## **MUSCLES OF THE PECTORAL REGION**

	Pectoralis Major	Pectoralis minor	Subclavius	Serratus Anterior Muscle
Origin	by two heads: A) Clavicular head: from anterior surface of the medial 1/2 of the clavicle. B) Sternocostal head: 1) anterior surface of the sternum. 2) Upper 6 costal cartilages. 3) External abdominal oblique aponeurosis	from the 3rd, 4th and 5th ribs	from the upper surface of first rib and first costal cartilage	by fleshly digitations from the upper eight ribs The first digitation takes origin from the 1st and 2nd ribs
Insertion	Lateral lip of the bicipital groove	Superior surface of the coracoid process	into subclavian groove on the lower surface of the clavicle.	anterior surface of the medial border of the scapula. a) The first digitation: anterior surface of the superior angle. b) The 2nd and 3rd digitations: anterior surface of medial border. c) The lower five digitations: anterior surface of inferior angle.
Nerve supply	(double): Lateral and medial pectoral nerves.	medial pectoral nerve	Nerve to subclavius from upper trunk of brachial plexus (C 5 & 6).	long thoracic nerve (nerve of Bill C5, 6, &7) passes superficial to the muscle
Actions	1- Adduction and medial rotation of the arm. 2- Flexion of the arm by clavicular head. 3- Elevates the ribs during deep inspiration. 4- Sternocostal part acts together with latissimus dorsi, teres major and deltoid: draw the trunk up during climbing and gymnastic	1) Protraction the scapula (forward movement). 2) Depression the shoulder. 3) Elevates the ribs during deep inspiration.	Fixation of the clavicle during movements of the shoulder girdle	1- Protraction of the scapula (pulls the scapula forward with pectoralis minor). 2- Lower 5 digitations, Abduction of the arm above 90 degree, acting with the trapezius muscle. 3- Fixation of the scapula during movement of the upper limb

## Muscle of the back

	Trapezius	Latissimus Dorsi	
Origin	1- Back of the skull; external occipital protuberance and medial 1/3 of superior nuchal line. 2- Back of the neck; ligamentum nuchae and spine of the 7th cervical. 3- Back of the thorax; all thoracic spines.	1- From lower 6 thoracic spines under cover of the trapezius. 2- Lumbar fascia. 3- Posterior part of the outer lip of the iliac crest. 4- The lower 3 ribs. 5- The back of the inferior angle of the scapula	
Insertion	1- Upper fibers into posterior border of the lateral third of the clavicle. 2- Middle fibers into medial border of the acromion of the scapula. 3- Lower fibers into upper lip of the spine of the scapula	into the floor of the bicipital groove of the humerus	
Nerve supply	1- Motor; spinal part of accessory nerve. 2- Sensory (Proprioceptive sensation) from the cervical plexus	nerve to latissimus dorsi (thoracodorsal nerve) from posterior cord of brachial plexus.	
Actions	1. Upper fibers elevate the scapula. 2. Middle fibers retract the scapula. 3. Lower fibers Depress the scapula. 4. Middle and lower fibers Abduction of the arm more than 90 degree (with lower 5 digitations of the serratus anterior).	<ul> <li>Adduction, extension and medial rotation of the arm (as teres major) Used in Swimming</li> <li>It pulls the trunk towards the arm used in climbing and Gymnastics with pectoralis major.</li> <li>It assists in deep expiration (cough</li> </ul>	

## **Deep muscles of the back**

	Levator Scapulae	Rhomboideus Minor	Rhomboideus Major
Origin	transverse processes of C1- C4	From the lower part of the ligamentum nuchae, spines of C7 - T1	thoracic spines of T 2, 3, 4, 5
Insertion	dorsal surface of medial border of scapula from superior angle to the spine.	dorsal aspect of medial border of scapula opposite root of spine	dorsal aspect of medial border of scapula from spine to inferior angle.
Nerve supply	a- Dorsal scapular nerve (nerve to rhomboideus C5). b- Nerve to levator scapulae from cervical plexus (C3&4)		Dorsal scapular nerve (nerve to rhomboideus C5)
Actions	1- Elevates the scapula. 2- Tilts the neck to the same side when shoulder is fixed	Retraction of the scapula	Retraction of the scapula



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