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OTHER TABLES

GROSS ANATOMY OF THE MUSCULAR SYSTEM

MUSCLE NAME		ORIGIN	INSERTION	ACTION	NERVE SUPPLY/ NOTES
<i>Muscles of the Head and Neck:</i>					
Occipito-frontalis	Frontalis	Galea aponeurotica	Skin of eyebrows	raises eyebrows; wrinkles skin of forehead	Facial
	Occipitalis	Occipital & temporal	galea aponeurotica	fixes aponeurosis and pulls scalp posteriorly	Facial
Orbicularis oculi		Frontal & maxillary bones	Eyelids	Closes eye; blinking, squinting; draws eyebrows inferiorly	Facial
Orbicularis oris		Maxilla & mandible	Muscle and skin of mouth	Closes lips; purses and protrudes lips (as in kissing)	Facial
Buccinator		Maxilla and mandible	Orbicularis oris	Draws corner of mouth laterally; compresses cheek (whistling, sucking); holds food between teeth	Facial
Masseter		Zygomatic arch and maxilla	Body and ramus of mandible	Prime mover of mandible elevation	Trigeminal (Mandibular Branch)
Temporalis		Temporal fossa	Coronoid process of mandible	Elevates, retracts and moves mandible side-to-side	Trigeminal (Mandibular Branch)
Sternocleidomastoid		Sternum & clavicle	Mastoid process	Each turns head toward opposite side or tilts head laterally; together, flex head on chest	Accessory, Cervical Spinal Nerves (2-4)
Platysma		Fascia of chest	Lower margin of mandible and skin of mouth	Depresses mandible (agonist); pulls lip down and back; tenses skin of neck	Facial

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<i>Muscles of the Thorax, Shoulder, and Abdominal Wall:</i>					
Rotator Cuff	Supraspinatus (rotator cuff)	Scapula (supraspinous fossa)	Greater tubercle of humerus	Stabilizes shoulder (helps prevent downward dislocation); assists in abduction	Suprascapular
	Infraspinatus (rotator cuff)	Scapula (infraspinous fossa)	Greater tubercle	Holds head of humerus in glenoid cavity; stabilizes shoulder; rotates humerus laterally	Suprascapular
	Subscapularis (rotator cuff)	Subscapular fossa	Lesser tubercle	Medially rotates humerus; helps hold humerus in glenoid cavity	Subscapular nerve
	Teres minor (rotator cuff)	Lateral dorsal scapula	Greater tubercle	Holds head of humerus in glenoid cavity; stabilizes shoulder; rotates humerus laterally; adducts arm at	Axillary
Teres major	Posterior inferior scapula	Intertubercular groove	Extends, medially rotates, adducts humerus (synergist of latissimus dorsi)	Lower subscapular	
Pectoralis major	Medial clavicle; sternum;	Intertubercular groove	Prime mover of arm flexion at shoulder; rotates arm medially; adducts arm against resistance; pulls ribs	Pectoral nerves	
Pectoralis minor	Ribs 3-5 (or 2-4)	Coracoid process of scapula	Draws scapula forward and down (with ribs fixed); draws ribs up (with scapula fixed)	Pectoral nerves	
Serratus anterior	Ribs 1-8 (or 9)	Vertebral border of scapula	Protracts and holds scapula against ribs; rotates scapula laterally and upward; raises point of shoulder;	Long thoracic nerve	

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<i>Muscles of the Thorax, Shoulder and Abdominal Wall (continued):</i>				
Deltoid	Clavicle; acromion & spine	Deltoid tuberosity	Abduction, flexion and extension of arm at shoulder; medial rotation (anterior); lateral rotation (posterior)	Axillary
Trapezius	Occipital bone; cervical vertebrae	Acromion and spine of scapula; clavicle	Stabilizes, retracts, raises, rotates scapula; extends with scapula fixed	Accessory and cervical spinal nerves
Latissimus dorsi	Spines of lower thoracic & lumbar vertebrae	Intertubercular groove	Arm adduction, medial rotation and extension at shoulder; depresses scapula; brings arm down in power stroke	Thoracodorsal nerve
Internal intercostal muscles	Superior border of rib below	Inferior border of rib above	Pull down on rib for forced expiration	Intercostal nerves
External intercostal muscles	Inferior border of rib above	Superior border of rib below	Pull up on rib for inspiration	Intercostal nerves
Diaphragm	Ribs, sternum, costal cartilages	Central tendon	Increase size of thoracic cavity for inspiration	Phrenic
External oblique	Lower 8 ribs	Linea alba (some to pubic crest and iliac crest)	Individually, flex vertebral column laterally or rotate trunk; together, aid flexion of vertebral column; increase intra-abdominal pressure	Intercostal nerves

