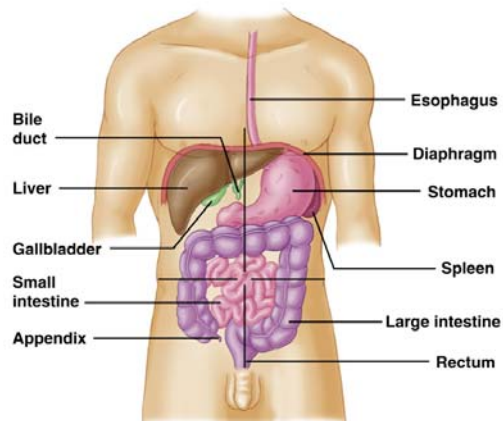
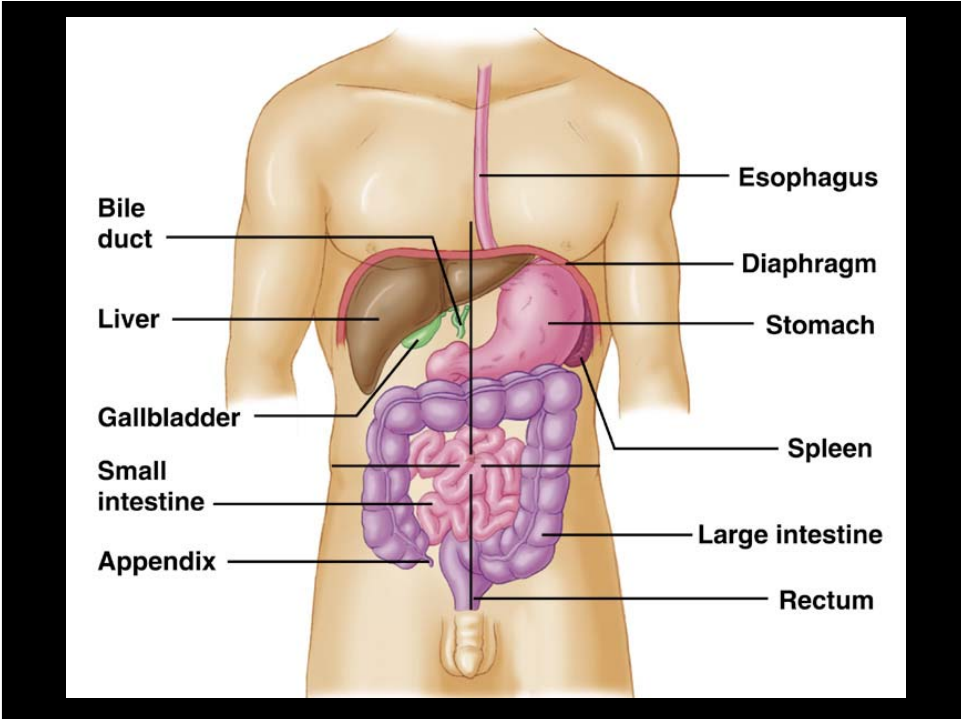


The Thorax (posterior)

The Abdomen (1 of 2)

- The abdomen is the second major body cavity.
- It contains the major organs of digestion and excretion.





