

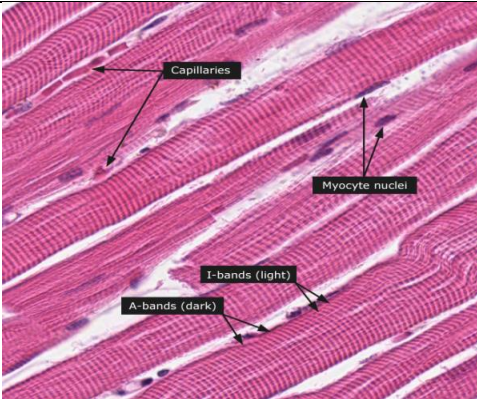
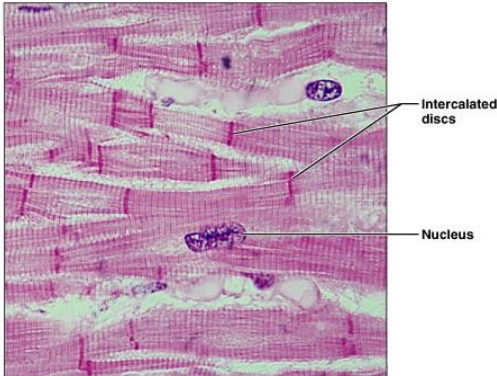
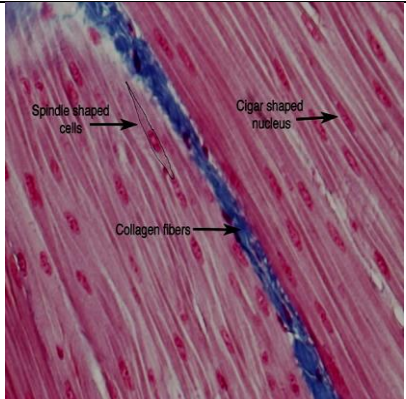
Muscular tissue

Muscular Tissue: A tissue composed of bundles of elongated cells capable of contraction and relaxation to produce movement in an organ or part. The components of muscle tissue are muscle fibers, connective tissue, and extracellular material.

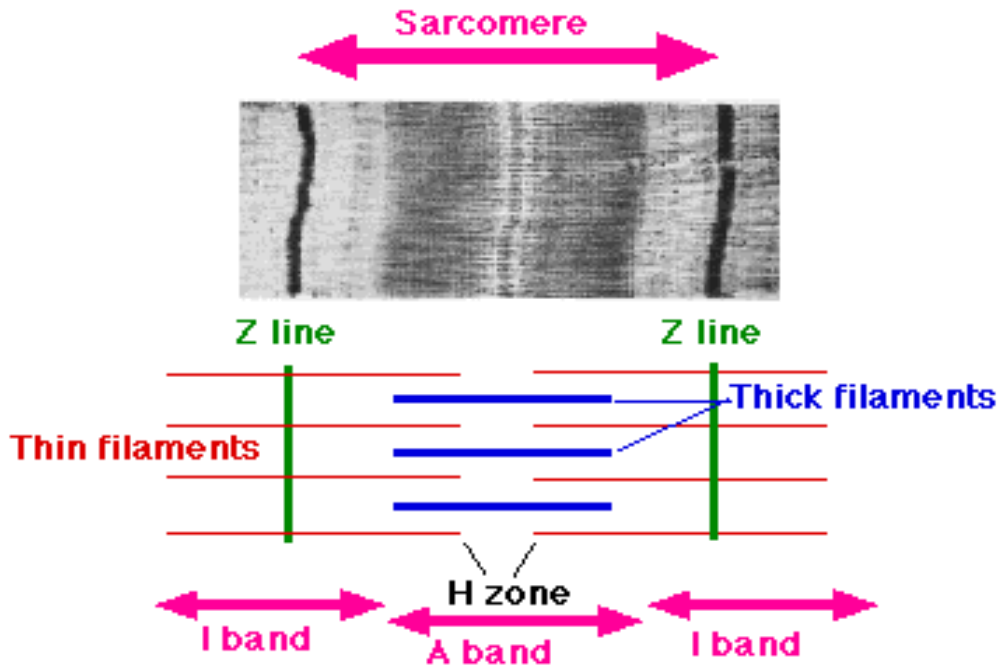
Functions:

- 1- motion 2-thermogenesis

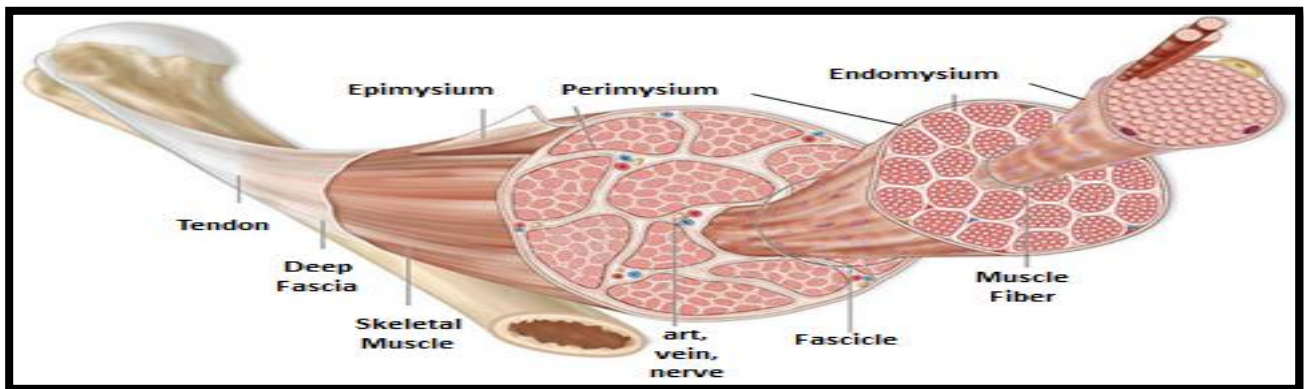
Types of muscles

Skeletal Muscle	Cardiac Muscle	Smooth Muscle
Long, cylindrical cells	Branching cells	Spindle-shaped cells
Multinucleate	Uni-nucleate Intercalated discs	central nuclei arranged closely to form sheets
Striated	Striated	No striations
under voluntary control	Involuntary control	Involuntary control
Function: Voluntary movement, facial expression	Function: Contracts to propel blood into circulatory system	Function: Propels substances along internal passageways
Location: Skeletal muscles attached to bones.	Location: Occurs in walls of heart	Location : Mostly walls of hollow organs
 <p>Labels: Capillaries, Myocyte nuclei, I-bands (light), A-bands (dark)</p>	 <p>Labels: Intercalated discs, Nucleus</p>	 <p>Labels: Spindle shaped cells, Cigar shaped nucleus, Collagen fibers</p>

Sarcomere: is a contractile unit composed of myofilament consists of contractile protein.



Structure of the skeletal muscle



Purkinje fibers : are modified muscle fibers. They have fewer myofibrils, but a higher content of glycogen.

Function: conduction of electrical impulses