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Internal oblique	Lumbar fascia, iliac crest	Linea alba (to pubic crest and iliac crest)	Individually, flex vertebral column laterally or rotate trunk; together, aid flexion of vertebral column; increase intra-abdominal pressure	Intercostal nerves
<i>Muscles of the Thorax, Shoulder and Abdominal Wall (continued):</i>				
Transversus abdominis	Inguinal ligament; last 6 costal	Linea alba; pubic crest	increase intra-abdominal pressure	Intercostal nerves
Rectus abdominis	Pubic crest and symphysis	Sternum & 5-7 costal cartilages	Flex and rotate lumbar vertebral column; stabilize pelvis during walking; increase intra-abdominal	Intercostal nerves
Levator scapulae	Transverse processes C1-C4	Medial border & spine of scapula	Elevates & adducts scapula; flexes neck to same side	Cervical spinal nerves & dorsal scapular nerve
Rhomboids	Spinous processes of C7 –T5	Medial border of scapula	Retracts scapula; rotates scapula downward (when arm is lowered against resistance; paddling muscle);	Dorsal scapular nerve
<i>Muscles of the Upper Appendage (Arm) that act on the Forearm:</i>				
Biceps brachii	Coracoid process; tubercle over glenoid cavity	Radial tuberosity	Flexes and supinates arm at elbow; weak flexor at shoulder	Musculocutaneous
Brachialis	Front of distal humerus	Coronoid process	Flexes arm at elbow	Musculocutaneous

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Brachioradialis	Supracondylar ridge humerus	Styloid process of radius	Synergist of arm flexion at elbow; stabilizes elbow (rapid movements)	Radial nerve
Triceps brachii	Scapula; humerus	Olecranon process	Extends arm at elbow; assists arm adduction	Radial
Supinator	Lateral epicondyle	Proximal radius	Supinates forearm	Radial (Posterior interosseous)
Pronator teres	Medial epicondyle; coronoid process	Lateral radius (midshaft)	Pronates forearm; weak elbow flexor	Median
Anconeus	Lateral epicondyle	Olecranon process	Abducts ulna during pronation; aids elbow extension	Radial
Coracobrachialis	Coracoid process	Medial humerus	Flexion and abduction of humerus	Musculocutaneous
<i>Muscles of the Upper Appendage (Forearm) that act on the Wrist, Hand, and Fingers:</i>				
Flexor carpi ulnaris	Medial epicondyle; olecranon process	Carpals; 5 th metacarpals	Flexes wrist; adducts hand (with extensor carpi ulnaris); stabilizes wrist for finger extension	Ulnar

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Palmaris longus	Medial epicondyle	Palmar aponeurosis	Weak wrist flexor; weak synergist of elbow flexion; not present in all people	Median
Flexor carpi radialis	Medial epicondyle	Base of 2 nd & 3 rd metacarpals	Flexes wrist; abducts wrist; weak synergist of elbow flexion	Median
Flexor digitorum superficialis	Medial epicondyle; coronoid	Middle phalanges 2-5	Flexes wrist and middle phalanges of digits 2-5 (fast acting)	Median
Extensor carpi ulnaris	Lateral epicondyle	Base of 5 th metacarpal	Extends wrist; adducts wrist	Radial (Posterior interosseous)
Extensor digitorum	Lateral epicondyle	Distal phalanges 2-5	Extends digits, weak wrist extensor; abducts (flares) fingers	Radial (posterior interosseous)
Flexor pollicis longus	Radius; interosseous membrane	Distal thumb phalanx	Flexes distal phalanx of thumb	Median
Flexor digitorum profundus	Coronoid process anterior ulna	Distal phalanges of 2-5	Flexes digits (slow); weak synergist of wrist flexion	Ulnar (medial half); median (lateral half)
Pronator quadratus	Distal ulna	Distal anterior radius	Prime mover of forearm pronation	Median

