in limb muscles the mid portion is much thicker than the ends and contains a greater number of muscle fibres known as the belly of the muscle.

Attachment to the skeleton is achieved by tendons (strap like bands of dense white fibrous connective tissue) muscles like thorax and abdomen attach by sheet of connective tissue known as aponeurosis the linea alba is the white line down ventral midline of abdomen is the combined aponeuroses of the abdominal muscles.

Where tendons pass over bony prominences risk that they might become damaged by friction, this is prevented by development of fluid filled cavity called bursa, acts as cushion between tendon and underlying bone, in some areas bursa is actually wrapped around the tendon forming a tendon sheath/ synovial sheath.

Muscle contraction

Each muscle cell has cell membrane called sarcolemma which is very excitable and easily stimulated in response to nerve impulses, the muscle cell has an interconnecting series of tubes running through it which allows a stimulus to the sarcolemma to be rapidly spread throughout the cell. The muscle will then contract, each cell is composed of repeating sections lined up end to end known as sarcomeres, which contain two overlapping fibres of two proteins actin and myosin,

- if the fibres are overlapping a little the muscle is relaxed
- If the fibres overlap a lot the muscle is contracted

The actin and myosin do not change length but the sarcomeres do as they overlap more or less

Muscles of the forelimb (flashcards)

- Supraspinatus
- Infraspinatus
- Brachialis

Pairs of muscles:

- Biceps brachii
- Triceps

These pairs form an antagonistic paring and have opposite effects

Muscles of the hind limb

Biceps femoris- flexes the stifle, extends the hip, found in the sacroiliac region, inserts on the distal femur, on the tibial crest and also the tendon of insertion forms part of the Achilles tendon which inserts on the point of hock (calcaneus)

Anterior tibial – antagonistic partner on gastrocnemius muscle, runs down anterior aspect of tibia, flexes the hock.