

MUSCLE	LOCATION	Insertion	ACTION
Muscles of the Face			
Frontalis	Cranial Apponeurosis(Dome of Skull); Galea aponeurotica	Skin of eyebrows and root of nose.	Raises Eyebrows
Occipitalis	Occipital and Temporal Bones	Galea aponeurotica	Pulls Scalp Posteriorly
Orbicularis Oris	Indirectly on Maxilla and Mandible	Encircles mouth; Inserts into muscle and skin at angles of mouth.	Closes mouth; Kissing and whistling muscle.
Buccinator	Molar region of Maxilla and Mandible	Orbicularis Oris	Holds food between teeth during chewing.
Zygomaticus Major and Minor	Zygomatic Bone	Skin and muscle at corner of mouth.	Raises lateral corners of mouth upward (smiling).
Orbicularis Oculi	Frontal and Maxillary bones and ligaments around Orbit	Encircles orbit and inserts in tissue of eyelid.	Closes eyes; Blinking, squinting; Draws eyeborws.
Masseter	Zygomatic arch and Maxilla	Angle and ramus of mandible.	Closes jaw, and elevates Mandible.

Temporalis

Temporal Fossa

Coronoid process of mandible.

Closes jaw; Elevates and retracts Mandible.

MUSCLES

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Muscles that move the Head

Sternocleidomastoid

Manubrium of sternum and medial portion of clavicle

Mastoid process of temporal bone and superior nuchal line of occipital bone.

Flexion of neck forward, generally against resistance.

Scalenes

Transverse processes of cervical vertebrae

Anterolaterally on ribs 1-2.

Flex and slightly rotate neck; elevate ribs 1-2.

Anterior Abdominals

Rectus Abdominalis

Pubic crest and symphysis

Xiphoid process and costal cartilages of ribs 5-7.

Flexes and rotates vertebral column; Increases abdominal pressure (sit-ups).

External Oblique

Anterior surface of last eight ribs

Linea alba, pubic crest and tubercles, and iliac crest.

(rectus abdominis) Aids muscles of back in trunk rotation.

Internal Oblique

Lumbar fascia, iliac crest, and inguinal ligament

Linea alba, pubic crest and costal cartilages of last three ribs.

(External oblique) lateral flexion used in oblique curls.

Diaphragm	Interior of rib and sternum, costal cartilages of last six ribs, lumbar vertebrae	Central tendon.	Prime mover of inspiration; Flattens on contraction; Increases intra-abdominal pressure.
Internal Intercostals	Superior border of rib below	Inferior border of rib above.	Draws ribs together to depress rib cage; Aids in forced expiration
External Intercostals	Inferior border of rib above	Superior border of rib below.	Pulls ribs toward one another to elevate rib cage; Aids in inspiration.

MUSCLE

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Muscles that move the Shoulder Girdle

Pectoralis Major	Aponeurosis of ext. oblique muscle, clavicle, sternum, cartilage of ribs 1-6 (or 7)	Fibers converge to insert by short tendon into intertubercular sulcus of humerus.	Prime mover of shoulder flexion, used in shoulder adduction and medially rotates the shoulder joint, rotates arm.
Pectoralis Minor	Anterior surface of ribs 3-5, near their costal cartilages.	Coracoid process of scapula.	With ribs fixed, draws scapula forward and inferiorly; With scapula fixed draws rib cage up, abducts scapula
Serratus Anterior	Lateral aspect of ribs 1-8 (or 9)	Vertebral border of anterior surface of scapula.	Moves scapula forward toward chestwall; Abduction and raising of arm.
Trapezius	Occipital bone; Ligamentum nuchae; Spines of C7 and all thoracic vertebrae	Acromion and spinous process of scapula; Lateral third of clavicle.	Extends head; Raises, rotates and retracts (adducts) scapula.