The Human Body

4

The Abdomen

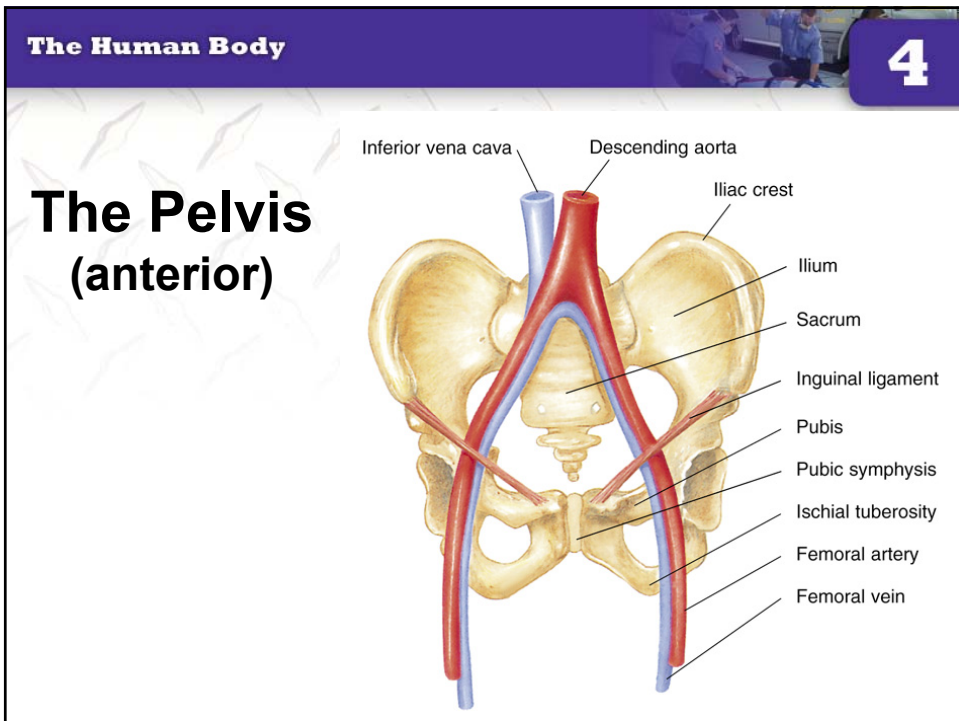
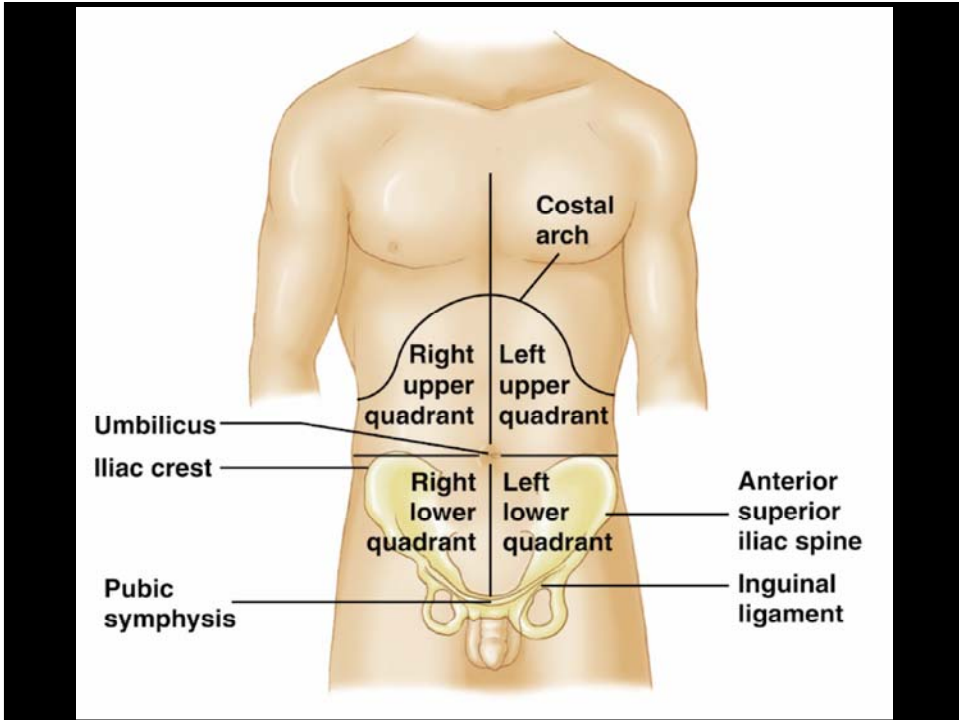
(2 of 2)

This diagram shows the human abdomen divided into four quadrants by a vertical midline and a horizontal transumbilical plane. The quadrants are labeled as follows:

- Right upper quadrant (RUQ):** The top-right quadrant.
- Left upper quadrant (LUQ):** The top-left quadrant.
- Right lower quadrant (RLQ):** The bottom-right quadrant.
- Left lower quadrant (LLQ):** The bottom-left quadrant.

