List of Muscles and Actions

Muscles of the Head that Produce Facial Expressions

<u>Muscle</u> <u>Action</u>

Occipitofrontalis Frontal belly draws scalp anteriorly, raises eyebrows and wrinkles

skin of forehead horizontally.

Occipital belly draws scalp posteriorly.

Orbicularis oris Closes and protrudes lips as in kissing

Zygomaticus major Draws angle of mouth superiorly and laterally as in smiling.

Levator labii superioris Raises upper lip.

Depressor labii inferioris Depresses lower lip.

Depressor anguli oris Draws angle of mouth laterally and inferiorly.

Buccinator Presses cheeks against teeth and lips as in whistling, blowing,

and sucking.

Risorius Draws angle of mouth laterally as in grimacing.

Mentalis Elevates and protrudes lower lip and pulls skin of chin up–pouting.

Platysma Draws outer part of lower lip inferiorly and posteriorly as in

pouting and depresses mandible.

Orbicularis oculi Closes eye.

Levator palpebrae superioris Elevates upper eyelids (opens eyes).

Corrugator supercilii Draws eyebrow inferiorly and wrinkles skin of forehead vertically

As in frowning.

Muscles that Move the Eyeballs (Extrinsic Eye Muscles)

Muscle Action

Superior rectus Moves eyeballs superiorly and medially.

Inferior rectus Moves eyeballs inferiorly and medially.

Lateral rectus Moves eyeballs laterally.

Medial rectus Moves eyeballs medially.

Superior oblique Moves eyeballs inferiorly and laterally.

Inferior oblique Moves eyeballs superiorly and laterally.

Muscles That Move the Mandible and Assist in Mastication

<u>Muscle</u> <u>Action</u>

Masseter Elevates mandible as in closing mouth

Temporalis Elevates and retracts mandible.

Muscles That Move the Tongue

<u>Muscle</u> <u>Action</u>

Genioglossus Depresses tongue and thrusts it anteriorly (protraction).

Muscles of the Anterior Neck That Assist in Deglutition and Speech

<u>Muscle</u> <u>Action</u>

Digastric Elevates hyoid bone and depresses mandible.

Stylohyoid Elevates hyoid bone.

Mylohyoid Elevates hyoid bone and depresses mandible.

Omohyoid Depresses hyoid bone.

Sternohyoid Depresses hyoid bone.

Muscles of the Neck that Move the Head

<u>Muscle</u> <u>Action</u>

Sternocleidomastoid Acting together, flex cervical vertebral column and head.

Semispinalis capitis Acting together, extend head.

Longissiumus capitis Acting together, extend head.

Muscles of the Neck and Back that Move the Vertebral Column – Erector Spinae Muscles

<u>Iliocostalis (lateral) group</u> – Acting together, muscles of each region (cervical, thoracic, and lumbar) extend and maintain erect posture of vertebral column of their respective regions.

Iliocostalis cervicis Iliocostalis thoracis Iliocostalis lumborum

<u>Longissimus (intermediate) group</u> — Acting together, longissimus capitis muscles extend head (see above). Acting together longissimus cervicis and both longissimus thoracis muscles extend vertebral column of their repective regions.

Longissimus capitis (already listed above) Longissimus cervicis Longissimus thoracis

<u>Spinalis (medial) group</u> - Acting together muscles of each region (cervical, thoracic and lumbar) extend vertebral column of their respective regions.

Spinalis capitis Spinalis cervicis Spinalis thoracis

Muscles of the Abdomen

Muscle Action

Rectus abdominis Flexes vertebral column and compresses abdomen.

External oblique Acting together, compress abdomen.

Internal oblique Acting together, compress abdomen.

Transversus abdominis Compresses abdomen.

Muscles of the Thorax that Assist in Breathing

<u>Muscle</u> <u>Action</u>

Diaphragm Contraction causes it to flatten and increase size of thoracic cavity

resulting in inhalation.

Relaxation causes it to move superiorly and decrease the size of

the thoracic cavity resulting in exhalation.

External Intercostals Contraction causes ribcage to expand and increase the size of the

thoracic cavity resulting in inhalation.

Internal Intercostals Contraction draws adjacent ribs together to decrease the size of the

thoracic cavity resulting in exhalation.

Muscles of the Pelvic Floor

<u>Muscle</u> <u>Action</u>

Pubococcygeus (part of Levator ani) Supports and maintains position of pelvic viscera.

Iliococcygeus (part of Levator ani) Supports and maintains position of pelvic viscera.

Muscles of the Perineum

Muscle Action

Superficial transverse perineal Stabilizes perineal body of perineum.

Bulbospongiosus Helps expel urine, propel semen, and assists in erection of penis

and clitoris.

Ischiocavernosus Maintains erection of penis and clitoris.

Muscles of the Thorax That Move the Pectoral Girdle

<u>Muscle</u> <u>Action</u>

Subclavius Depresses clavicle.

Pectoralis minor Fixator of scapula

Serratus anterior Fixator of scapula

Trapezius Fixator of scapula

Levator scapulae Fixator of scapula

Rhomboid major Fixator of scapula

Rhomboid minor Fixator of scapula

Muscles of the Thorax and Shoulder That Move the Humerus

<u>Muscle</u> <u>Action</u>

Pectoralis major Adducts and medially rotates arm.

Latissimus dorsi Extends, adducts and medially rotates arm.

Deltoid Abducts arm.

Supraspinatus Assists deltoid muscle in abducting arm.

Infraspinatus Laterally rotates arm.

Subscapularis Medially rotates arm.

Teres major Extends arm.

Teres minor Laterally rotates and extends arm.

Coracobrachialis Flexes and adducts arm.

Muscles of the Arm That Move the Forearm

<u>Muscle</u> <u>Action</u>

Biceps brachii Flexes forearm.

Brachialis Flexes forearm.

Brachioradialis Flexes forearm.

Triceps brachii Extends forearm.

Pronator teres Pronates forearm.

Supinator Supinates forearm.

Muscles of the Forearm that Move the Hand

<u>Muscle</u> <u>Action</u>

Palmaris longus Flexes hand at wrist joint Extensor digitorum Extends hand at wrist joint

Muscles of the Hip That Move the Femur

Muscle Action

Psoas Major (part of Iliopsoas) Flexes thigh.

Iliacus (part of Iliopsoas) Flexes thigh.

Gluteus maximus Extends thigh.

Gluteus medius Abducts thigh.

Gluteus minimus Abducts thigh.

Tensor fascia latae Abducts thigh.

Piriformis Abducts thigh.

Adductor longus Adducts thigh.

Adductor brevis Adducts thigh.

Adductor magnus Adducts thigh.

Pectineus Adducts thigh.

Muscles of the Thigh that Move the Leg

<u>Muscle</u> <u>Action</u>

Quadriceps femoris: All four heads of the quadriceps extend leg.

Rectus femoris Vastus lateralis Vastus medialis Vastus intermedius

Sartorius Flexes leg.

Biceps femoris Flexes leg.

Semitendinosus Flexes leg.

Semimembranosus Flexes leg.

(The biceps femoris, semitendinosus, and semimembranosus comprise the hamstrings.)

Muscles of the Leg that Move the Foot

<u>Muscle</u> <u>Action</u>

Tibialis anterior Dorsiflexes foot.

Extensor digitorum longus Dorsiflexes foot.

Fibularis longus Plantar flexes foot.

Fibularis brevis Plantar flexes foot.

Gastrocnemius Plantar flexes foot.

Soleus Plantar flexes foot.