

The Muscular System

Chapter 4

Overview of Structures, Combining Forms, and Functions



DELMAR

CENGAGE Learning™

© 2009 Delmar, Cengage Learning

Major Structures

- Muscles – _____
- Fascia – _____
- Tendons – _____

Muscles

■ Primary Functions

- Make _____.
- Hold _____.
- Move _____.
- Produce _____.

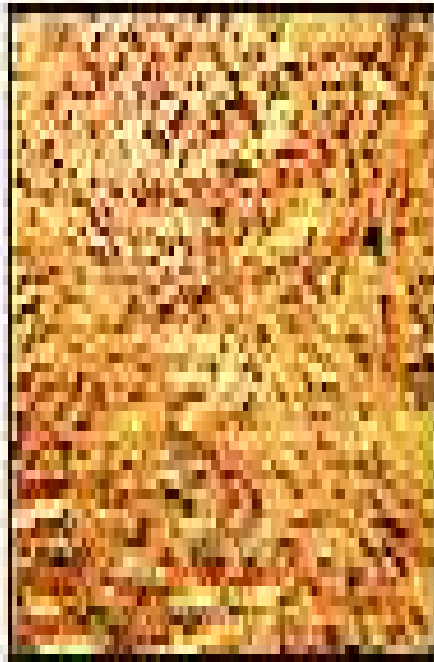
■ Related Combining Forms

— _____

Types of Muscle Tissue



Skeletal muscle



Smooth muscle



Cardiac muscle

Muscle

- Attach to the _____
- Make _____ possible
- Are _____ muscles
- Are also known as _____
_____ (conscious control)

Muscles

- Located in the walls of _____

- Function is to _____ and _____ the flow of

- Are _____ muscles
- _____ Muscles (under control of the
autonomic nervous system)
- Also known as _____

Muscles

- Located only in the walls of the _____
- Also known as _____ muscle or the _____
- Function is to make the _____

Play this video

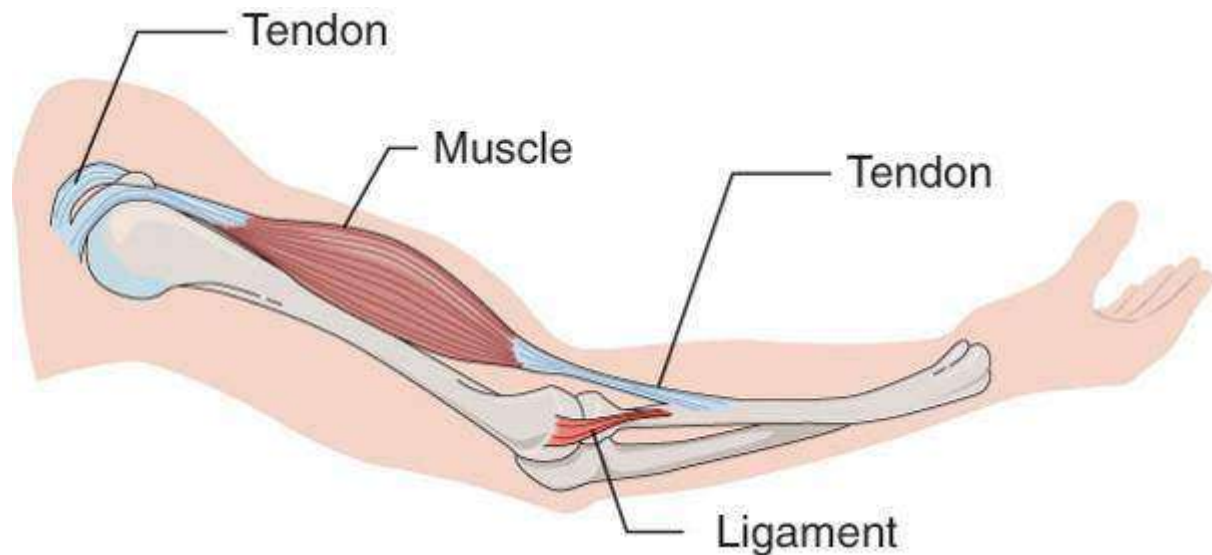
- <https://www.youtube.com/watch?v=raGl8bLkaAw&list=WL&index=2>

