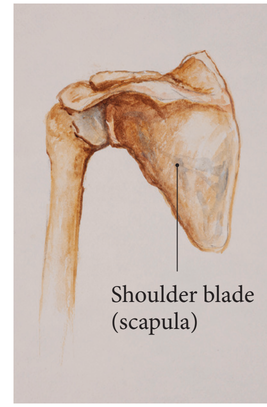


Figure 12-0-2.

Figure 12-0-3. *Top*
Figure 12-0-4. *Bottom*

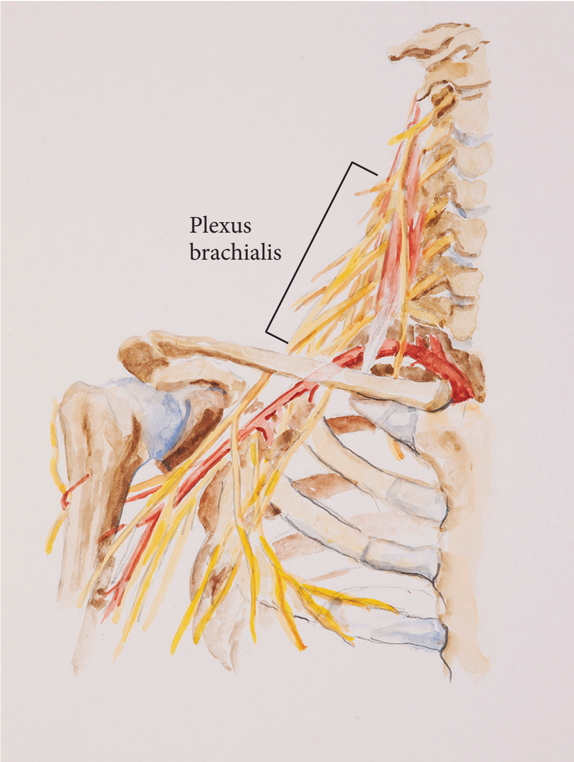


Figure 12-0-5. *Nerves extending from the neck to the arm, hands and fingers*

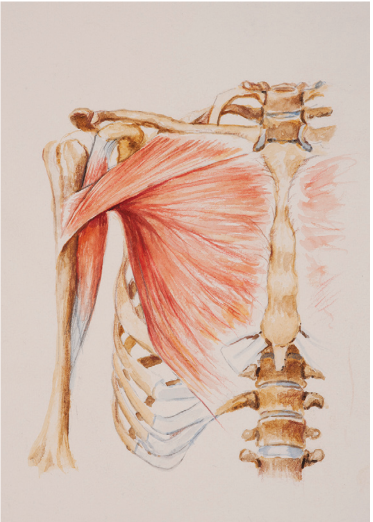


Figure 12-0-6.
Pectoralis major

Figure 12-0-7.
Pectoralis minor

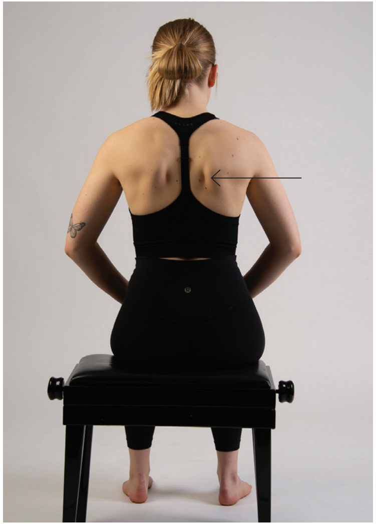
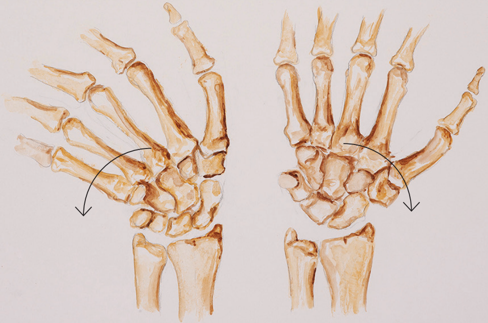


Figure 12-0-8.
Lower corner of the shoulder blade sticking out

Figure 12-1-4.



