

Back Muscles, Functions and Exercises:



Anatomy of the Back Muscles

The *Latissimus Dorsi* muscles (also known as the *Lats*) are the largest muscles of the back.

Being large, fan-shaped muscles, they are able to provide force in a wide range of body positions, e.g. leaning back to straight vertical and all points in between.

The *Lats* are attached to the upper end of the humerus with fibers running down in a fan down the vertebral column and pelvic girdle.

The *Trapezius* (trap) muscle is a long, trapezoid-shaped muscle that runs down the upper section of the spinal cord, originating at the base of the skull and attaching down in the middle to lower back.

The angles of the *Trapezius* fibers provide pull in three different directions: up, down and in towards the centerline of the body.

Functions

The function of the *Latissimus Dorsi* is to pull the arm down towards the pelvis. When the arm is fixed (e.g. during a chin-up), the lats serve to bring the body up towards the arm. It is the same basic movement but with the directions reversed. The *Lats* also function to stabilize the torso during many movements, including the flat bench press.

The functions of the *Trapezius* muscle include scapular elevation (shrugging up), scapular adduction (drawing the shoulder blades together) and scapular depression (pulling the shoulder blades down).

Exercises

- Close-grip pulldowns, •Wide-grip front pulldowns, •One-arm dumbbell rows
- Seated cable rows, •Chin-ups, •Bent-over barbell rows, •Deadlifts, •Wide-grip pull-ups
- Stiff-arm pushdowns

Spinal Erectors

The *Erector Spinae* is a group of muscles that support the spinal column. They include the *Longissimus*, the *Spinalis* and *Iliocostalis*. The muscles of the *Erector Spinae* attach to the vertebrae, the ribs and the pelvis. The functions of the *Erector Spinae* group are to extend the spine as well as provide support for it.

Exercises that work the *Erector Spinae* include hyperextensions, deadlifts and good mornings.

The *Teres Major* muscle originates on the outer (lateral) edge of the scapula and attaches to the humerus.

The *Teres Major* muscles work with the *Rotator Cuff* muscles to stabilize the shoulder joint and works with the *Latissimus Dorsi* muscles to pull the humerus back.

The *Rhomboids (Major and Minor)* originate on the spinal column and attach to the middle (medial) surface of the scapula.

The *Rhomboid* muscles get their name from their shape: rhomboid. The *Major* and *Minor* designations refer to their relative size to each other.

Functions

The function of the *Teres Major* is to move the humerus posteriorly, meaning that it brings the arm towards the back.

The *Rhomboids* function to bring the scapula in towards the spinal column, essentially squeezing the shoulder blades together when the *Rhomboids* of both sides are used at the same time.

Exercises

Exercises that work the *Teres Major* and *Rhomboids* include:

- Close grip pulldowns, •Wide-grip front pulldowns, •One-arm dumbbell rows,
- Bent-Over lateral raises, •Seated cable rows, •Bent-over barbell rows, •Wide grip pullups
- Chin-ups