- Primary Functions

- Related Combining Form

- Primary Function

- Related Combining Forms



Aponeurosis

- Flat fibrous sheet of connective tissue, like tendons
- Connect muscle to bones and muscle to other tissues

Range of Motion

- _____ – Movement _____ from the _____ of the body
 - _____ muscles move a part away from the midline

- _____ – movement _____ the _____ of the body
 - _____ muscles move a part _____ the midline

Range of Motion

- _____ – means _____ the angle between two _____ or _____
 - _____ muscle bends a limb or joint
- _____ – means _____ the angle between two _____ or _____ out a limb
 - _____ muscle _____ a limb at a joint

Range of Motion

- _____ – is the act of _____ or _____ a body part
 - _____ muscle is a muscle that _____ a body part

- _____ – is the act of _____ a body part
 - _____ muscle a muscle that _____ a body part

Range of Motion

- _____ – is a _____ movement around an _____
 - _____ muscle – _____ a body part on its _____
 - Rotator Cuff muscles that holds the head of the humerus securely in place as it rotates within the shoulder joint
- _____ – is the _____ movement of a _____ at the far end

Range of Motion

- _____ – is the act of rotating the arm or the leg so that the palm of the hand and sole of the feet is turned forward or upward
*like holding a bowl of soup
- _____ – is the act of rotating the arm or leg so that the palm of the hand or sole of the foot is turned downward or backward

Range of Motion

- _____ – bends the _____
_____ at the ankle
 - Brings your toes towards your shin

