

Unit 3, Lesson 4: The Muscular System

Function of the muscular system

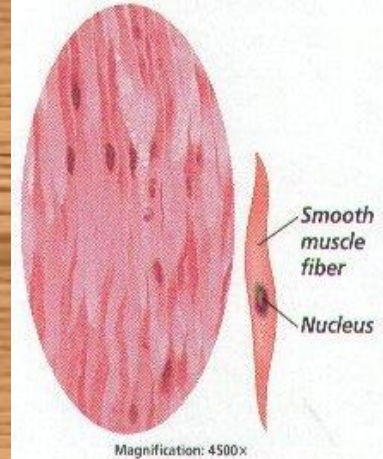
- Provides movement in conjunction with the skeletal system
- Important in life support
- Used by humans for food

Classifications of Muscles

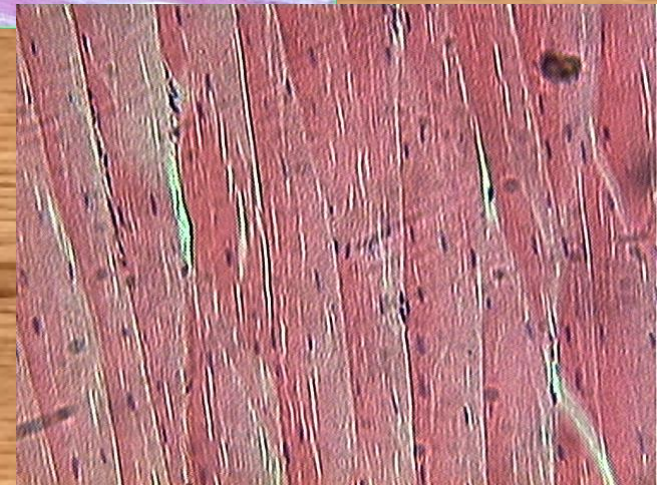
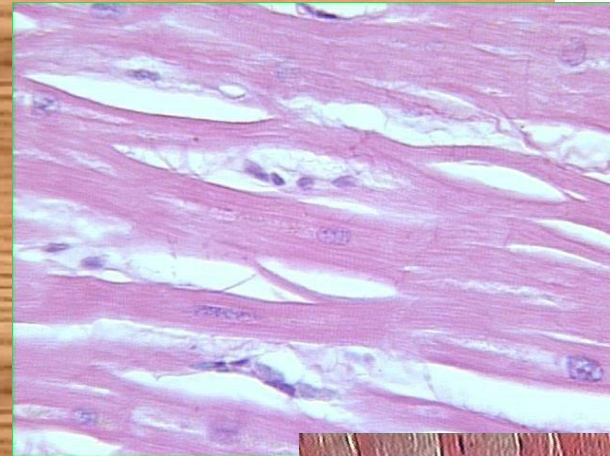
- Voluntary: Movement of the muscle is under the control of the animal
- Involuntary: Movement of the muscle is not controlled by the animal

Types of Muscles

- Smooth Muscles: Involuntary muscles, found in the walls of internal organs and the blood vessels.
- Cardiac Muscles: Muscles that form a network to make up the heart.
- Skeletal Muscles: Have a striped appearance, include voluntary and involuntary, attached to and moves your bones. This is a majority of the muscle tissue in your body.



Smooth muscle fibers are under involuntary control and appear spindle-shaped.



