

Bones

Acromion – Portion of the scapula that serves for the attachment of several muscles as well as the articulation of the clavical.

Calcaneus - The heel bone. It articulates with the cuboid bone and with the talus.

Cervical – Pertaining to the neck.

Clavicle – The collar bone. Articulates with the sternum and the scapula.

Coccyx - A small bone at the base of the spinal column in humans, formed by four fused rudimentary vertebrae. It is usually ankylosed and articulated with the sacrum above.

Cuboid Bone - The outer **bone** of the instep bones of the foot that articulates posteriorly with the calcaneus and anteriorly with the fourth and fifth metatarsals.

Cuneiform – Wedge shaped. The cuneiform bones of the foot are one the internal, middle, and external tarsus.

Digit – A finger or toe.

Eleventh rib – Te most superior set of ribs not attached to the sternum. It is referred to as floating rib.

Femur – The thigh bone.

Fibula - The outer and smaller bone of the leg from the ankle to the knee, articulating above with the tibia and below with the tibia and talus. It is one of the longest and thinnest bones of the body.

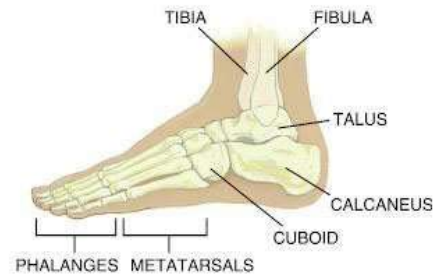
Greater Trochanter - A thick process at the lateral upper end of the femur projecting upward to the union of the neck and shaft.

Humerus – The upper arm bone.

Hyoid - The horseshoe-shaped bone at the base of the tongue.

Iliac Crest - The anatomical landmark for the superior margin of the pelvis, located between the anterior superior and posterior superior **iliac** spines.

Infraorbital Ridge – The ridge beneath the orbit. It forms the inferior lateral margin of orbit. It is formed on the zygomatic bone.



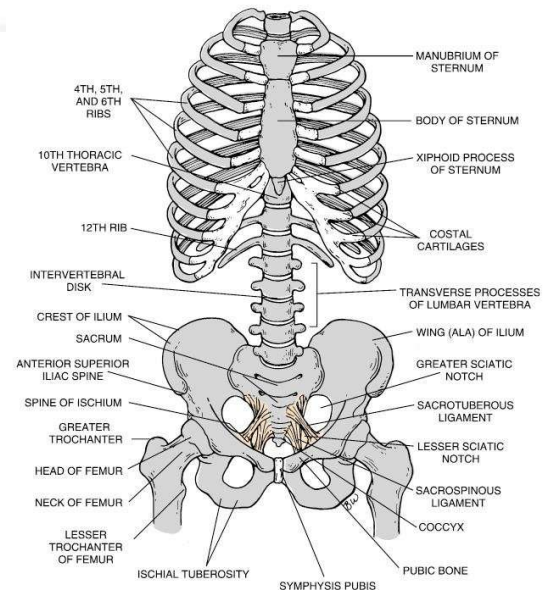
BONES OF FOOT AND ANKLE

Left foot, lateral view

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BONES OF THE LEG AND FOOT



BONY STRUCTURES OF THE THORAX, ABDOMEN, AND PELVIS

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Lumbar – The part of the back between the thorax and pelvis.
 Malleolus – The protuberance on both sides of the ankle joint; the lower end of the fibula is the lateral malleolus and lower end of the tibia is the medial malleolus.

Mandible – The lower jawbone.
 Metacarpal – The bones of the body of the hand.
 Metatarsal – The bones of the body of the foot.

Navicular Bone – The bone in the tarsus between the talus and the cuneiform bones.

Occipital- A bone in the lower back part of the skull between the parietal and temporal bones.

Olecranon - A large process of the ulna projecting behind the elbow joint and forming the bony prominence of the elbow.

Orbit – The bony cavity of the skull that contains and protects the eyeball.

Patella – The kneecap.

Phalanges – Any one of the bones of the fingers or toes.