- _____ – bends the _____
_____ at the ankle
 - Pointing your toes

Anatomy motion explained video

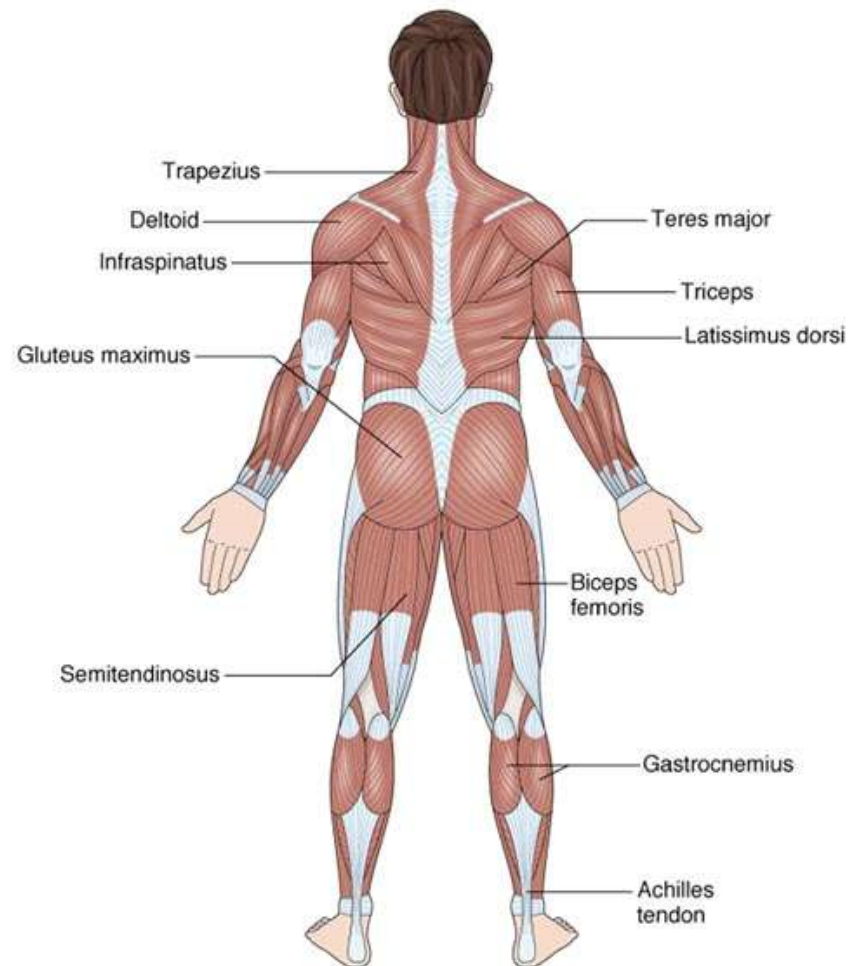
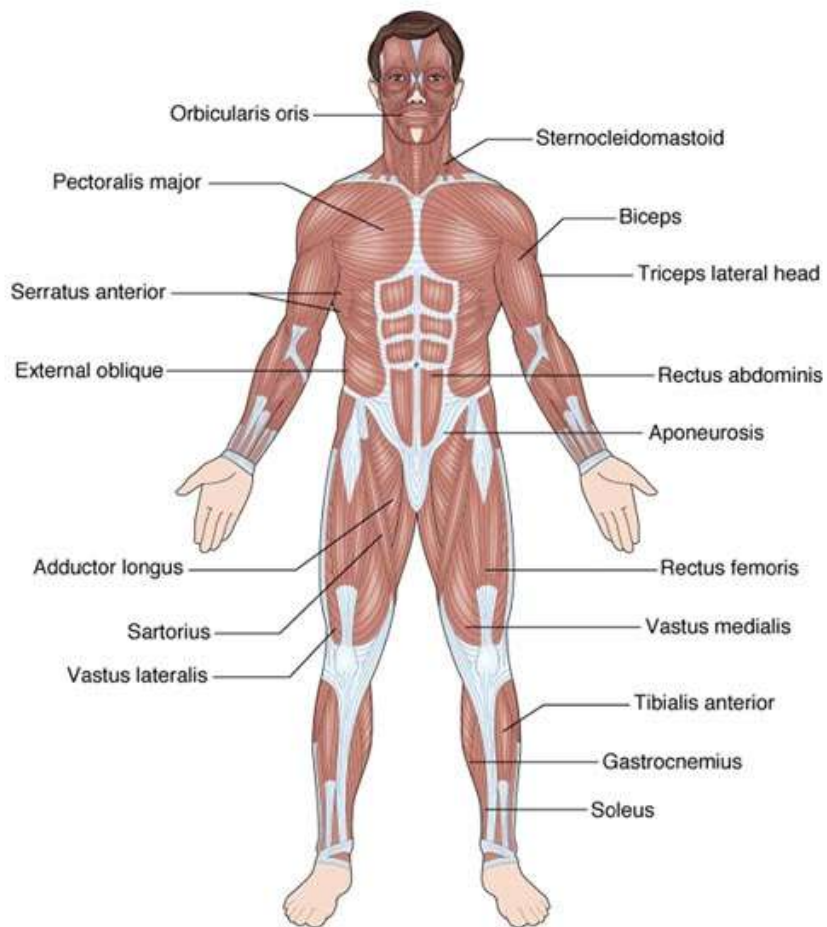
- https://www.youtube.com/watch?v=13_Nq4QgALs&list=WL&index=4

Key Word Parts

- bi – two
- -cele – hernia, tumor, swelling
- -desis – surgical fixation (of bone or joint) -ia – disease condition of
- -ic – pertaining to; relating to
- Kinesi – motion, movement
- -lysis – breakdown, loosening, destruction

Key Word Parts

- my; myo --muscle
- -plegia -- paralysis
- -rrhexis -- rupture
- tax / o
- ten; tend; tendin -- tendon
- ton / o
- tri-three