Levator Scapulae	Transverse process of C1 - C4.	Medial border of scapula superior to spine.	Elevates and adducts scapula; With fixed scapula flexes neck to same side.
Rhomboideus Major	Spinous Process of C7, T1 - T5	Medial border of scapula.	Pulls scapula medially; Stabilizes scapula; Rotates glenoid cavity downward.
Rhomboideus Minor	Spinous Process of C7, T1 - T5	Medial border of scapula.	Pulls scapula medially; Stabilizes scapula; Rotates glenoid cavity downward.

MUSCLE

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Muscles that move the Humerus

Latissmus Dorsi	Indirect attachment to spinous processes of lower six thoracic and lumbar vertebrae, last 3-4 ribs and iliac crest.	Floor of intertubercular sulcus of humerus.	Prime mover of arm extension; Adducts and medially rotates arm.
Deltoid	Lateral one-third of clavicle; Acromion and spine of scapula.	Deltoid tuberosity of humerus.	Prime mover of arm abduction.
Teres Major	Posterior surface at inferior angle of scapula.	Intertubercular sulcus of humerus.	Extends , medially rotates and adducts humerus.

Teres Minor	Lateral margin of scapula.	Greater tubercle of humerus.	Lateral rotation of humerus; Stabilizes shoulder.
Pectoralis Major	Aponeurosis of ext. oblique muscle, clavicle, sternum, cartilage of ribs 1-6 (or 7)	Fibers converge to insert by short tendon into intertubercular sulcus of humerus.	Prime mover of arm flexion; Adducts medially, rotates arm.

MUSCLE

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Muscles that move the Forearm

Biceps Brachii

Short head: coracoid process;
tendon of long head runs in
intertubercular sulcus and within
capsule of shoulder joint.

Radial tuberosity.

Flexion (powerful) of elbow and
supination of forearm; Weak arm
flexor.

Brachialis

Distal portion of anterior
humerus.

Coronoid process of ulna.

A major flexor of forearm.

Brachioradialis	Lateral ridge at distal end of humerus.	Base of styloid process of radius.	Synergist in forearm flexion.
Triceps Brachii	Long head --inferior margin of glenoid cavity; Lateral head -- posterior humerus; Medial head -- distal radial groove on posterior humerus.	Olecranon process of ulna.	Powerful forearm extensor; Antagonist of forearm flexors (brachialis and biceps brachii).
Pronator Teres	Medial epicondyle of humerus and coronoid process of ulna.	Midshaft of radius.	Acts synergistically with pronator quadratus to pronate forearm; Weak elbow flexor.

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Muscles that move the Wrist & Hand

Flexor Carpi Radialis	Medial epicondyle of humerus.	Base of metacarpals 2 and 3.	Powerful flexor of wrist; Abducts hand.
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Flexor Carpi Ulnaris	Medial epicondyle of humerus and olecranon process and posterior surface of ulna.	Base of metacarpal 5; Pisiform and hamate bones.	Powerful flexor of wrist; Adducts hand.
Extensor Carpi Radialis longus	Lateral supracondylar ridge of humerus.	Base of metacarpal 2.	Extends and abducts wrist.
Extensor Carpi Ulnaris	Lateral epicondyle of humerus; Posterior border of ulna.	Base of metacarpal 5.	Extends and adducts wrist.
Extensor Digitorum	Lateral epicondyle of humerus.	By four tendons into distal phalanges of fingers 2-5.	Prime mover of finger extension; extends wrist; can flare (abduct) fingers.

MUSCLE

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Muscles that move the Vertebra

Rectus Abdominus

Pubic crest and symphysis

Xiphoid process and costal cartilages of ribs 5-7.

Flexes and rotates vertebral column; Increases abdominal pressure (sit-ups).

