

Al-Mustaqbal University



Biomedical Engineering Department



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Lecture No.: - 2

Lecture Title: [muscle of pectoral and back]





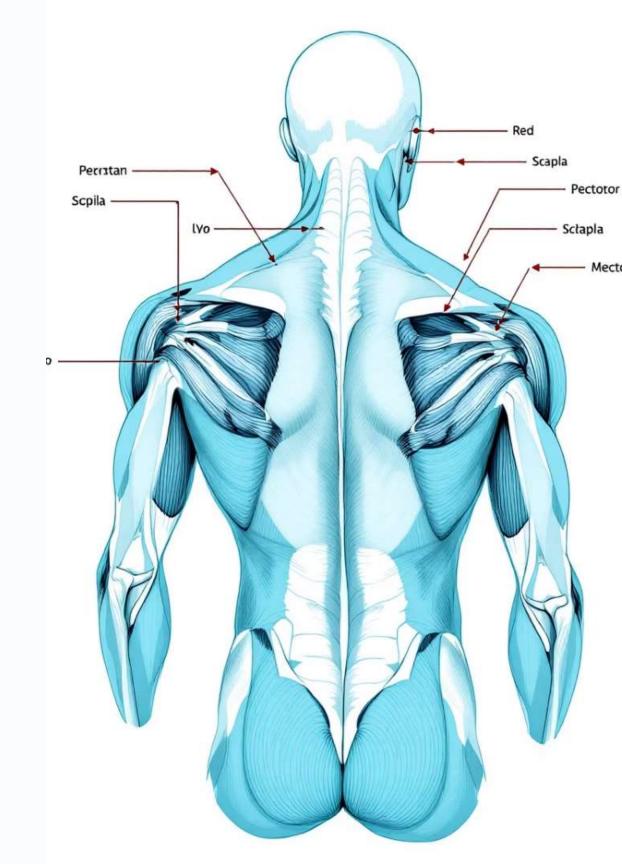
Muscles of the Back, Pectoral Region, and Scapula

This presentation covers key muscles in the back, pectoral area, and scapula.

Learn their functions, origins, insertions, and nerve supplies.

Understanding these muscles is vital for movement, posture, and stability.

By Battol Ali noory بتول علي نوري محمدسعيد





Superficial Back Muscles

Trapezius

Moves scapula in multiple directions. Originates from occipital bone and C7-T12 vertebrae. Inserts on clavicle and scapula. Innervated by accessory nerve.

Latissimus Dorsi

Extends and rotates the arm. Origin from T7-L5 vertebrae and ribs 9-12. Inserts at humerus. Innervated by thoracodorsal nerve.

Deep Back Muscles

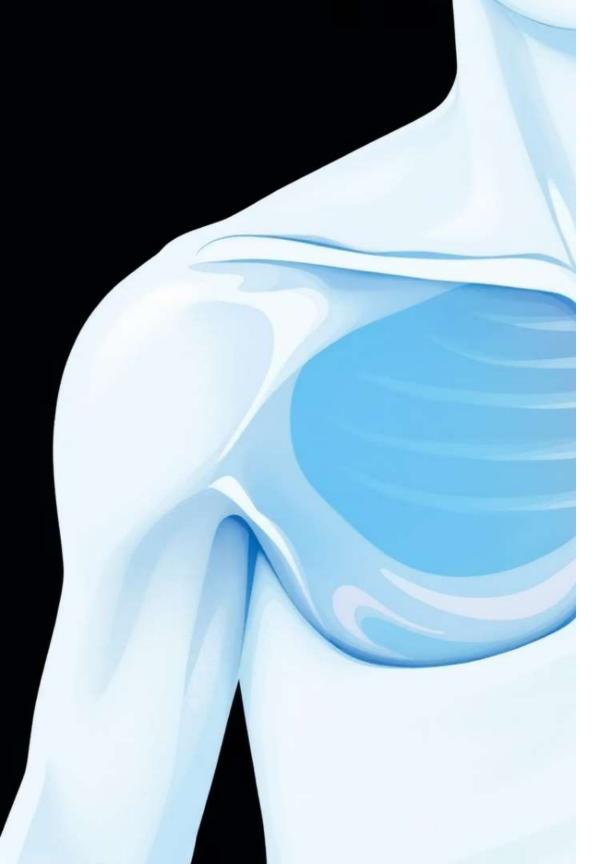
Erector Spinae Group

Extends and laterally flexes spine with three parts: iliocostalis, longissimus, spinalis.

