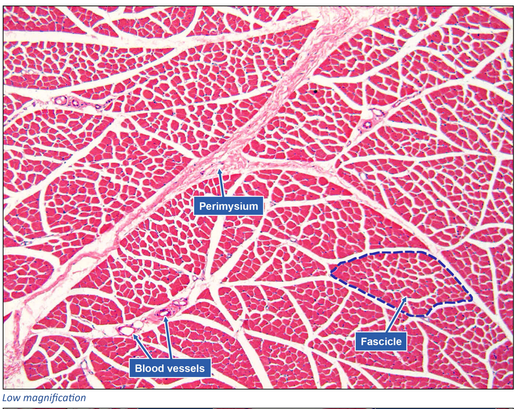
SKELETAL MUSCLE

Musculoskeletal System

Skeletal muscle is an excitable, contractile tissue. It is responsible for posture and movements.



Low magnification

High magnification

1. **Skeletal Muscle Fibres** are the basic cellular unit of a skeletal muscle.
2. Muscle fibres are striated, multinucleated ranging from 10 to 100 micrometre in diameter.
3. A distinctive feature of skeletal muscle fibres is the presence of the nuclei under the sarcolemma.
4. **Sarcolemma** is the plasma membrane of muscle fibres: a tubular sheath en compassing each muscle fibre, acting as a barrier between extracellular and intracellular compartments.
5. Each muscle fibre is surrounded by a thin layer of reticular fibres and dispersed fibroblasts (connective tissue) known as the **endomysium** covering the sarcolemma. Capillaries and nerve tissue are present in the endomysium.
6. Bundles of muscle fibres make up a fascicle.
7. **Perimysium** is a connective tissue layer which surrounds muscle fascicles.
8. The nerves, blood supply, and lymphatics for each fascicle enters through the perimysium.
9. **Epimysium** is a dense fibrous irregular connective tissue and surrounds the whole muscle.
10. Skeletal muscles may undergo a condition known as atrophy. This may result from conditions such as denervation, systemic illness, chronic glucocorticoid use, and malnutrition. This leads to reduced muscle mass.