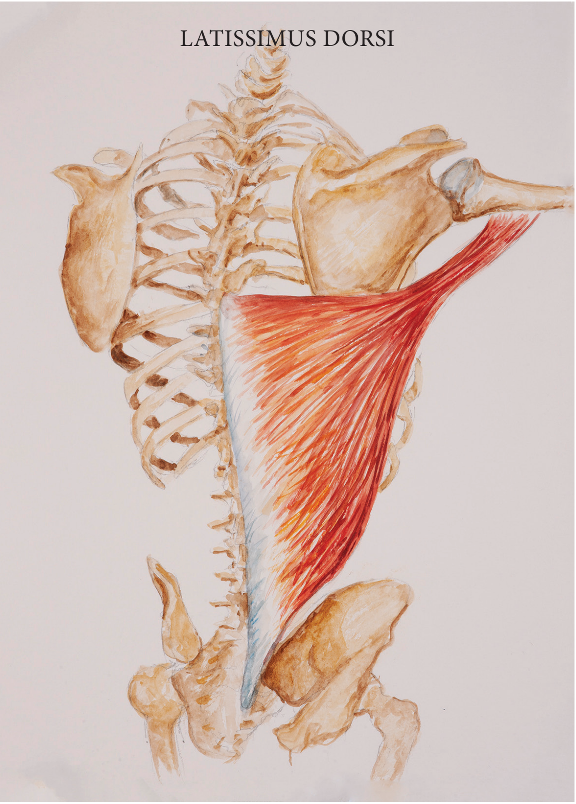


Figure 12-2-1.

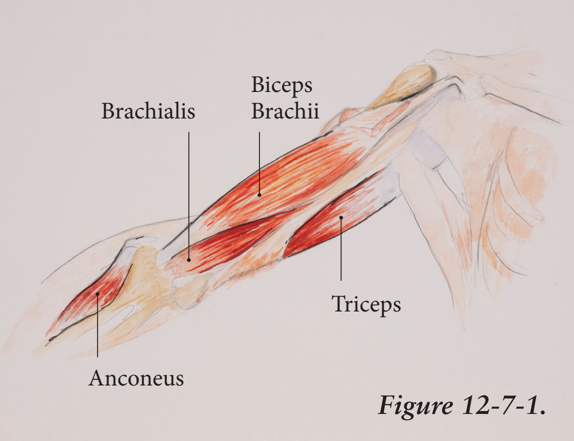


Figure 12-7-1.

Figure 12-7-6.

Figure 12-7-7.

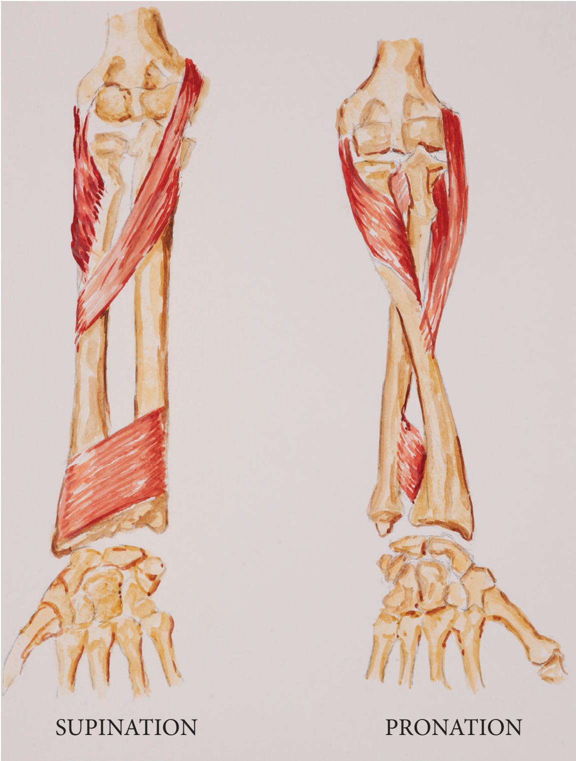


Figure 12-7-8.

Figure 12-8-1.