Innervated by dorsal rami of spinal nerves.

Semispinalis

Extends head and spine; rotates to opposite side. Plays key role in posture.



Pectoralis Major

Clavicular Head

Flexes the arm forward.

Originates from clavicle.

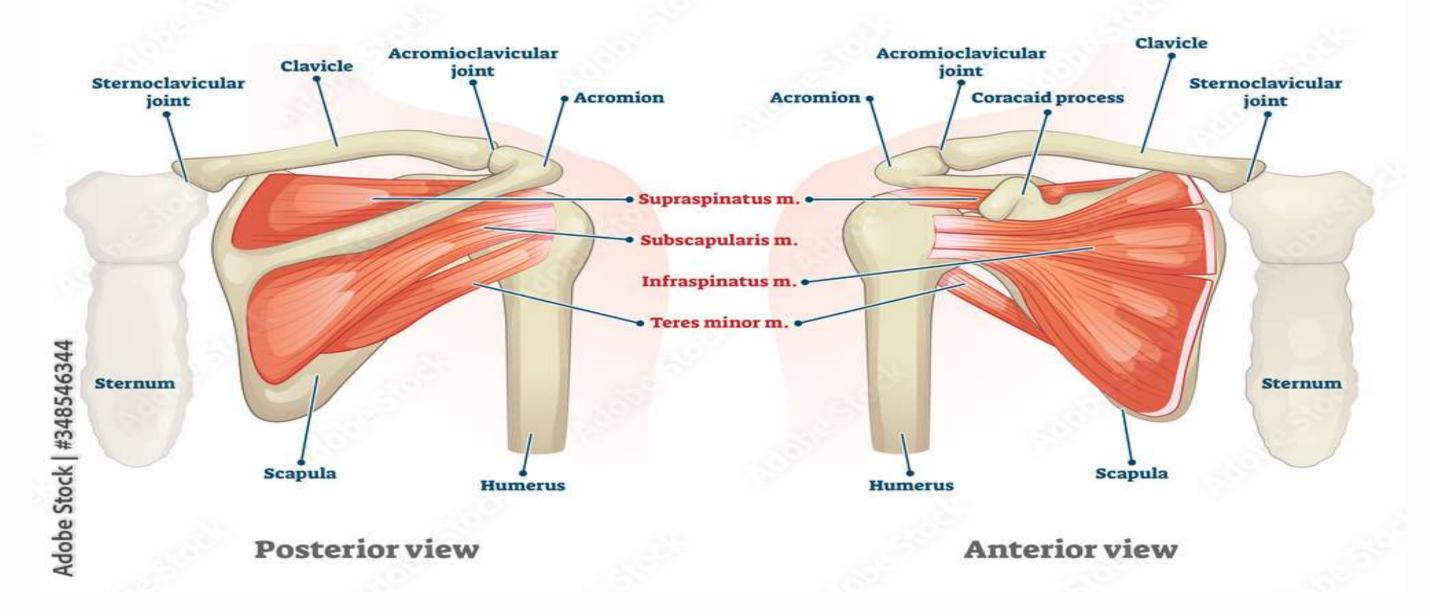
Sternal Head

Adducts and medially rotates the arm. Originates from sternum and ribs 1-6.

Insertion & Innervation

Inserts on humerus. Innervated by medial and lateral pectoral nerves.

