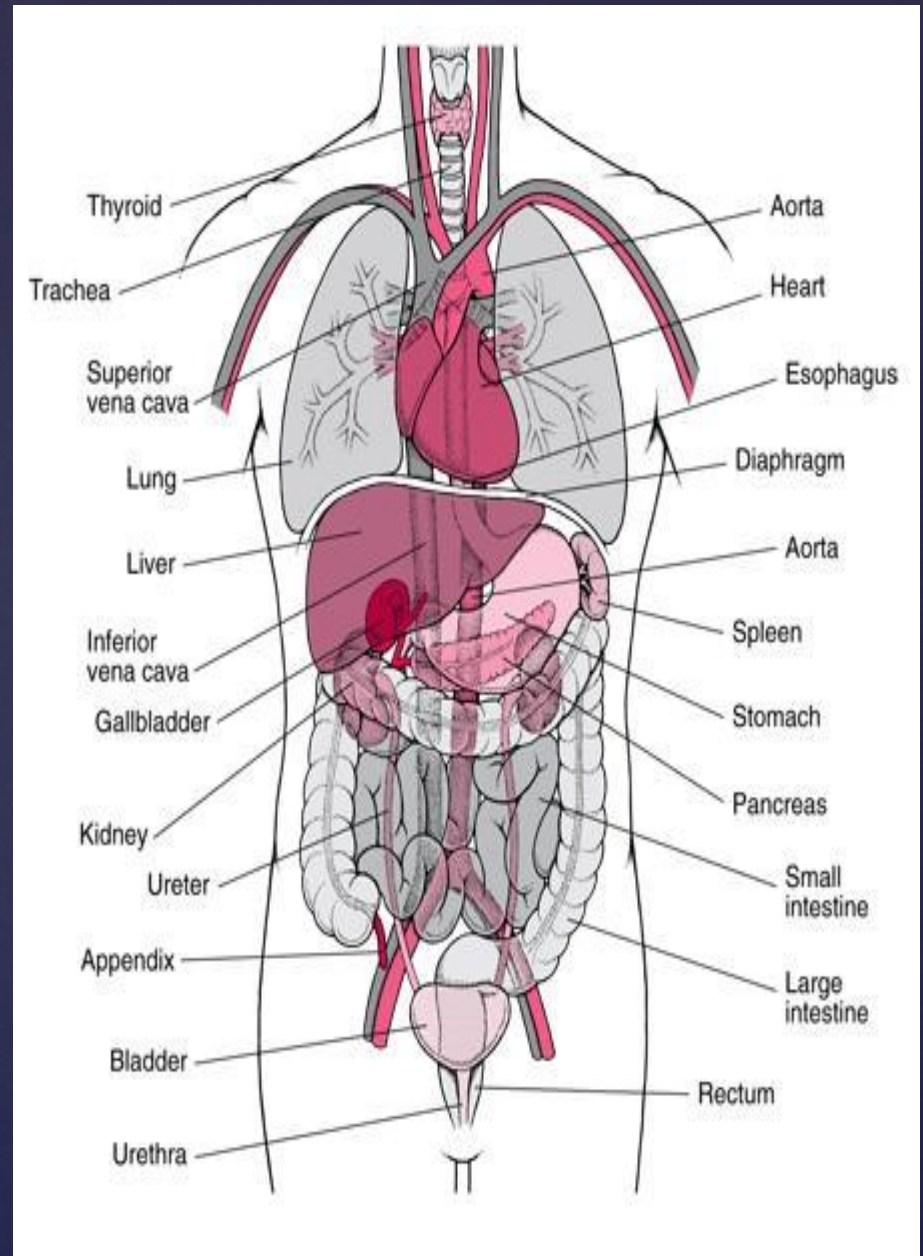


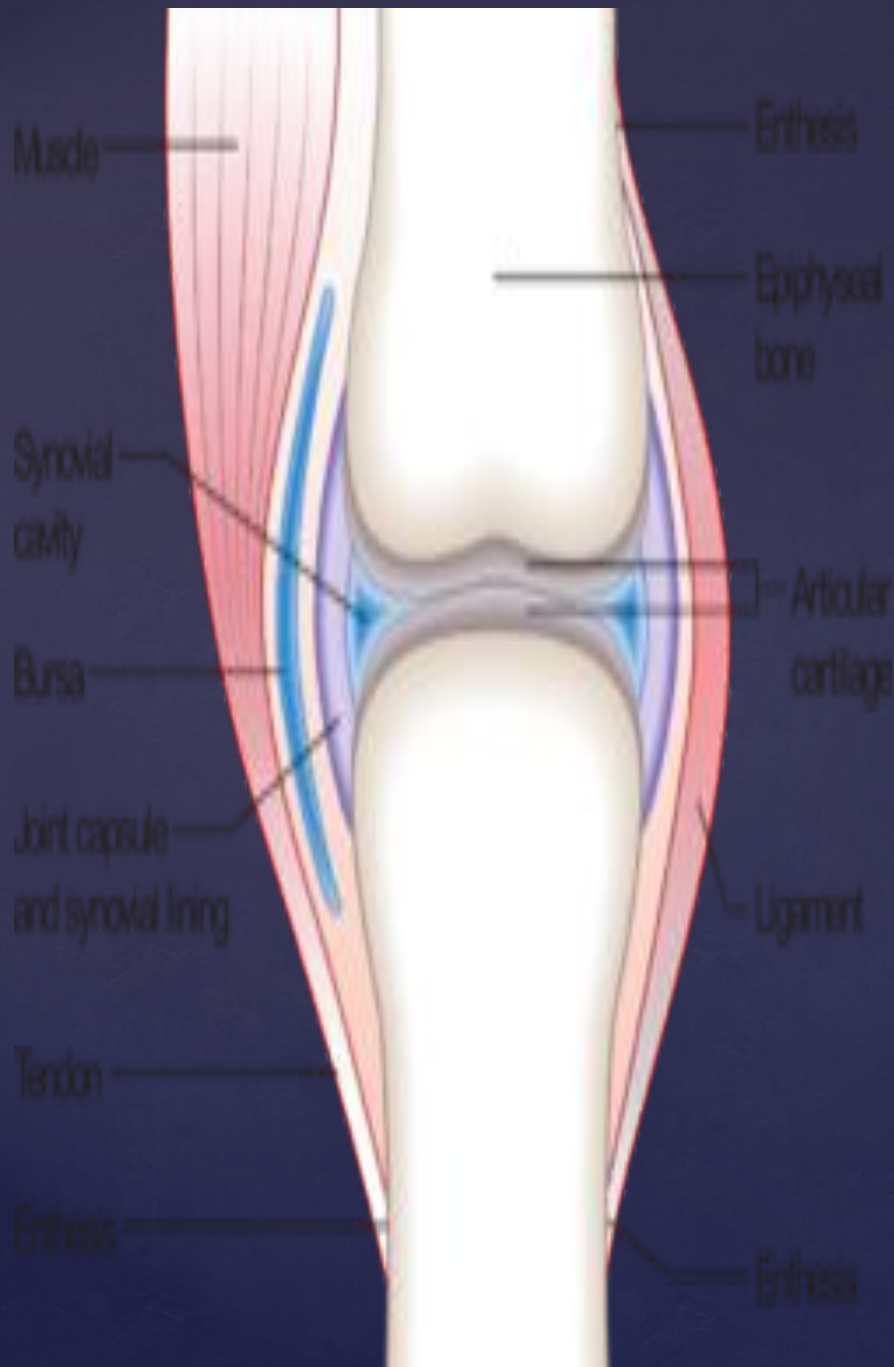
The skeleton

- The **human skeleton** consists of both fused and individual bones supported and supplemented by ligaments, tendons, muscles and cartilage. It serves as a scaffold which supports organs, anchors muscles, and protects organs such as the brain, lungs and heart.