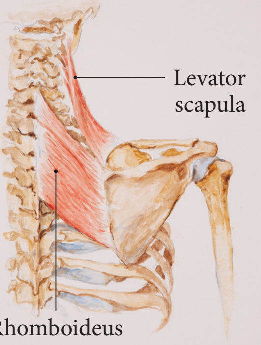


Figure 13-0-1.
Intrinsic muscles of the hand

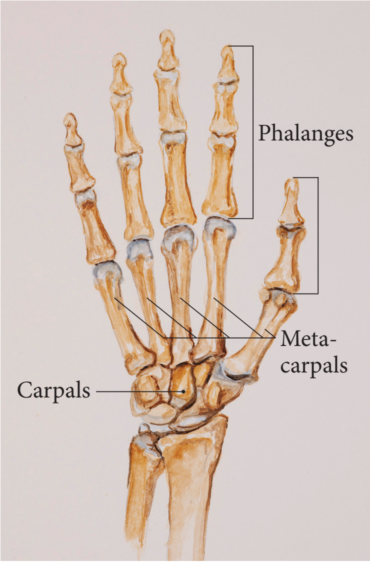


Figure 13-0-2.
Hand skeleton


Figure 13-0-4.

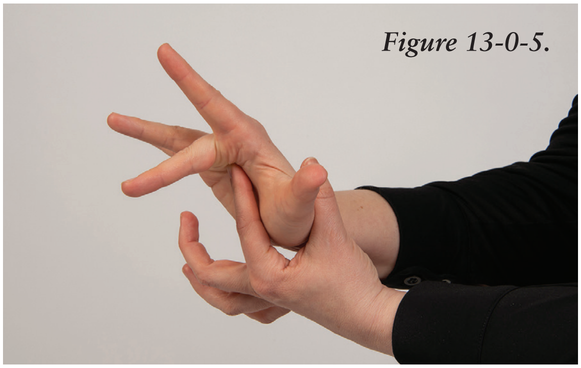


Figure 13-0-5.


Figure 13-0-6.
Extrinsic muscles of the wrist and fingers

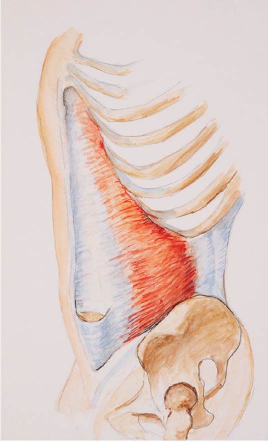


Figure 14-0-1.
Transverse abdominis

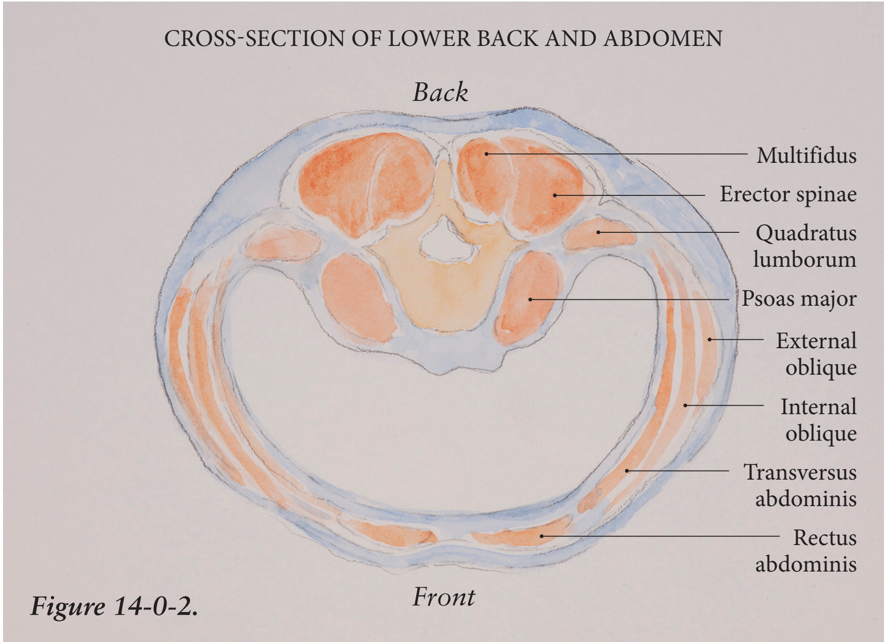


Figure 14-0-2.