How Muscles are _____

- _____ and _____
 - sternocleidomastoid
- Muscles named for their _____
 - Flexor carpi muscles (wrist)
- Muscles named for their _____
 - Pectoralis major

How Muscles are _____

- Muscles named for their _____



Rectus
abdominis



External
oblique



Internal
oblique

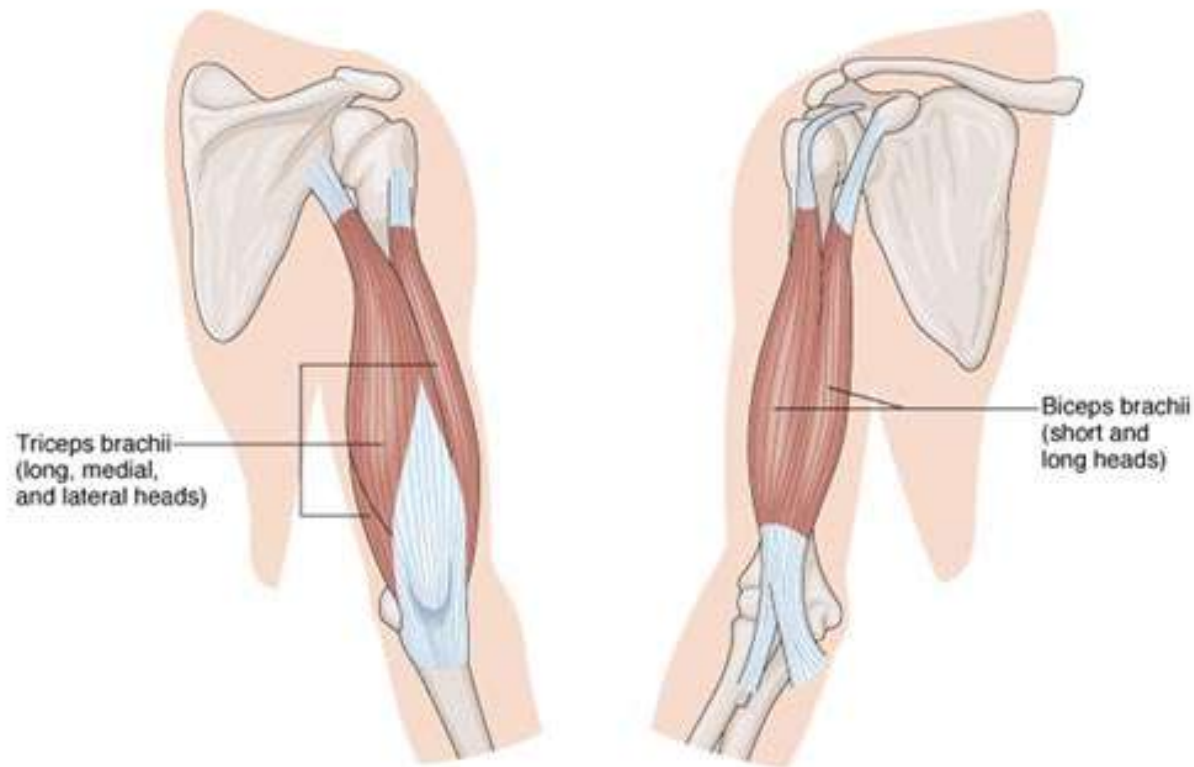


Transversus
abdominis

- _____ – _____ muscle that tightly constricts the opening of a _____

How Muscles are _____

- Muscles named for number of _____



How Muscles are _____

- Muscles are named for their _____
 - Named because they are broad, narrow, large, or small
 - Ex. Gluteus maximus

How Muscles are _____

- Muscles are named for their _____
 - Named because they are shaped like a familiar object.
 - Ex. Deltoid Muscle shaped like an inverted triangle or Greek letter delta

- Page 70 - write the specialists in your notes (5)
- Page 77 – add the Career Opportunities in the green box to the specialists list