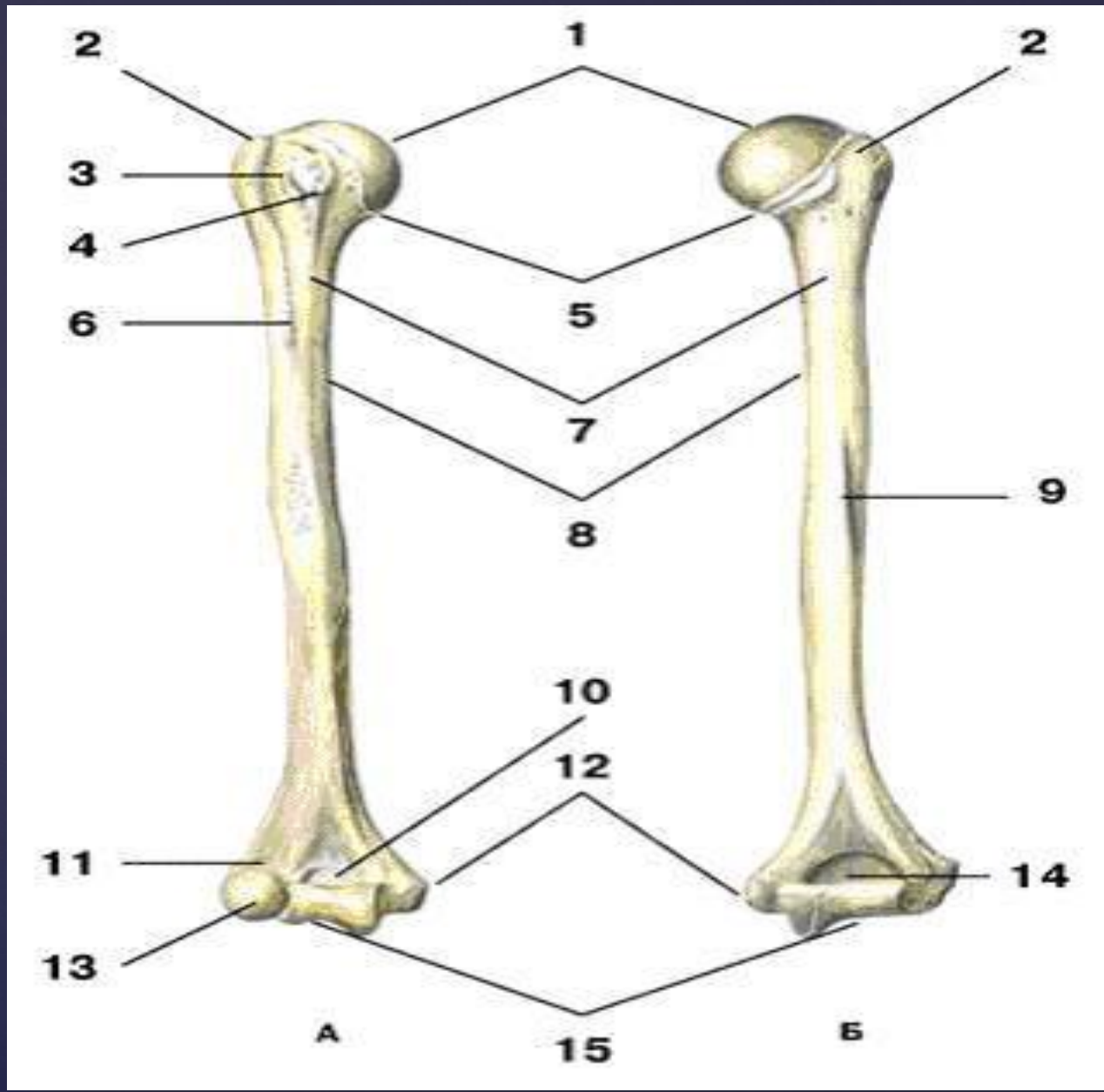


- There are over 206 bones in the adult human skeleton, a number which varies between individuals and with age – newborn babies have over 270 bones<sup>[4][5][6]</sup> some of which fuse together into a longitudinal axis, the axial skeleton, to which the appendicular skeleton is attached