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Extensor carpi radialis longus		Lateral supracondylar ridge	Base of 2 nd metacarpal	Extends wrist; abducts wrist (with flexor radialis)	Radial
Extensor carpi radialis brevis		Lateral epicondyle	Base of 3 rd metacarpal	Extends wrist; abducts wrist; steadies wrist during finger extension	Radial
<i>Muscles of the Hand That Move the Thumb</i>					
Extensor pollicis longus		Dorsal radius and ulna	Base of distal thumb phalanx	Extends thumb	Radial (posterior interosseous)
Extensor pollicis brevis		Dorsal radius and ulna	Base of proximal thumb phalanx	Extends thumb	Radial (posterior interosseous)
Abductor pollicis longus		Posterior radius & ulna	Base of metacarpal 1	Abducts and extends thumb; abducts wrist	Radial (posterior interosseous)
<i>Muscles of the Pelvis and Lower Appendage That Act on the Thigh and Upper Leg</i>					
<i>Iliopsoas</i>	Iliacus	iliac fossa and crest; sacrum	femur below lesser trochanter	prime mover of thigh flexion at hip	Femoral
	Psoas major	lumbar vertebrae	lesser trochanter	prime mover of thigh flexion at hip; lateral flexion of vertebral column; posture	Femoral

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Gluteus maximus		Dorsal ilium; sacrum; coccyx	Gluteal tuberosity; iliotibial tract	Major thigh extensor, especially when thigh is flexed (as in climbing); laterally rotates & abducts thigh	Inferior gluteal
Gluteus medius		Lateral ilium	Greater trochanter	Thigh abduction; medial thigh rotation; stabilizes hip when walking	Superior gluteal
<i>Muscles of the Lower Appendage (Thigh) that act on the Knee:</i>					
Hamstrings	Biceps femoris	Ischial tuberosity / linea alba	Lateral condyle of tibia; fibula	Extends thigh, flexes knee; laterally rotates leg	(branch) Tibial
	Semimembranosus	Ischial tuberosity	Medial proximal tibia	Extends thigh, flexes knee; medially rotates leg	(branch) Tibial
	Semitendinosus	Ischial tuberosity	Medial proximal tibia	Extends thigh, flexes knee; medially rotates leg	(branch) Tibial
Quadriceps femoris	Rectus femoris	Anterior inferior iliac spine	Tibial tuberosity via patellar ligament	Extends knee; flexes thigh on hip	Femoral

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	Vastus lateralis	Greater trochanter; linea aspera	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral
	Vastus intermedius	linea aspera	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral
	Vastus medialis	Anterolateral proximal femur	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral
Sartorius		Anterior superior iliac spine	Medial proximal tibia	Flexes abducts, laterally rotates knee; tailor's muscle	Femoral
<i>Adductors</i>	Adductor magnus	Ischial tuberosity; pubis	Linea aspera; adductor tubercle	Anterior: adducts, medially rotates thigh; flexes thigh Posterior: extends thigh	Obturator
	Adductor longus	Pubis	Linea aspera	Adducts, flexes thigh, medially rotates thigh	Obturator
	Gracilis	Pubis, ischium	Medial tibia	Adducts, flexes and medially rotates thigh; flexes knee	Obturator
Muscles of the Lower Appendage (Leg) that act on the Knee:					

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<i>Triceps surae</i>	Gastrocnemius	Medial & lateral femoral condyles	Calcaneus	Plantar flexes foot when knee is extended; flexes knee when foot is dorsiflexed	(branch) Tibial
	Soleus	Tibia, fibula	Calcaneus	Plantar flexes	(branch) Tibial
Tibialis anterior	Lateral Condyle of Tibia, interosseous membrane	Medial cuneiform; 1 st metatarsal		Dorsiflexes and inverts foot	(branch) Common Fibular
<i>Muscles of the Lower Appendage (Leg) that act on the Foot</i>					
Tibialis posterior	Tibia & fibula	Tarsals & metatarsals 2-4		Foot inversion; plantar flexion	(branch) Tibial
Fibularis (peroneus) longus	Fibula	1 st metatarsal; medial cuneiform		Plantar flexes & everts foot	(branch) Common Fibular
Fibularis (peroneus) tertius	Distal anterior fibula	5 th metatarsal		Dorsiflexes & everts foot	(branch) Common Fibular
Fibularis (peroneus) brevis	Fibula	5 th metatarsal		Plantar flexes & everts foot	(branch) Common Fibular

Shaded: Do NOT need to know for lab.

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NOT Shaded: **Do** need to know for lab.

Flexor digitorum longus	Tibia	Distal phalanges 2-5	Plantar flexes & inverts foot; flexes toes	(branch) Tibial
Extensor digitorum longus	Tibia; fibula	Middle & distal phalanges 2-5	Toe extension; dorsiflexes foot	(branch) Common Fibular