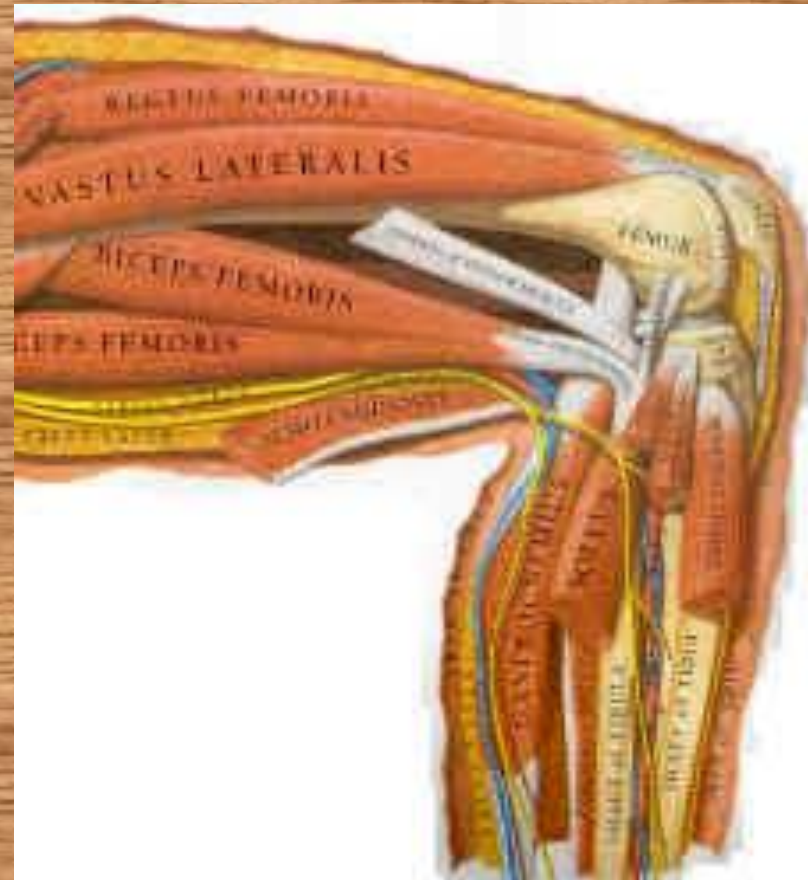
Muscles of the Front Limb

- The largest and most important muscle attaching the front legs to the body is the serratus ventralis. It is fan shaped and supports the trunk of the body between the legs.



