

Pre-vertebral muscle

	Origin	Insertion	Action	Nerve supply
Rectus capitis Anterior	Front of lateral mass of atlas	Base of skull Anterior to occipital condyle	Flexion of head	Ventral rami of cervical nerve
Rectus capitis lateral	Front of transverse processes of atlas	Base of skull Lateral to occipital condyle	Lateral flexion of head	
Longus colli	3rd thoracic vertebra	Anterior tubercle of atlas	Flexion of neck	
Longus capitis	Transverse processes of typical vertebra	Basilar part of occypital bone	Flexion of head	

para-vertebral muscles

	Origin	Insertion	Action	Nerve supply
Scalens minimus	Tip of transverse processes of C7	Suprapleural membrane	Tense the suprapleural membrane	Ventral ramus of C7
Scalenus anterior	Ant. Tubercle of transverse processes of C3,4,5,6	Scalene tubercle of 1st rib	Lateral flexion of neck Elevation of 1st rib in forced inspiration	Ventral rami of C4,5,6,7
Scalenus medius	Post. Tubercle of transverse processes of all cervical vertebra	Upper surface of 1st trip		Ventral rami of all cervical nerves
Scalenus posterior	Post. Tubercle of transverse processes of C4,5,6.	2nd rib	Lateral flexion of neck Elevation of 2nd rib in forced inspiration	Ventral rami of C5,6,7

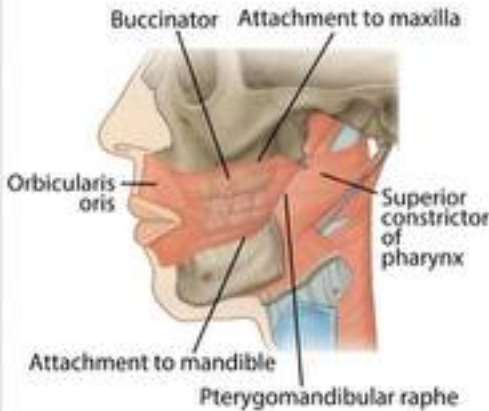
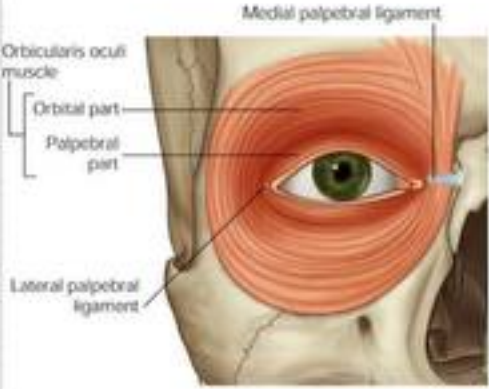

Post-vertebral muscles

	Origin	Insertion	Action	Nerve supply
Rectus capitis posterior minor	Posterior tubercle of C1	Medial area below inferior nuchal line	Extend head	Suboccipital n. (dorsal ramus of C1 n.)
Rectus capitis posterior major	Spine of C2	Lateral area below inferior nuchal line	Extend head Turn face to the same side	
Inferior oblique	Spine of C2	Transverse processes of C1	Turn this to the same side	
Superior oblique	Transverse processes of C1	Lateral area between superior and inferior nuchal lines	Extend head	

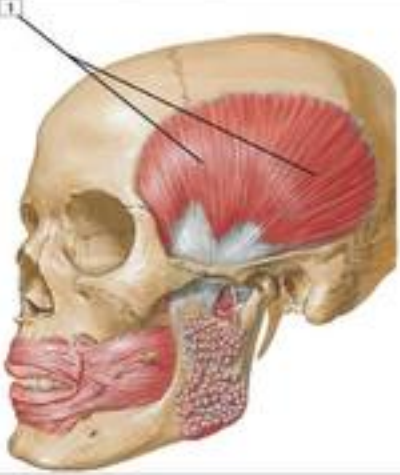

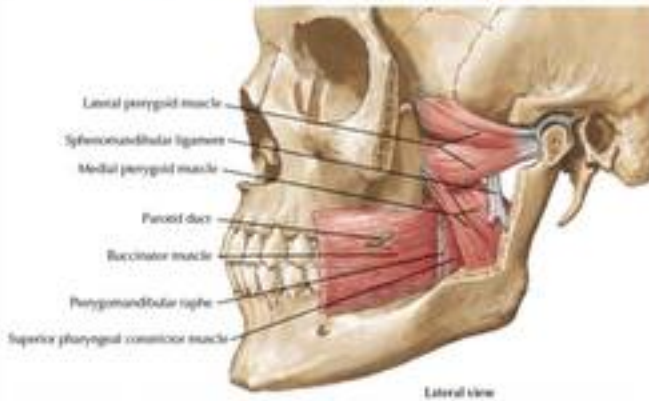
Muscles of the back	Origin	Insertion	Action	Nerve supply
	<u>Minor deep</u>			
Interspinales	Upper border of spinous processes of cervical & lumbar vertebrae	Lower border of spinous processes of the vertebra above the origin	Extension of vertebral column	posterior rami of spinal nerves
Intertransversarii	Upper border of transverse processes of cervical & lumbar vertebrae	Lower border of transverse processes of the vertebra above the origin	Lateral flexion of vertebral column	
Levator costarum	Tips of transverse processes of C7-T11 vertebrae	Pass inferolaterally to be inserted into the ribs	Lateral flexion of vertebral column, elevation of ribs assist respiration	