Pisiform – The smallest carpal bone on the ulnar side in the proximal row.

Radius – the lateral bone of the forearm.

Sacrum - The triangular bone situated dorsal and caudal from the two fifth lumbar vertebra and the coccyx.

Scapular Spine – The spine on the posterior surface of the scapula.

Sternum – The flat bone in the anterior medial line of the thorax.

Styloid Process – It could be a couple of things:

A pointed process of the temporal bone, projecting downward, and to which some of the muscles of the tongue are attached.

A pointed projection behind the head of the fibula.

A protuberance on the outer portion of the distal end of the radius.

An ulnar projection on the inner side of the distal end.

Symphysis pubis – The junction of the pubic bones on the midline in front.

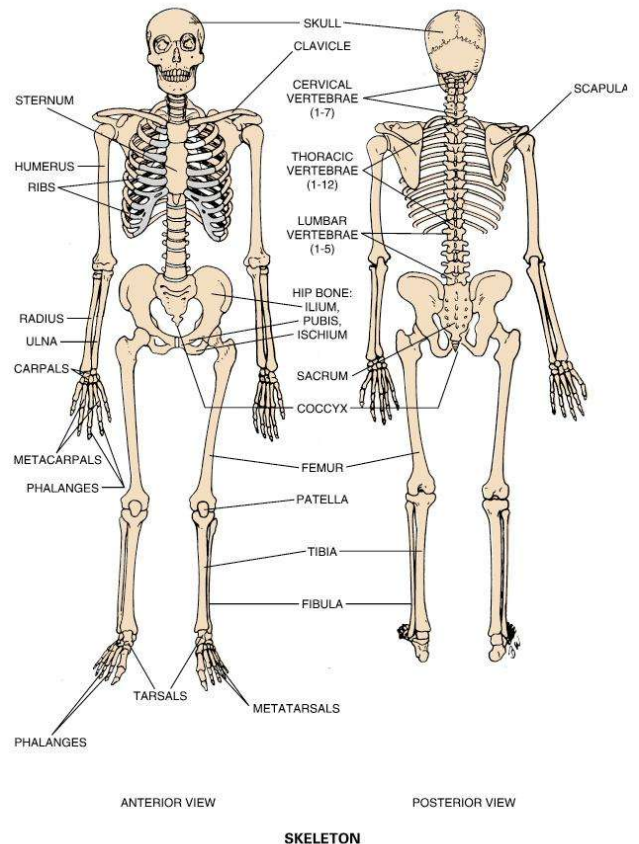
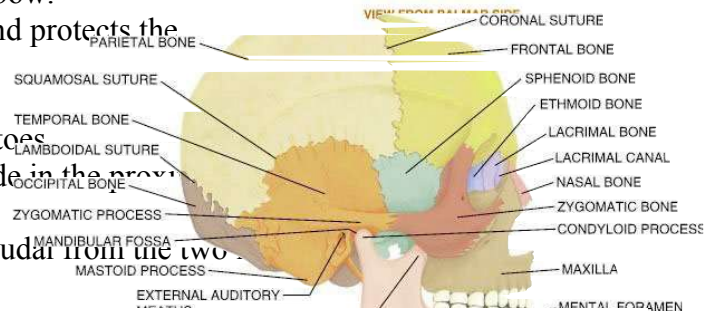
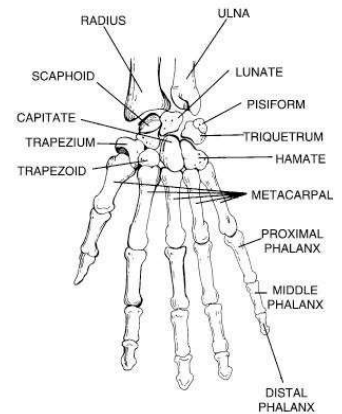
Tibia – The larger of the two lower leg bones.

Thoracic – Dealing with the chest and ribs.

Triquetral bone – third carpal bone in the proximal row.

Ulna – The bone in the forearm that articulates with the medial side of the wrist in the anatomical position.

