

Neck and Shoulder Muscles

The neck and shoulder muscles can be divided into superficial and deep muscles. The superficial neck and shoulder muscles include the splenius capitis, trapezius, rhomboid major, rhomboid minor, deltoid and latissimus dorsi. The deep neck and shoulder muscles include the levator scapulae, supraspinatus, infraspinatus, teres minor and teres major.



Superficial

Splenius Capitis

Spanish Cap

The splenius capitis originates from the nuchal ligament and the spinous process of C7-T3, and inserts on the mastoid process of the temporal and occipital bones. It is innervated by the posterior rami of spinal nerves. Unilaterally, it acts to laterally flex the neck and rotate the head. Bilaterally, it acts to extend the neck.

Trapezius

Trapeze-artist

The trapezius originates from the spinous processes of C1- T12 and inserts onto the external occipital protuberance, nuchal ligament, medial superior nuchal line, posterior lateral clavicle, acromion process as well as the spine of the scapula. It receives its motor innervation from CN XI (spinal accessory nerve) and receives its sensory innervation from spinal cervical nerves C3 and C4. The trapezius acts to elevate, retract and depress the scapula.

Rhomboid Minor

Rhombus Miner

The rhomboid minor originates from the nuchal ligament and spinous processes of C7 to T1 and inserts onto the medial border of the scapula, superior to the rhomboid major insertion site. It is innervated by the dorsal scapular nerve (C4-C5). The rhomboid minor acts to retract and rotate the scapula as well as fix the scapula to the thoracic wall.

Rhomboid Major

Rhombus Major

The rhomboid major originates from the spinous processes of T2-T5 and inserts onto the medial border of the scapula, inferior to the rhomboid minor insertion site. Like the rhomboid minor, it is innervated by the dorsal scapular nerve (C4-C5). Similar to the rhomboid minor, the rhomboid major acts to rotate the scapula and fix the scapula to the thoracic wall.

Deltoid

Doll-toad

The deltoid muscle originates from the lateral clavicle, acromion and spine of the scapula and inserts onto the deltoid tuberosity of the humerus. The deltoid is innervated by the axillary nerve. The deltoid acts to abduct, flex and extend the shoulder.

Latissimus Dorsi

Lotus with Dorsal-fins

The latissimus dorsi originates from the spinous process of T6-T12, thoracolumbar fascia, iliac crests and the inferior 3-4 ribs and inserts onto the intertubercular sulcus of the humerus. It is innervated by the thoracodorsal nerve (C6-C8). It acts to extend, adduct and medially rotate the humerus.

Deep

Levator Scapulae

Levigator with Scapula

The levator scapulae originates from the transverse processes of C1 and C4 and inserts onto the medial border of the scapula. It is innervated by the dorsal scapular nerve (C5) and the cervical nerves (C3, C4). It acts to elevate the scapula and tilt the glenoid cavity inferiorly.

Supraspinatus

Super-spine-ape

The supraspinatus is one of the four rotator cuff muscles, meaning it helps to stabilize the shoulder (SITS mnemonic = Supraspinatus, Infraspinatus, Teres Minor, and Subscapularis). The supraspinatus originates from the supraspinous fossa of the scapula and inserts onto the superior facet of the greater tubercle of the humerus. It is innervated by the suprascapular nerve (C5). The supraspinatus acts to initiate abduction of the arm.

Infraspinatus

Infrared-spine-ape

The infraspinatus is one of the four rotator cuff muscles, meaning it helps to stabilize the shoulder. The infraspinatus originates from the infraspinous fossa of the scapula and inserts onto the posterior facet of the greater tubercle of the humerus. It is innervated by the suprascapular nerve (C5-C6).

Teres Minor

Teary Miner

The teres minor is one of the four rotator cuff muscles, meaning it helps to stabilize the shoulder. The teres minor originates from the lateral border of the scapula and inserts onto the inferior facet of the greater tubercle of the humerus. It is innervated by the axillary nerve (C5). Along with the infraspinatus, the teres minor acts to externally rotate the humerus.

Teres Major

Teary Major

The teres major originates from the posterior aspect of the inferior angle of the scapula and inserts onto the medial intertubercular sulcus of the humerus. It is innervated by the lower subscapular nerve (C5 and C6). It primarily acts to extend the arm and also adduct and internally rotate the arm.