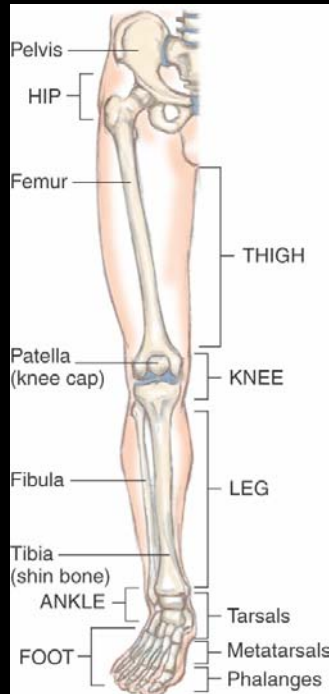
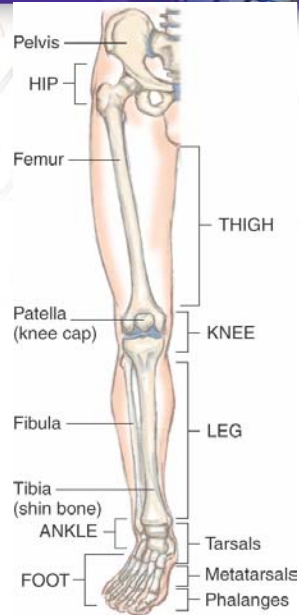
 Key anatomical landmarks are labeled:

- Costal arch:** The upper boundary of the abdominal cavity.
- Umbilicus:** The navel, marking the horizontal plane.
- Iliac crest:** The upper border of the iliac fossa.
- Pubic symphysis:** The lower boundary of the abdominal cavity.
- Anterior superior iliac spine (ASIS):** A bony landmark on the right side.
- Inguinal ligament:** A ligament on the right side.



The Lower Extremity

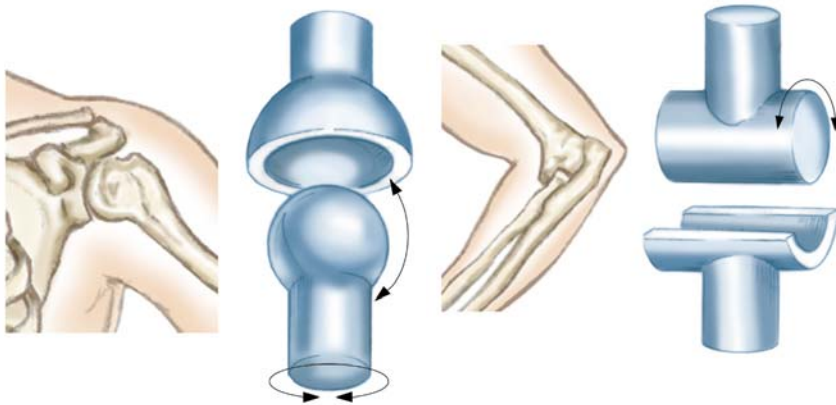
- Hip
- Thigh
- Knee
- Leg
- Ankle
- Foot



The Upper Extremity

- Shoulder girdle
- Arm
- Elbow
- Forearm
- Wrist
- Hand

Joints



Functions of the Musculoskeletal System

- Gives the body shape
- Protects internal organs
- Provides for movement
- Consists of more than 600 muscles