Vertebral column – The column formed by the vertebrae in the back.



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Zygoma - The long arch that joins the zygomatic processes of the temporal and malar bones on the sides of the skull.

Miscellaneous Bone Terminology

Condyle – smooth rounded articular surfaces – lower end of thigh bone

Epicondyle – for muscle attachment - sitting off of a condyle

Foramen – A nice clean round whole in the bone, like the opening in a bone for blood vessels and nerves.

Fossa – A smooth shallow depression in a bone

Process – A projection off of a bone (usually kind of sharp) for muscle attachment.

Tuberosity – a blunt irregular shaped projection (smaller than trochanter) for muscle attachment.

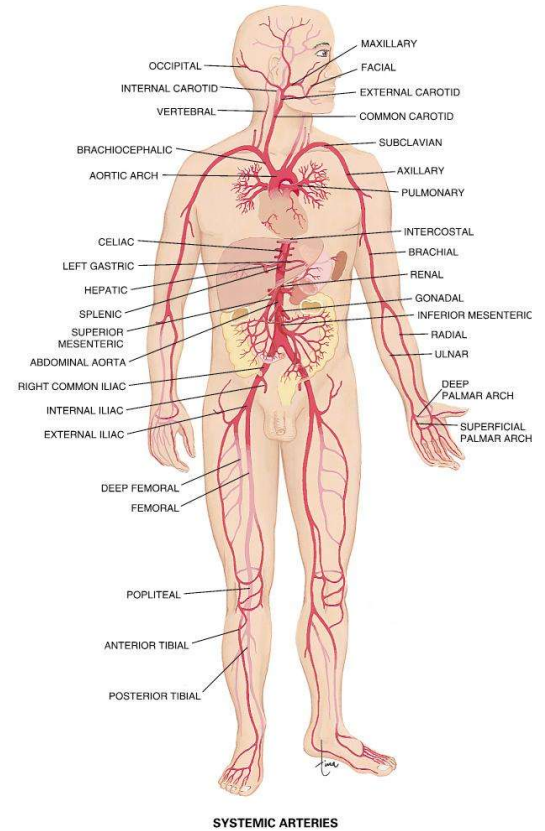
Nerves, Veins, and Arteries

Common Carotid Artery - Pertaining to the right and left common carotid arteries, which form the principal blood supply to the head and neck.

Femoral Artery – The artery that begins at the external iliac artery and terminates behind the knee as the popliteal artery on the inner side of the femur. The main blood supply for the leg.

Radial Artery – The artery on the anterior radial side of the forearm.

Temporal Artery – The superficial temporal artery passes over the zygomatic arch through the temple and towards the top of the head.



Areas

Ala Nasi - of the nose; broad portion forming the lateral wall of each nostril.

Axillary Fold – the fold of skin in the armpit.

Dorsum of foot – The top of the foot.

Ear Apex – Very top of the outer ear. (5 in the illustration)

Frenulum – Attaches the bottom of the tongue to the floor of the mouth.

Gluteal Fold – The linear crease in the skin that separates the buttocks from the thighs.

Hiatus of Sacrum – the articulation between the sacrum and the coccyx.

Index Finger – the medial of the five fingers.

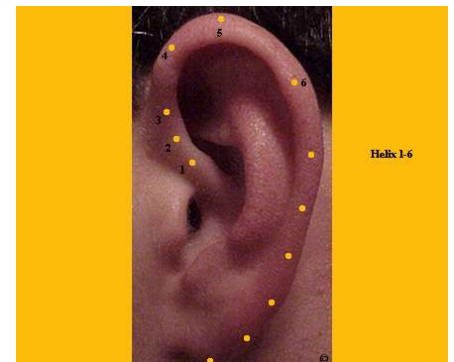
Inguinal Groove – The groove between anterior portion of the pelvis and thigh.

Inner Canthus – the inner corner where the eyelids meet near the nose.

Intercostal Spaces – The spaces between the ribs.

Labial Gingiva – the gums that cover the teeth nearest to the lips.