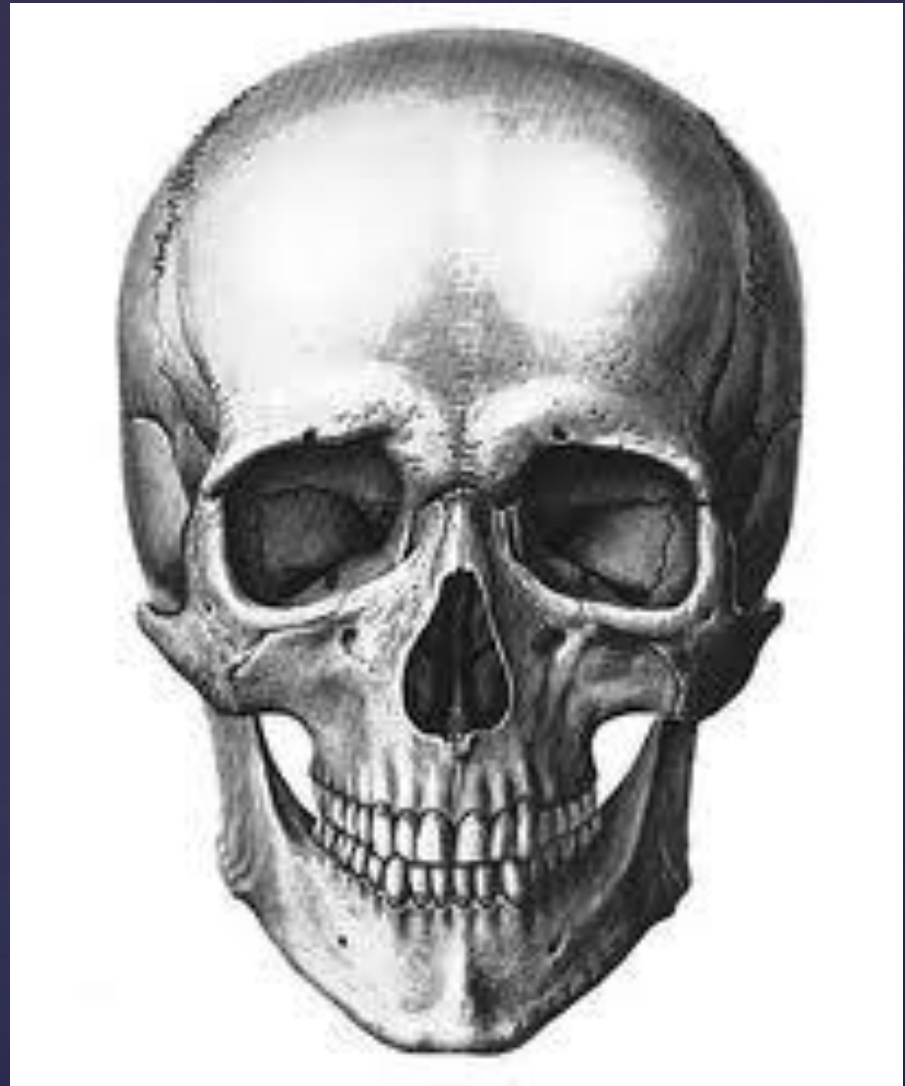


- The axial skeleton (80 bones) is formed by the vertebral column (26), the rib cage (12 pairs of ribs and the sternum), and the skull (22 bones and 7 associated bones). The upright posture of humans is maintained by the axial skeleton, which transmits the weight from the head, the trunk, and the upper extremities down to the lower extremities at the hip joints. The bones of the spine are supported by many ligaments. The erectors spinae muscles are also supporting and are useful for balance.