Muscles that move the Thigh

Gluteus Maximus	Dorsal ilium, sacrum, and coccyx.	Gluteal tuberosity of femur and iliotibial tract.	Complex, powerful thigh extensor; Laterally rotates and abducts thigh. (Climbing stairs).
Gluteus Medius	Upper lateral surface of ilium.	Greater trochanter of femur.	Abducts and medially rotates thigh; Steadies pelvis during walking.
Tensor Fasciae Latae	Anterior aspect of iliac crest and anterior superior iliac spine.	Iliotibial tract (lateral portion of fascia lata).	Flexes, abducts, and medially rotates thigh; Steadies trunk.
Adductor Longus	Pubis near pubic symphysis.	Linea aspera	Adduct and medially rotate and flex thigh.
Piriformis	Anterior part of the sacrum; Superior margin of the greater sciatic notch.	Greater trochanter of femur.	Externally rotates the hip.

MUSCLE

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Muscles that move the Lower Leg

Quadriceps Femoris:

Rectus Femoris	Anterior inferior iliac spine and superior margin of acetabulum.	Tibial tuberosity and patella.	Extends leg at the knee and flexes thigh at hip.
Vastus Lateralis	Greater trochanter, intertrochanteric line, and linea aspera.	Tibial tuberosity and patella.	Extends leg at the knee and stabilizes knee.
Vastus Medialis	Linea aspera and intertrochanteric line.	Tibial tuberosity and patella.	Extends leg at the knee ; Stabilizes patella.
Vastus Intermedius	Anterior and lateral surface of femur.	Tibial tuberosity and patella.	Extends leg at the knee

Hamstrings:

Biceps Femoris	Ischial tuberosity (long head); Linea aspera and distal femur (short head).	Tendon passes laterally to insert into head of fibula and lateral condyle of tibia.	Extends thigh at the hip; Laterally rotates leg; Flexes leg at the knee.
Semitendinosus	Ischial tuberosity.	Medial aspect of upper tibial shaft.	Extends thigh at the hip; Medially rotates leg. Flexes leg at the knee.

MUSCLE

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Muscles that move the Lower Leg (cont.)

Semimembranosus

Ischial tuberosity.

Medial condyle of tibia; Lateral condyle of femur.

Extends thigh at the hip; Flexes leg at the knee; Medially rotates leg.

Gracilis

Inferior ramus and body of pubis.

Medial surface of tibia just inferior to medial condyle.

Adducts thigh; Flexes and medially rotates leg, especially during walking.

Sartorius

Anterior superior iliac spine.

By an aponeurosis into medial aspect of proximal tibia.

Flexes, abducts and laterally rotates thigh; Flexes knee; Known as "tailor's muscle".

Muscles that move the Feet and Toes

Gastrocnemius

By two heads from medial and lateral condyles of femur.

Calcaneus via calcaneal tendon.

Plantar flexes foot when knee is extended; Crosses knee joint; Thus can flex knee (when foot is dorsiflexed).

Soleus

Proximal portion of tibia and fibula; Interosseous membrane.

Calcaneus via calcaneal tendon.

Plantar flexion; Is an important muscle for locomotion.

Peroeus Longus

Head and upper portion of fibula.

By long tendon under foot to metatarsal 1 and medial cuneiform.

Plantar flexes and everts foot; Helps keep foot flat on ground.

Tibialis Posterior

Superior portion of tibia and fibula and interosseous membrane.

Tendon passes obliquely behind medial malleolus and under arch of foot; Inserts into several tarsals and metatarsals 2-4.

Prime mover of foot inversion; Plantar flexes foot; Stabilizes longitudinal arch of foot.

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Muscles that move the Feet and Toes			
Tibialis Anterior	Lateral condyle and upper 2/3 of tibia; Interosseous membrane.	By tendon into inferior surface of first cuneiform and metatarsal 1.	Prime mover of dorsiflexion; Inverts foot; Supports longitudinal arch of foot.
Flexor Digitorum Longus	Posterior surface of tibia.	Distal phalanges of toes 2-5.	Flexes toes; Plantar flexes and inverts foot.
Extensor Digitorum Longue	Lateral condyle of tibia; Proximal 3/4 of fibula; Interosseous membrane.	Tendon divides into four parts; Inserts into middle and distal phalanges of toes 2-5.	Prime mover of toe extension; Dorsiflexes foot.