Lobule of Ear – The ear lobe.



Maxillary Line –

Midsagittal Lines of the Head – The vertical plane that evenly bisects the head at the nose.

Mid-Axillary Line – A line that runs along a coronal plane about the middle of the armpit down the thorax.

Mentolabial Groove – separates the lower lips from the chin

Nasolabial Groove – separates the lips from the cheeks

Outer Canthus – the lateral corner where the upper and lower eyelids meet.

Perineum (Men) – The external area between the scrotum and the anus.

Perineum (Women) – The external area between the vulva and the anus.

Philtrum – The median groove on the external surface of the upper lip.

Popliteal Crease – The crease at the back of the knee.

Root of Auricle – The anterior portion of the outer ear where it meets the skull. (Inferior to point 4 in illustration above.)

Radial Side – On the thumb side of the forearm.

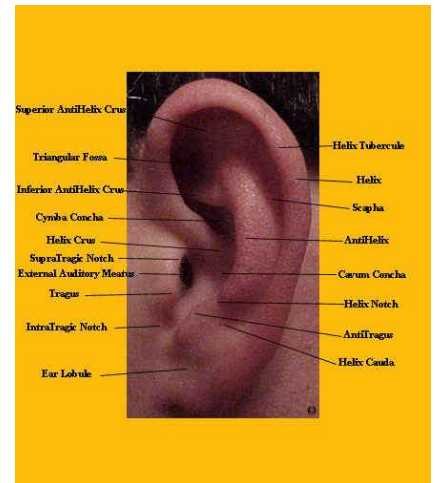
Supraclavicular Fossa – A depression on either side of the neck extending down behind the clavicle.

Tragus - A cartilaginous projection in front of the exterior meatus of the ear.

Transverse Cubital Crease – The crease on the anterior surface of the elbow.

Ulnar Side – The “pinky” side of the forearm.

Xyphoid Process – The “tip” of the sternum.



Direction

Abduction – To move further from the midline of the body.

Adduction – To move closer to the midline of the body.

Anterior – The front.

Anteroinferior – in front and below

Distal – further from the midline than a reference point.

Dorsal or Dorsum – the back or posterior surface

Flexed – to bend in the flexion position

Inferior - below

Medial – toward the midline.

Palmer Side – the palm side of the hand.

Posterior – the back.

Prone – lying with the face down.

Proximal – closer to the midline than a reference point.

Superior – above

Superolateral – to the back and above.

Supine – lying with the face up.

Muscles

Abductor Longus – muscle in forearm for abducting the thumb.

Biceps Brachii – The muscle of the upper arm that flexes the arm and forearm and supinates the hand.

Biceps Femoris - One of the hamstring muscles lying on the posterior lateral side of the thigh.

Deltoid - The large triangular muscle that covers the shoulder joint.