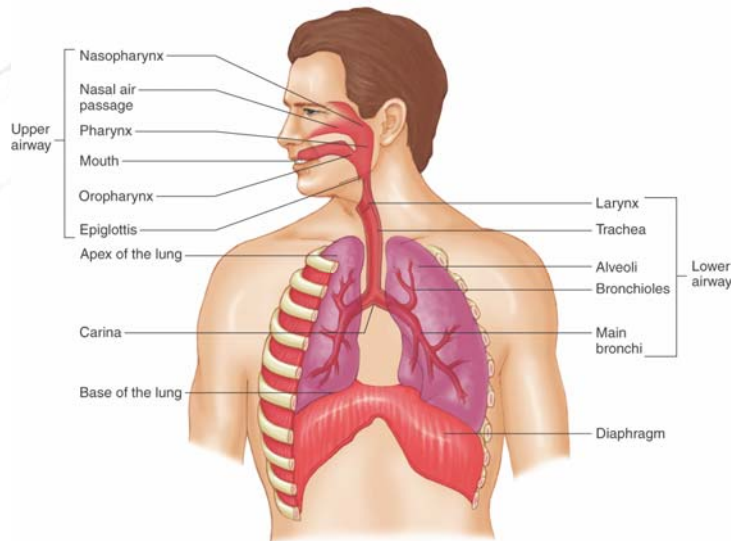
Types of Muscle (1 of 2)

- Skeletal (voluntary) muscle
 - Attached to the bones of the body
- Smooth (involuntary) muscle
 - Carries out the automatic muscular functions of the body

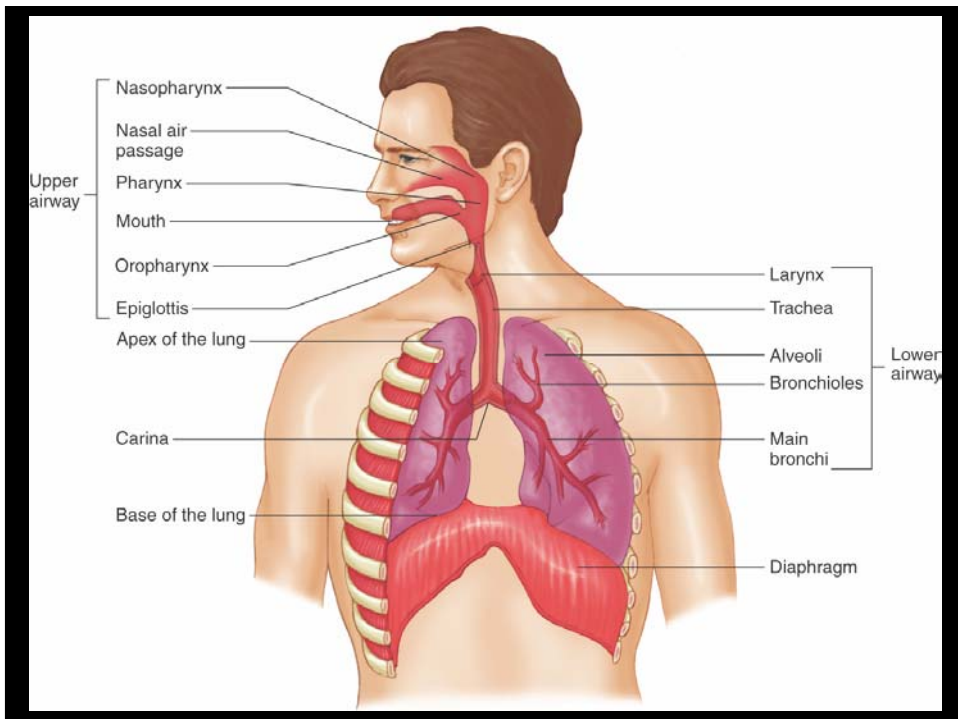
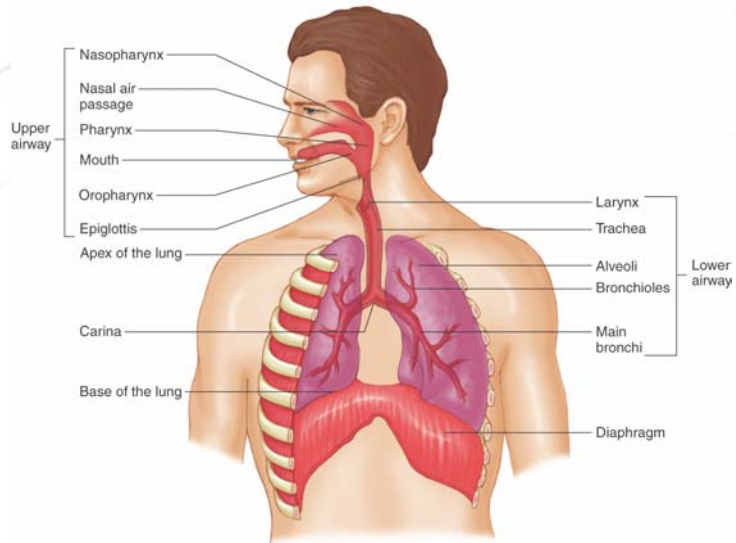
Types of Muscle (2 of 2)