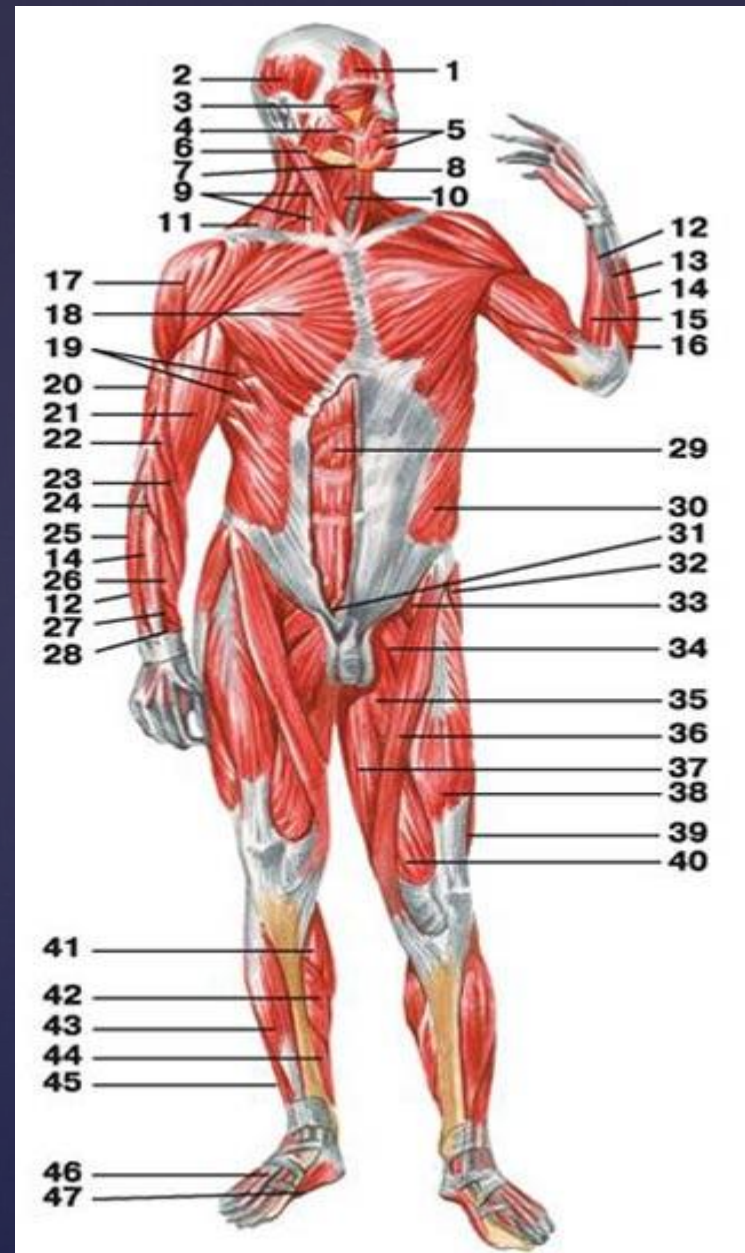


□ Males tend to have slightly thicker and longer limbs and digit bones (phalanges), while females tend to have narrower rib cages, smaller teeth, less angular mandibles, less pronounced cranial features such as the brow ridges and external occipital protuberance (the small bump at the back of the skull), and the carrying angle of the forearm is more pronounced in females. Females also tend to have more rounded shoulder blades.

□ [edit]

