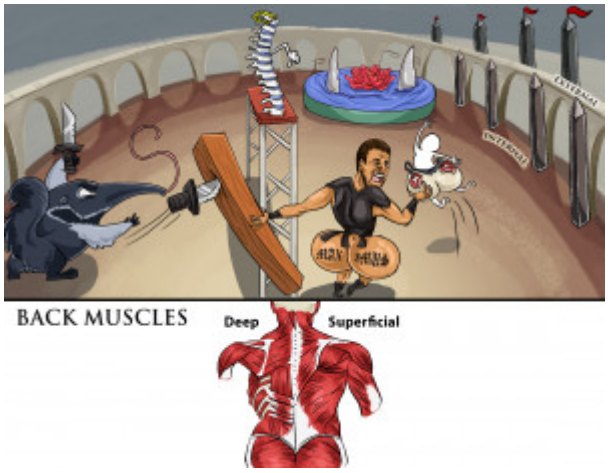
Back Muscles

The back muscles can be divided into superficial and deep muscles. The superficial muscles include the latissimus dorsi, external oblique, internal oblique, gluteus medius and gluteus maximus. The deep muscles include the erector spinae, serratus anterior and serratus posterior.



PLAY PICMONIC

Superficial

Latissimus Dorsi
Lotus with Dorsal-fins
The latissimus dorsi is a broad, triangular muscle located on the inferior part of the back that forms most of the posterior wall of the axilla. The reverse muscle action (RMA) of the latissimus dorsi enables the vertebral column and torso to be elevated, as in doing a pull up. It is commonly called the “swimmer’s muscle” because its many actions are used while swimming; consequently, many competitive swimmers have well-developed “lats.”

External Oblique
External Obelisks
The external oblique helps to compress organs of the abdomen in order to produce important movements such as defecation, vomiting and forced expiration. These muscles also aid in movements such as flexing, rotating and lateral bending of the trunk.

Internal Oblique
Internal Obelisks
The internal oblique lies below the external oblique muscle. The internal oblique acts to compress the abdomen and stabilizes the spine and posture The internal oblique also aids in rotation of the trunk.

Gluteus Medius
Gluteus Meat
The gluteus medius originates from the gluteal surface of the ileum, and inserts onto the greater trochanter of the femur. It mainly acts to abduct and medially rotate the thigh. It also helps keep the pelvis level when the opposite leg is raised. A positive Trendelenburg’s sign may indicate a gluteus medius or superior gluteal nerve injury. The gluteus medius is mostly deep to the gluteus maximus and is a powerful abductor of the femur at the hip joint. It is a common site for intramuscular injection. Abducts and rotates the thigh outward.

Gluteus Maximus
Gluteus Maximus
The gluteus maximus acts to extend the thigh, laterally rotate the thigh and also steadies the thigh to assist in rising from a sitting position.The gluteus maximus is the largest and heaviest of the three muscles and is one of the largest muscles in the body. It is the chief extensor of the femur. The bulkiest muscle in the body, it produces the backswing of the leg when walking and provides most of the power for climbing stairs.

Deep

Erector Spinae
Erector-set Spine
The erector spinae are a group of muscles that act as the main extensors of the vertebral column and form the largest muscle mass of the back, forming a prominent bulge on either side of the vertebral column. The erector spinae includes the spinalis muscle group, longissimus muscle group and iliocostalis muscle group. Unilaterally, these muscles aid in lateral flexion of the vertebral column. Bilaterally, these muscles extend the vertebral column and head. A functional mnemonic to remember the erector spinae muscles is “I Like Standing” to represent the iliocostalis, longissimus, and spinalis muscle groups, respectively.

Serratus Anterior

Serrated-knife Anteater

The serratus anterior originates from ribs 1 to 8 along the midaxillary line and inserts posteriorly on the medial margin of the scapula. The serratus anterior acts to protract and stabilize the scapula. A lesion of the long thoracic nerve will cause winging of the scapula. The serratus anterior is a large, flat, fan-shaped muscle between the ribs and scapula. It is so named because of the saw-toothed appearance of its origins on the ribs. Drives all forward-reaching and pushing movements and pulls the shoulder down and forward.

Serratus Posterior

Serrated-knife Post

The serratus posterior is divided into the serratus posterior superior and serratus posterior inferior. It inserts on the superior borders of ribs 2-5. The serratus posterior superior acts to elevate the ribs. The serratus posterior inferior attaches to ribs 9-12. The serratus posterior inferior acts to depress the ribs.