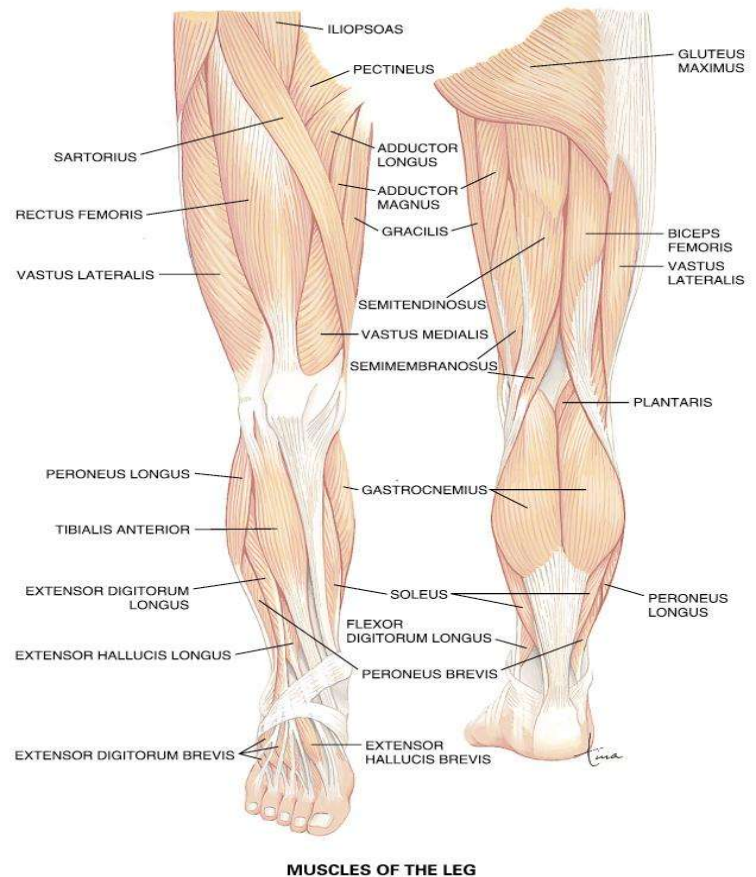
Digitum Longus - Flexor digitorum longus is one of the deep muscles of the posterior lower limb. It originates from the posterior and middle third of the tibia. Its tendon passes inferiorly posterior to the medial malleolus to enter the sole of the foot. It inserts into the bases of the distal phalanges of the lateral four toes. Flexor digitorum longus has the following actions:

- flexion of the lateral four toes
- plantarflexes the foot at the ankle
- supports the medial longitudinal arch

Extensor Digitorum Communi - Extensor digitorum is one of the superficial layer of muscles on the extensor surface of the forearm. It arises from the common extensor origin on the anterior aspect of the lateral epicondyle of the humerus. Passing distally, it occupies most of the posterior aspect of the forearm. It divides into four tendon slips proximal to the wrist. The tendons insert into the extensor expansions of the fingers: the middle slip of each tendon supplies the base of the middle phalange; the two outer slips of each tendon pass to bases of the distal phalanges. Tendons to the ring and little fingers often fuse. The contribution to the little finger extensor hood may only be a small slip. Extensor digitorum extends the:

- wrist
- fingers at the metacarpophalangeal and interphalangeal joints

Flexor Carpi Radialis - One of the superficial muscles on the anterior aspect of the forearm. It originates from the common flexor origin on the medial epicondyle of the humerus. It passes distally and radially to insert into the base of the second metacarpal. The action of flexor carpi radialis is to flex and radially-deviate the hand at the wrist joint.



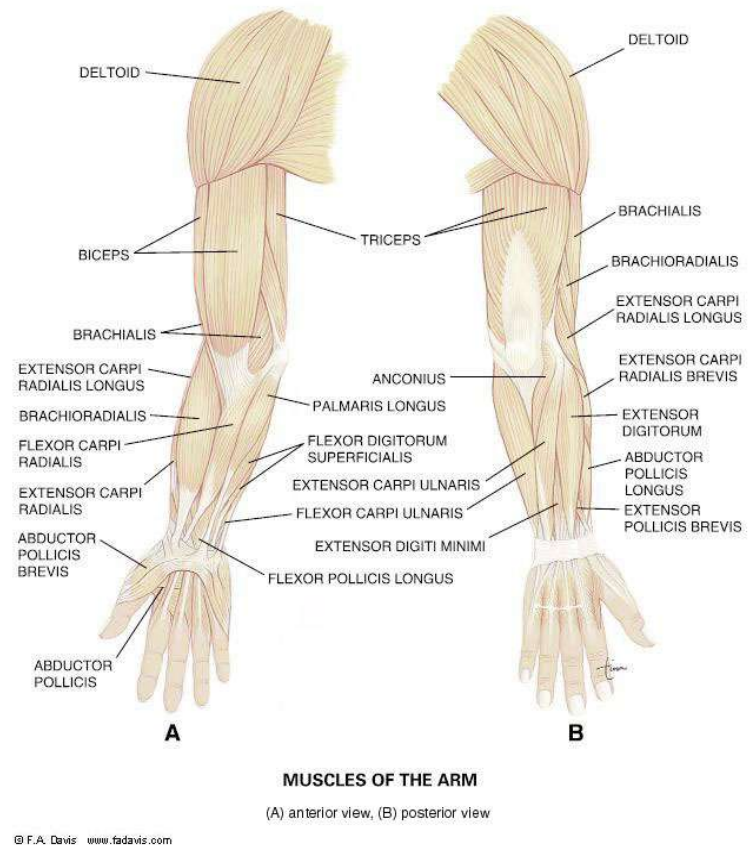
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Flexor Carpi Ulnaris - One of the muscles of the anterior aspect of the forearm. It originates from two sites:

- humeral head from the common flexor origin on the medial epicondyle of the humerus
- ulnar head from the medial border of the olecranon via an aponeurosis and from the proximal half of the subcutaneous posterior border of the ulna

It passes distally and radially. It inserts into the pisiform bone but indirectly acts upon the hamate bone and fifth metacarpals via the pisohamate ligament and pisometacarpal ligament respectively. The actions of flexor carpi ulnaris are:

- adduction (ulnar deviation) of the hand at the wrist
- flexion of the hand at the wrist
- fixes the pisiform bone during hypothenar muscle activity



Masseter – closes the mouth.

Mastoid Process – anchor for the muscle that opens the mouth.

Palmaris Longus – On the ulnar side of the forearm, Palmaris longus arises from the common flexor origin around the medial epicondyle. It is inserted into the tough fascia of the palmar aponeurosis and the flexor retinaculum. The action of palmaris longus is to flex the wrist and tense the palmar aponeurosis.

Patellar Ligament - A strong, flat band securing the patella to the tibia.

Quadriceps Femoris - A large muscle on the anterior surface of the thigh composed of the rectus femoris, vastus lateralis, vastus medialis, and vastus intermedius muscles. They act to extend the leg at the knee joint

Rectus Abdominis - Rectus abdominis is one of the muscles of the anterior abdominal wall. It originates from the symphysis pubis and the pubic crest. From here it passes superiorly, broadening in the process, to insert into the anterior surface of the xiphoid process, the medial part of the costal margin and the 5th to 7th costal cartilages. The actions of rectus abdominis are manifold:

- flexion of the trunk on the pelvis
- elevation of intra-abdominal pressure eg. during parturition, 'abdominal breathing'

- stabilization of the pelvis to permit the lower limb muscles to work more effectively

Sartorius – This is the longest muscle in the body. It is the most superficial muscle in the thigh and it forms one of the boundaries of the femoral triangle. It originates immediately inferior to the anterior superior iliac spine. It inserts into the upper, medial surface of the shaft of the tibia just anterior to the insertion of gracilis and semitendinosus. Its actions are:

- at the hip: flexion, abduction and lateral rotation of thigh
- at knee: flexes, medially rotates leg

Semitendinosus (**semitendinosus?**) & Semimembranosus - The fusiform muscle of the posterior and inner part of the thigh & A large muscle of the inner and back part of the thigh.

Sternocleidomastoid – Goes by SCM. On each side, the sternocleidomastoid muscle divides the neck into anterior and posterior triangles. It originates from two heads:

- sternal head: superior and anterior surface of manubrium sterni
- clavicular head: superior surface of medial third of clavicle

From this continuous origin, the muscle passes superiorly, laterally and posteriorly. It inserts along a continuous line between the lateral surface of the mastoid process of the temporal bone and the lateral half of the superior nuchal line of the occipital bone.

The actions of sternocleidomastoid are manifold:

- acting unilaterally, sternocleidomastoid:
 - flexes the cervical spine ipsilaterally
 - laterally rotates the cervical spine to the contralateral side
- acting bilaterally, both muscles:
 - protract the head
 - extend the incompletely extended cervical spine
- provide protection for deeper vital structures throughout some of their course, e.g. the great vessels

Tibialis Anterior – See image above.

Trapezius - A flat, triangular muscle covering the posterior surface of the neck and shoulder.

Triceps Brachii – See image above. A muscle of the arm with three points of origin and one insertion. It extends the forearm.