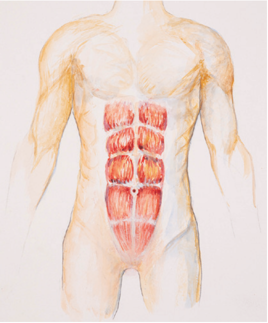
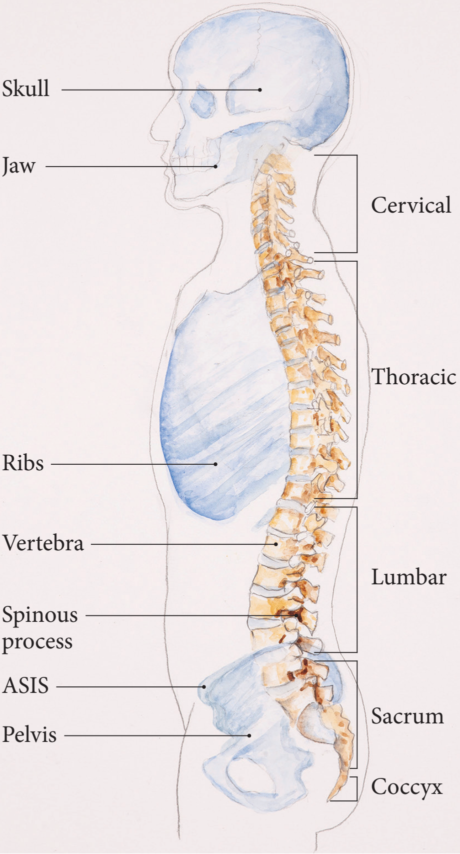


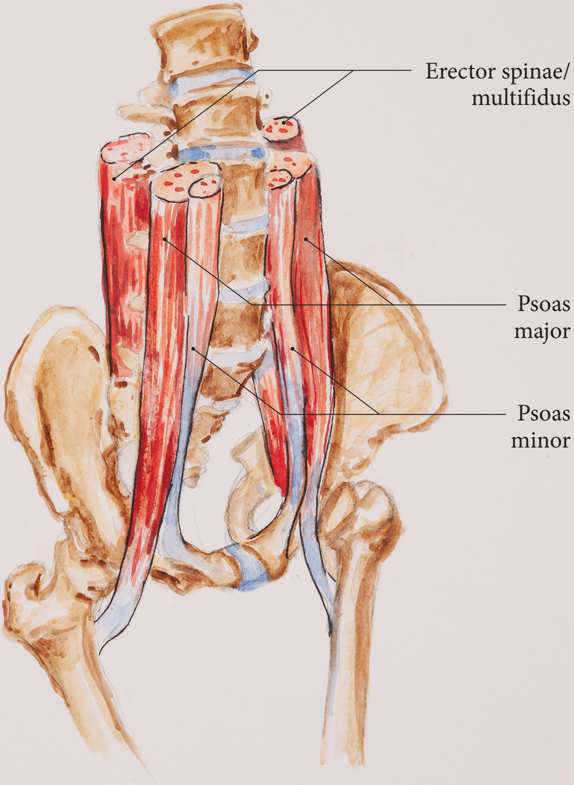
Figure 14-0-3.
Rectus abdominis

Figure 14-0-4.



Skull
Jaw
Ribs
Vertebra
Spinous process
ASIS
Pelvis
Cervical
Thoracic
Lumbar
Sacrum
Coccyx

Figure 14-0-5.



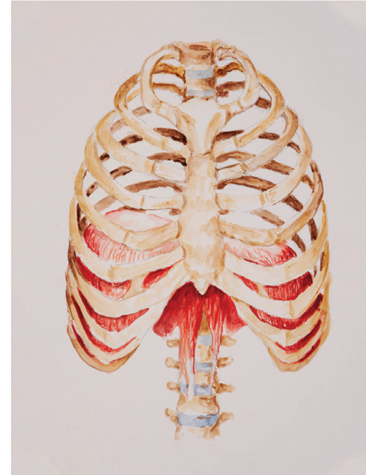


Figure 15-0-1. Diaphragm

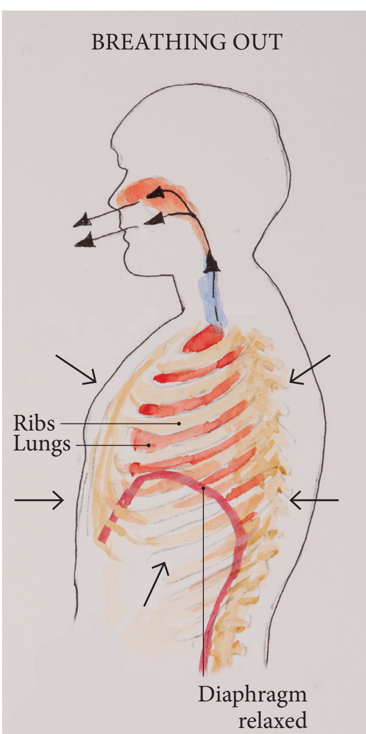


Figure 15-0-2A.