SHOULDER ANATOMY



Pectoralis Minor & Serratus Anterior

Pectoralis Minor

Stabilizes and depresses scapula •

Origin: ribs 3-5, Insertion: coracoid process •

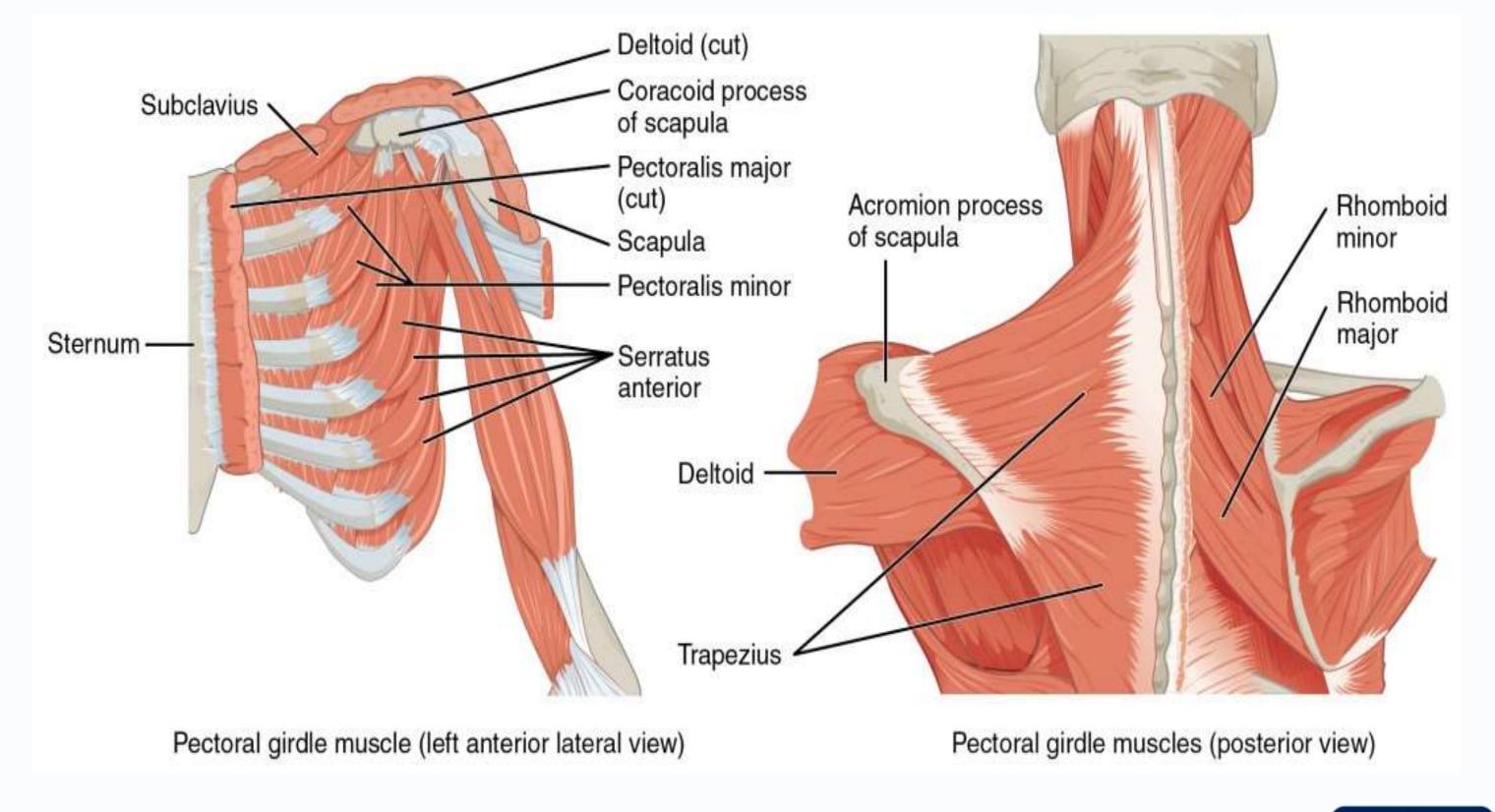
Innervated by medial pectoral nerve •

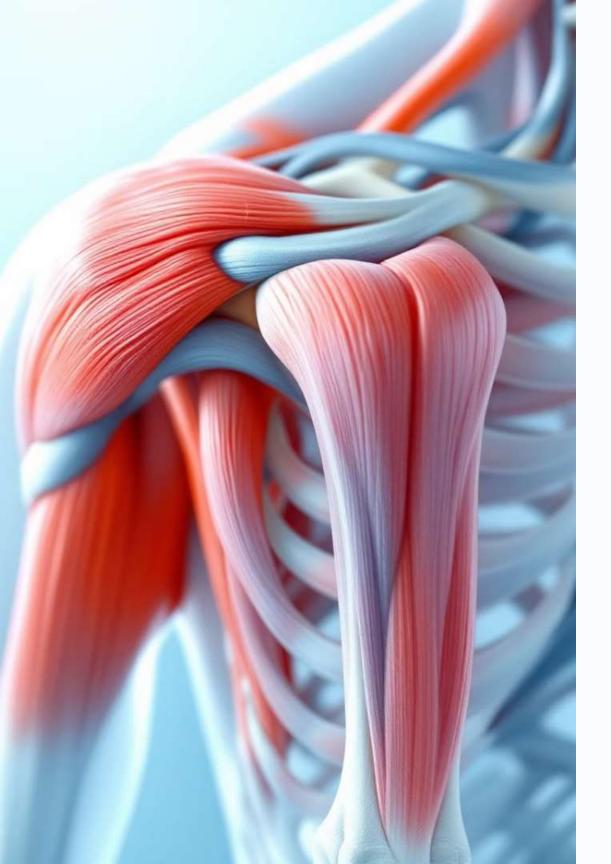
Serratus Anterior

Protracts and rotates scapula upward

Origin: ribs 1-8; Insertion: medial scapular border •

Innervated by long thoracic nerve •





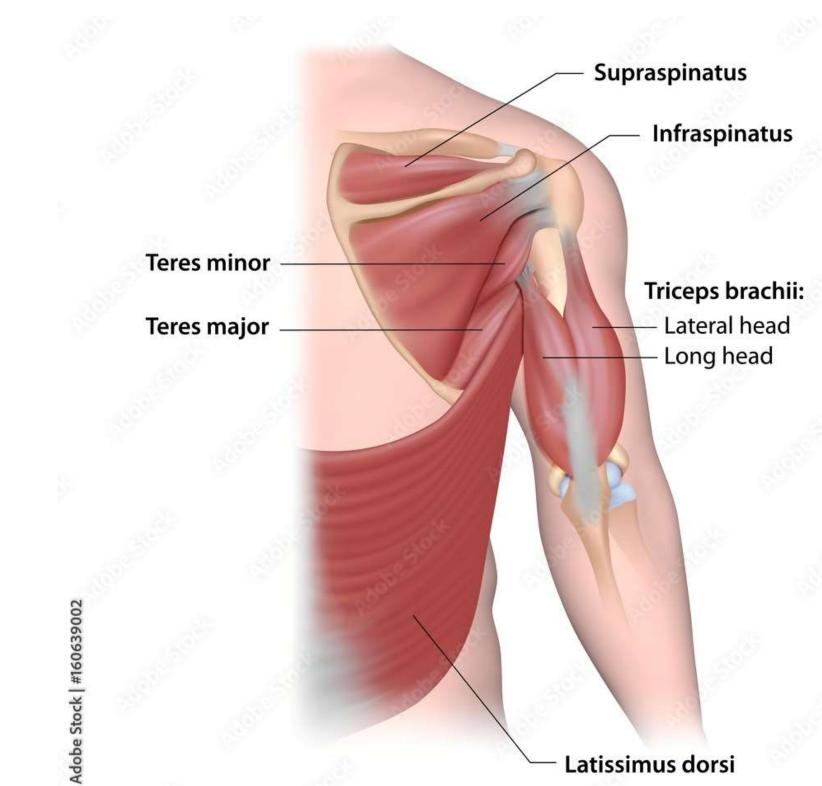
Scapular Muscles: Rotator Cuff (Part 1)

Supraspinatus

Abducts arm. Originates from supraspinous fossa. Innervated by suprascapular nerve.

Infraspinatus

Lateral rotation of arm. Origin from infraspinous fossa. Innervated by suprascapular nerve.



Scapular Muscles: Teres Minor & Subscapularis

Teres Minor

Adducts and laterally rotates arm. Origin on scapula's lateral border. Innervated by axillary nerve.

Subscapularis

Medially rotates and adducts arm. Origin on subscapular fossa. Innervated by subscapular nerves.



Clinical Significance & Summary

Common Injuries

Rotator cuff tears, back strains, and thoracic outlet syndrome.

Muscle Health

Maintaining posture and exercise promotes muscle function and prevents injury.

Key Functions

Back and pectoral muscles stabilize and enable diverse movements.