Muscles of the back	Origin	Insertion	Action	Nerve supply
<i>Intermediate extrinsic</i>				
serratus posterior Superior	Spinous processes of lower cervical & upper thoracic vertebrae deep to rhomboids	Upper ribs	Raise upper ribs in forced inspiration	Intercostal nerve
serratus posterior Inferior	Spinous processes of lower thoracic & upper lumbar vertebrae deep to latissimus dorsi	Lower ribs	Depress lower ribs in forced expiration	
<i>Deep intrinsic/ superficial layer (SPINO-TRANSVERSALIS)</i>				
Splenius muscle	Ligamentum nuchae & spinous process of C7-T4	Splenius capitus: mastoid process and lateral 1/3 superior nuchal line Splenius cervicis: transverse process of C1-C4	Contraction of both sides extend head & neck . Contraction of one side lateral flexion & rotation of head & neck to the same side	posterior rami of spinal nerves
<i>Intermediate layer</i>				
Iliocostalis	*Posterior part of iliac crest *back of sacrum *sacroiliac ligament	L/T/Cer/ angle of lower 11 ribs & cervical transverse process	<i>Acting unilateral</i> :laterally flexion and rotation of the vertebral column to the same side . <i>Acting bilateral</i> : main extensor of vertebral column and head .	posterior rami of spinal nerves
Longissimus	*sacral& lower lumbar spinous process	T/Cer/Cap/ ribs, transverse process of thoracic & cervical vertebrae & mastoid process		
Spinalis		T/Cer/Cap/ spinous process of upper thoracic & cervical vertebrae, ligamentum nuchae& skull		
<i>Deep layer (TRANSVERSO SPINALIS)</i>				
Semispinalis	from approximately ½ of the vertebral column, extends for 4-6 vertebrae	T/Cer/Cap/ , spinous process	extension, lateral flexion& rotation of vertebrae to the opposite side.	posterior rami of spinal nerves
Multifidus	Thick In lumbar region, back of sacrum, posterior superior iliac spine, sacroiliac ligament, transverse& articular processes of lumbar, thoracic & lower cervical vertebrae	spinous processes of 2- 4 vertebrae above		
Rotators	Thick in thoracic region.	spinous processes of one vertebra above (rotator brevis), or 2vertebra above (rotator longus).		

Muscles of face

Muscle	Origin	Insertion	Action	Nerve supply	
Buccinator: muscle of cheek	<p>Upper fibers: alveolar processes of maxilla opposite molar teeth.</p> <p>Lower fibers: alveolar processes of mandible opposite molar teeth</p> <p>Middle fibers: pterygomandibular ligament</p>	<p>Upper fibers: upper lip</p> <p>Lower fibers: lower lip</p> <p>Middle fibers: decussate at modulus And the upper part pass to the lower lip, and the lower part pass to the upper lip</p>	<p>#compress the cheek against teeth to prevent accumulation of food in vestibule</p> <p>#blowing & whistling</p>	Buccal branch of facial nerve	
Orbicularis Oculi: sphincter of eye	Medial palpebral ligament & the near bone	form complete ellipse around orbital opening to insert in the medial palpebral ligament	Tight closure of eye in exposure to injury	temporal and zygomatic branches of facial nerve	
<u>Orpital part</u>					
<u>Palpebral part</u>	Medial palpebral ligament	the fibers curve within the eyelids, then the upper & lower fiber decussate at lateral angle of eye forming the lateral palpebral raphe	Tight closure of eye in sleep and blinking		
<u>Lacrimal part</u>	Posterior lacrimal crest & fascia covering lacrimal sac.	Tarsi of eyelid	drainage of tears by dilating the lacrimal sac		
Orbicularis oris: sphincter of mouth	Maxilla Mandible	encircles oral opening	<p>#approximating the 2 lips together as in kissing blowing whistling</p> <p>#involved in production of speech</p>	buccal and mandibular branches of facial nerve	

Muscles of mastication

	Origin	Insertion	Direction of fibers	
Temporalis	<p>A/ Temporal fossa and deep surface of temporal fascia</p> <p>B/ inferior temporal line</p>	Into tip, anterior, posterior borders and inner surface of coronoid processes	<p>Anterior: vertical downward</p> <p>Posterior: downward and forward</p> <p>Most posterior: horizontal and forward</p>	
Masseter muscle	<p>Superficial/ fibers from lower border of zygomatic arch</p> <p>Deep/ fibers from deep surface of zygomatic arch</p>	Outer surface of the ramus of the mandible	<p>Anterior: downward and backward</p> <p>Posterior: vertically downward</p>	
Lateral pterygoid muscle	<p>Upper head/ infra temporal surface of greater wing of sphenoid</p> <p>Lower head/ lateral surface of lateral pterygoid plate</p>	<p>A- pterygoid fovea of anterior aspect of neck of mandible</p> <p>B- capsule and articular disc of temporomandibular joint</p>	Horizontally backward and lateral	
Medial pterygoid muscle	<p>Superficial head/ maxillary tuberosity</p> <p>Deep head/ medial surface of lateral pterygoid plate</p>	Into inner surface of ramus and angle of mandible	Downward, backward, and lateral	