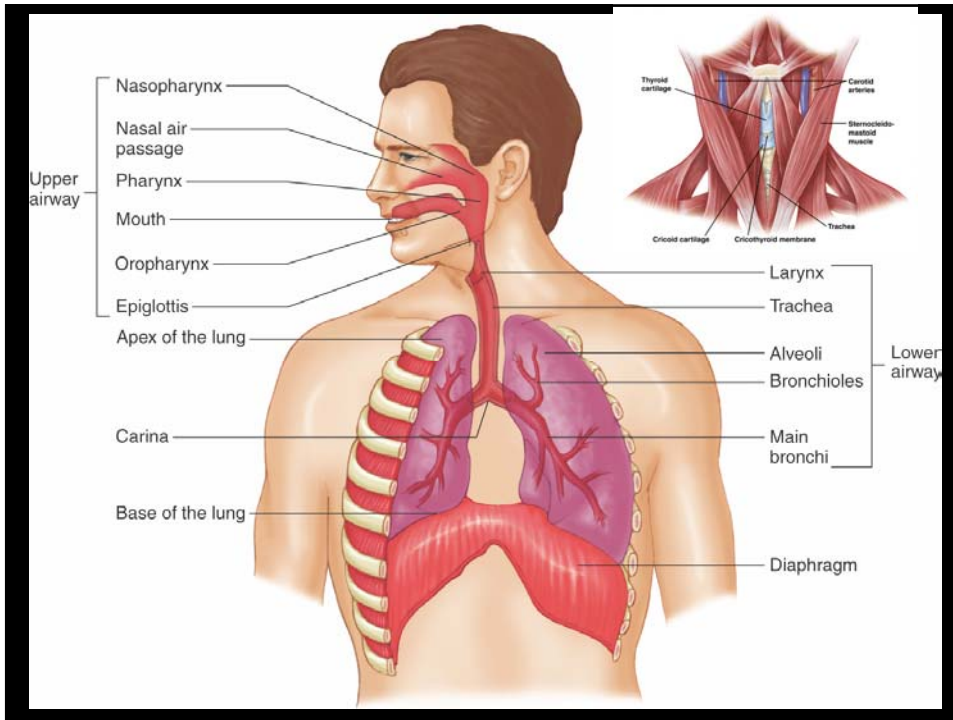
- Cardiac muscle
 - Involuntary muscle
 - Has own blood supply and electrical system
 - Can tolerate interruptions of blood supply for only very short periods

The Respiratory System



The Respiratory System





Diaphragm

- Has characteristics of both voluntary and involuntary muscles
- Dome-shaped muscle
- Divides thorax from abdomen
- Contracts during inhalation
- Relaxes during exhalation

Breathing Process: Inhalation

- Diaphragm and intercostal muscles contract, increasing the size of the thoracic cavity.
- Pressure in the lungs decreases.
- Air travels to the lungs.

Breathing Process: Exhalation

- Diaphragm and intercostal muscles relax.
- As the muscles relax, all dimensions of the thorax decrease.
- Pressure in the lungs increases.
- Air flows out of the lungs.