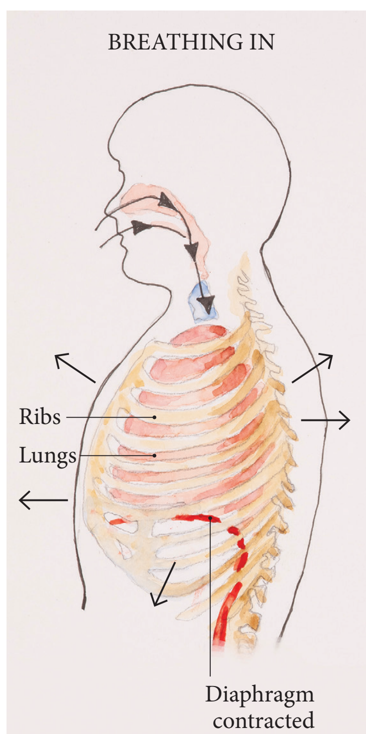


Figure 15-0-2B.

Figure 15-0-3.
The intercostal muscles

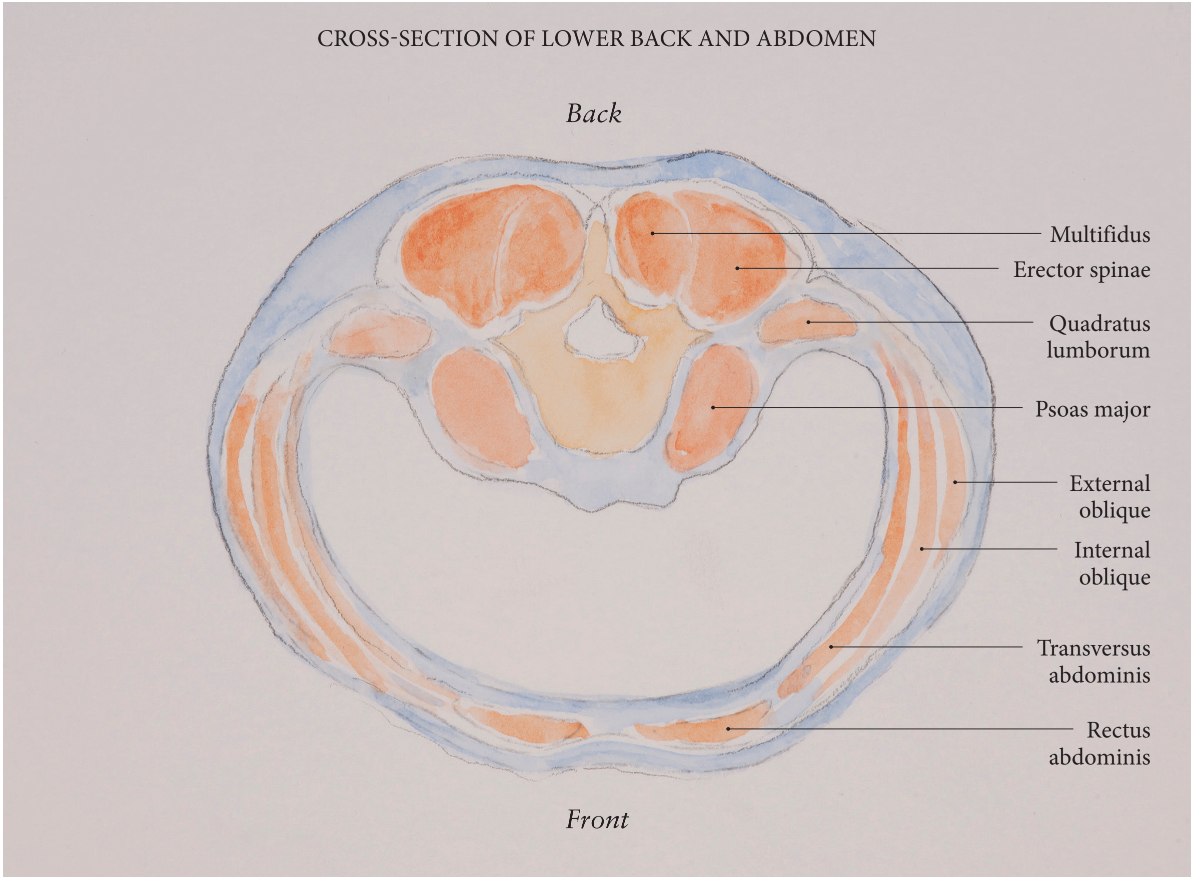

CROSS-SECTION OF LOWER BACK AND ABDOMEN
Back
Multifidus
Erector spinae
Quadratus lumborum