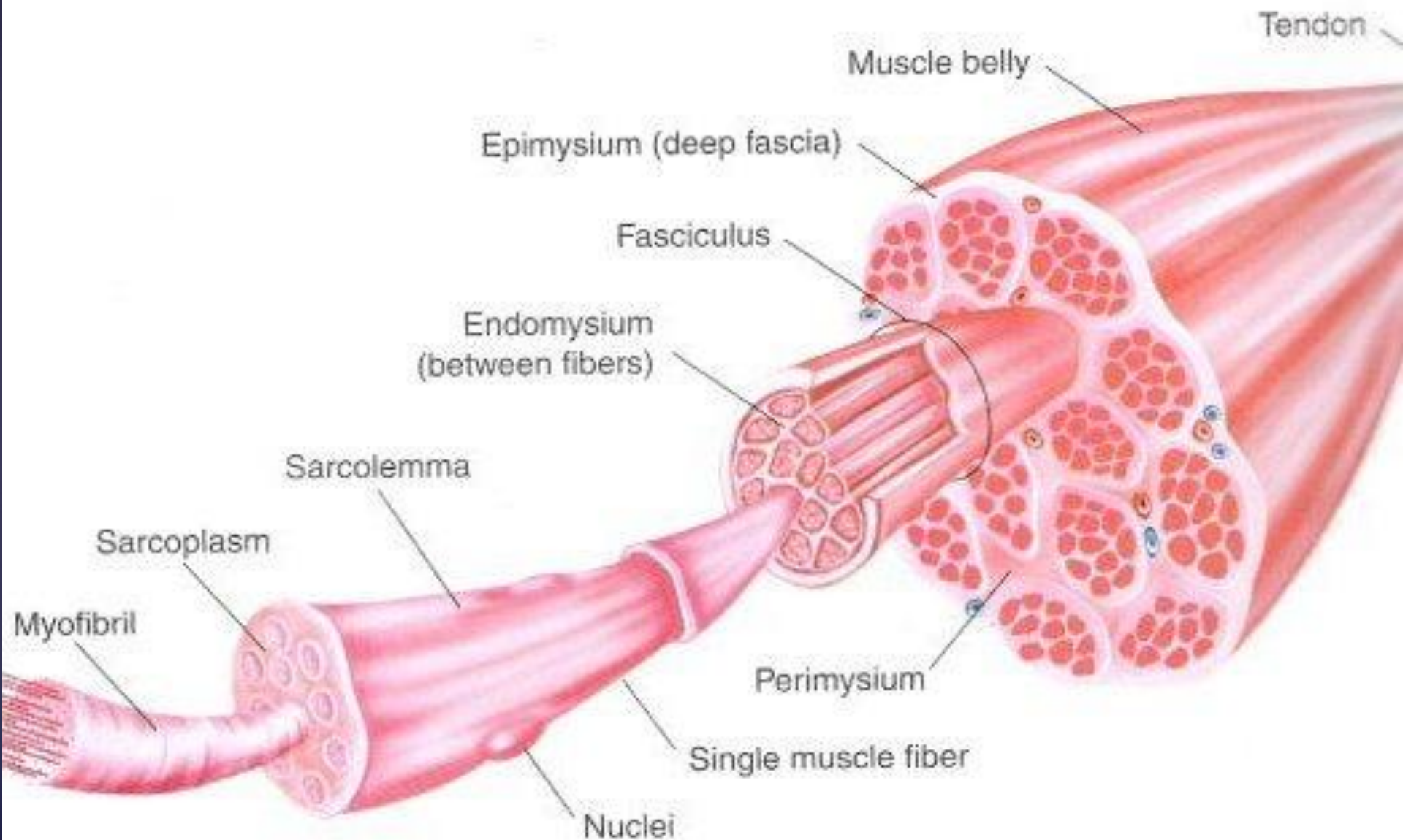


- The joints between bones permit movement, some allowing a wider range of movement than others, e.g. the ball and socket joint allows a greater range of movement than the pivot joint at the neck. Movement is powered by skeletal muscles, which are attached to the skeleton at various sites on bones. Muscles, bones, and joints provide the principal mechanics for movement, all coordinated by the nervous system



- There are many differences between the male and female human skeletons. Most prominent is the difference in the pelvis, owing to characteristics required for the processes of [childbirth](#). The shape of a female pelvis is flatter, more rounded and proportionally larger to allow the head of a fetus to pass. A male's pelvis is about 90 degrees or less of angle, whereas a female's is 100 degrees or more. Also, the coccyx of a female's pelvis is oriented more inferiorly whereas a male's coccyx is usually oriented more anteriorly.





**Figure 1: Muscle belly split into various component parts (from Essentials of Strength Training & Conditioning, National Strength & Conditioning Association)**

- Check up :Talgat Turekulovich
- Caried out :Moiynbaeva Sharapat