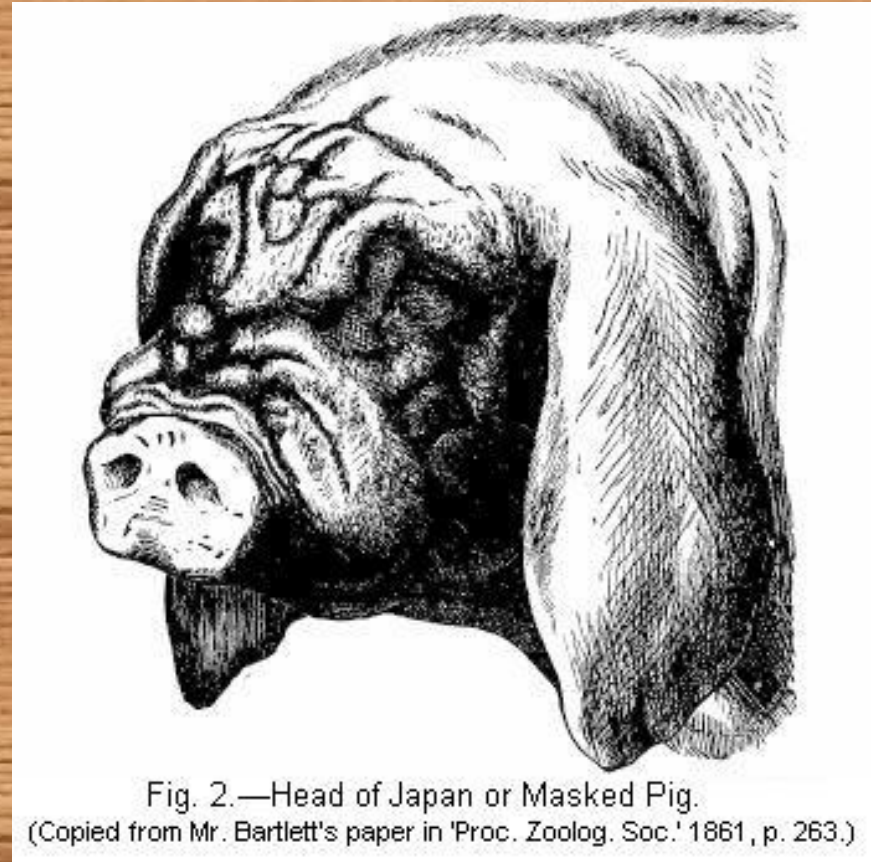
Muscles of the Back Limb

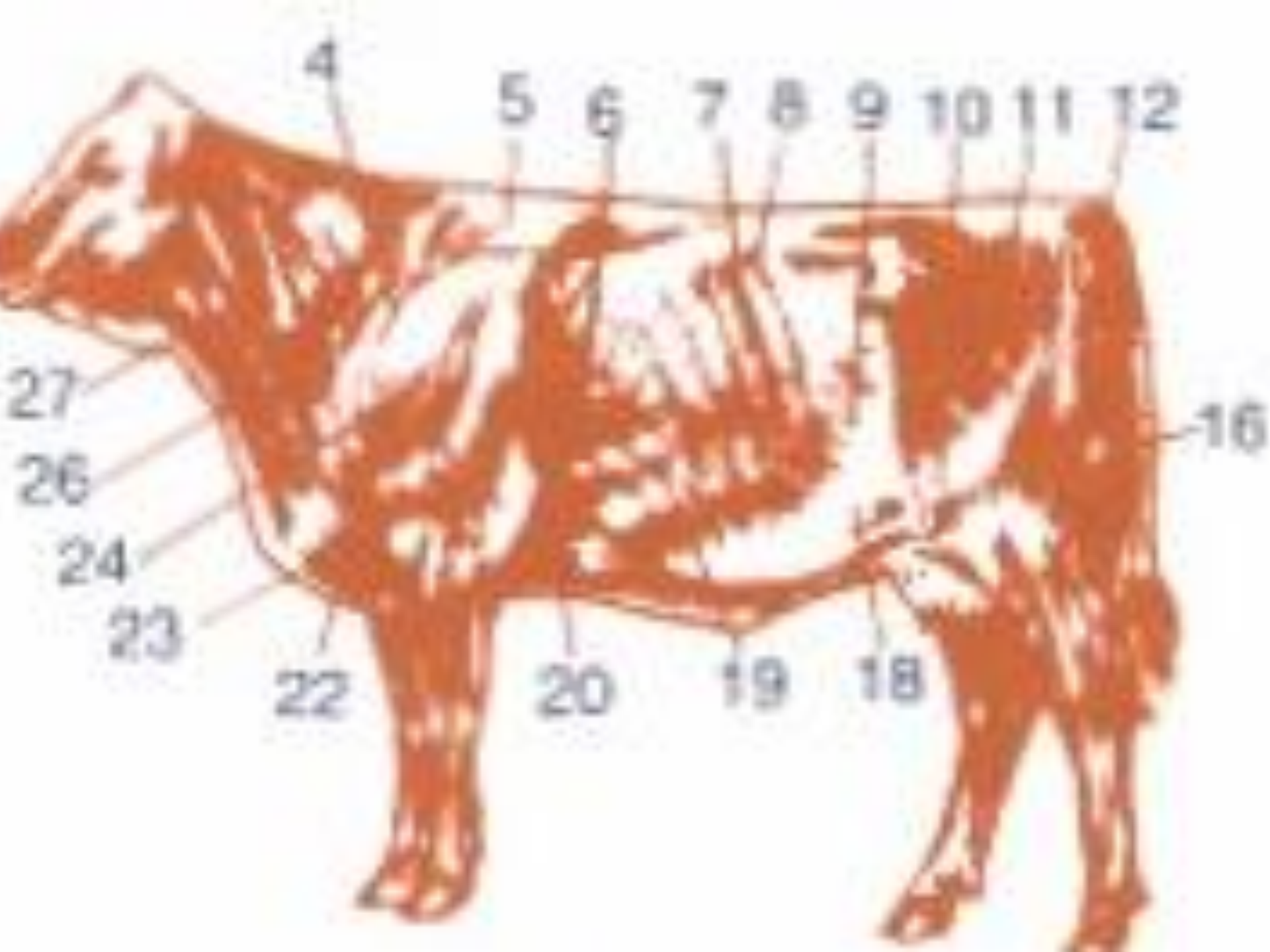
- The primary movements are extension and flexion.
- The main extensor muscle of the hip is the hamstring.
- Movement of the hock is primarily accomplished by flexors and extensors



Muscles of the Trunk, Head and Neck

- The loin muscle is responsible for extension of the spinal column
- Many of the muscles originate from the vertebrae
- There is greater flexibility in the neck than in the spinal column because of the muscles within





Cattle Muscle Group Labels

4. Trapezius cervicalis
5. Trapezius troacalis
6. Latissimus dorsi
7. External intercostals
8. Serratus dorsalis
9. Obiquus abdominis externus
10. Tensor fasciae latae
11. gluteus superficialis
12. Biceps femoris
16. Semitendinosis
18. Aponeurrosis
19. Serratus thoracis
20. Posterior deep pectoral
22. Anterior superficial pectoral
23. Long head of triceps
24. Deltoid
26. Brachiocephalicus
27. Sterno-cephalicus