Psoas major
External oblique
Internal oblique
Transversus abdominis
Rectus abdominis
Front

Figure 15-0-4.

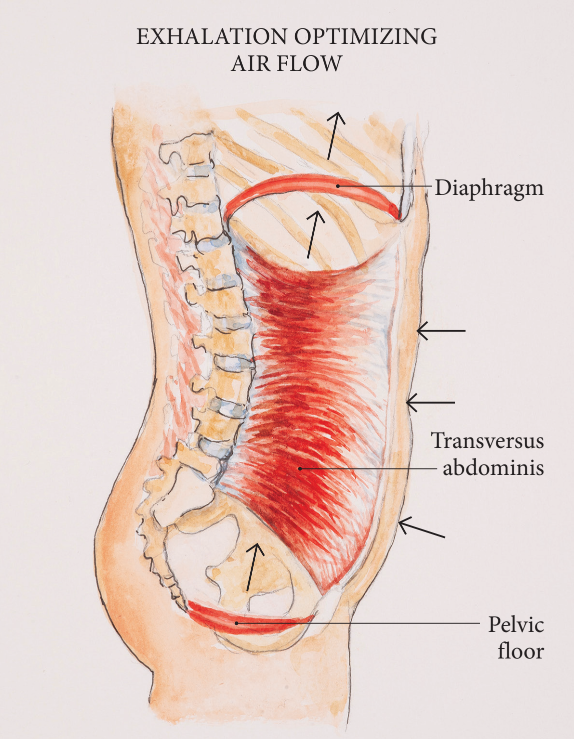


Figure 15-0-5.

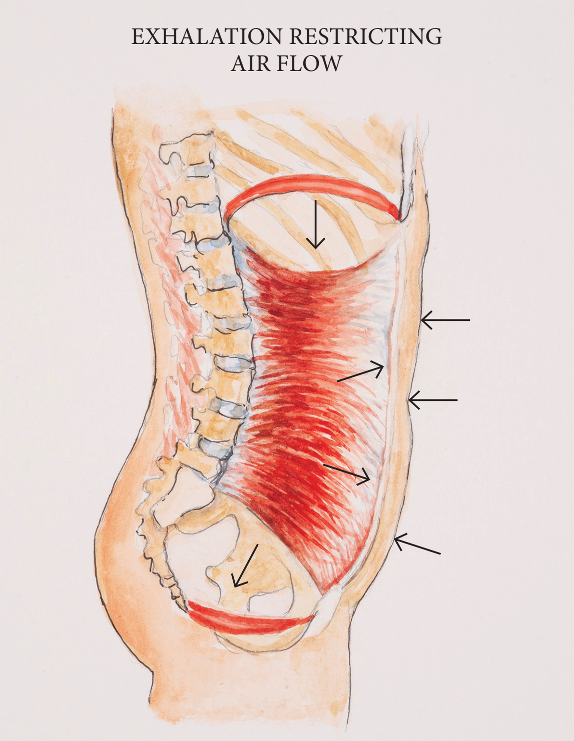


Figure 15-0-6.

MOVEMENT OF THE DIAPHRAGM AND
PELVIC FLOOR DURING INHALATION

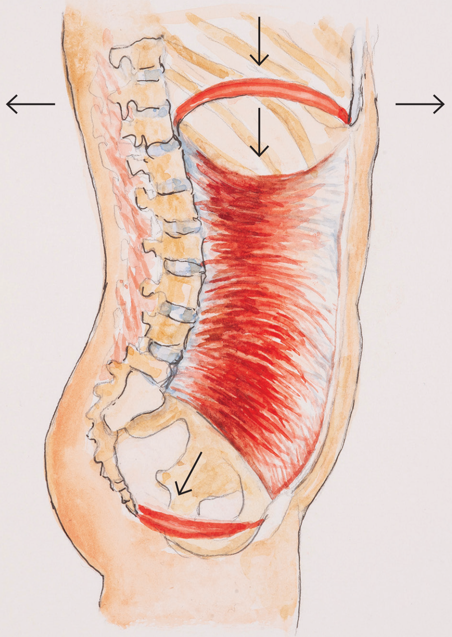


Figure 15-0-7.

MOVEMENT OF THE DIAPHRAGM AND
PELVIC FLOOR DURING EXHALATION

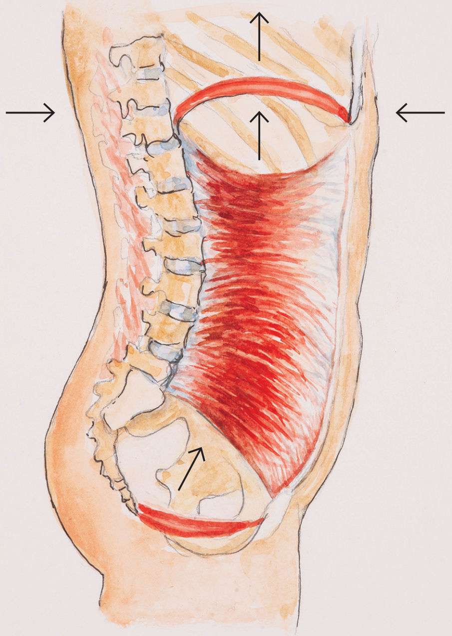
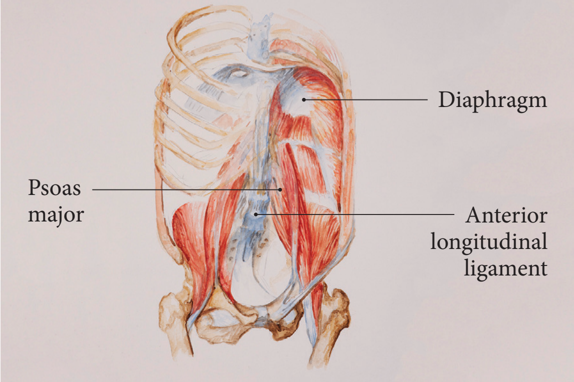


Figure 15-0-8.

Figure 15-5-3.

Figure 15-5-4.



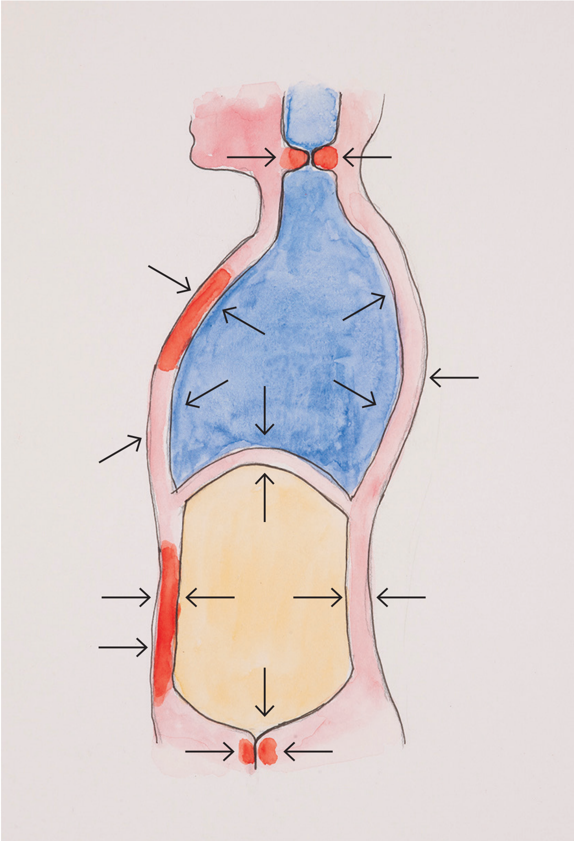


Figure 15-8-1.
The Valsalva maneuver closes the throat, tenses the diaphragm and creates increased pressure in the abdomen and chest