

Dumbbell Lateral Raises

By Tracy Anderson

Grasp dumbbells by the side or in the front of the thighs. Keep proper posture with a slight bend in the knees. Holding the dumbbells to the front allows you to use more body english, while holding the dumbbells to the side will help eliminate excess body motion. The slight bend in the knees will help keep pressure off of the lower back during the exercise.

To perform this exercise slightly bend your elbows, raise upper arms to sides until elbows are shoulder height, around 90°. Your elbow should be in the same plane as your wrists, avoiding any internal or external rotation.

The dumbbell lateral raise, also called side dumbbell raises, is an isolation movement. The joint in motion is the shoulder joint and the prime mover is the deltoid muscle, mainly the lateral head. The scapula will upwardly rotate during the concentric portion of this movement, but to minimize this motion, you should depress the shoulder girdle. If you push your shoulders down while raising the dumbbell laterally, you should not be able to raise your arm more than 90°. Because of scapulohumeral rhythm you are able to raise your arm 180°, but if you isolate the scapula from movement, or minimize it, your range of motion (ROM) will end around 90°. Scapulohumeral rhythm is a concept that describes the relationship between the shoulder girdle and the shoulder joint. The first 30° of shoulder joint motion is pure shoulder joint motion. But after that, for every 2° you raise your arm, your scapula will upwardly rotate 1°. This 2:1 ratio is known as scapulohumeral rhythm. The reason your ROM will be limited is because the lateral head of the deltoid is shortened to its maximum capability. Try it on yourself, with your arm down by your side, push your shoulder down forcefully and raise your arm to the side. You should not be able to raise it much higher than 90°, remember everybody is different, so the ROM may be slightly different.

This exercise is an example of a third class lever, and this movement is meant for range of motion (i.e. putting food in your mouth). The shoulder joint is the axis, the lateral head is the force and the weight in your hand is the resistance. This exercise is meant to be done with lighter weight, not so much weight, you have to bend your elbows a lot so you can bring the weight (resistance) closer to your joint (axis). This reduces the resistance arm and allows you to use more weight, but with improper form. This also puts a lot of pressure on your rotator cuff, because the weight is toward the front forcing internal rotation, and you must counter balance this by forcing external rotation so you can balance the dumbbell. Take my advice and keep the dumbbell directly to your side and save your rotator cuff.

The muscles used during this exercise are mainly the anterior (front) and lateral (side) heads of the deltoid muscle. This is because of their common insertion point, the deltoid tuberosity on the humerus, and the way their muscle fibers lay. When your arm is internally rotated, your lateral head mainly raises your arm to the side, when your arm is externally rotated, your anterior head mainly moves your arm. During over head shoulder press, your arm is externally rotated, this is why these types of pressing movements stress the front head more than the side head. But during upright rows your arm is internally rotated, and this is why this

exercise stresses the side head. It is mostly impossible to contract one head without affecting the other head during exercise, so make sure you train each head sufficiently.

The synergistic muscles include the supraspinatus, the upper and lower trapezius and the serratus anterior. The supraspinatus muscle, one of the four rotator muscles, inserts onto the top of the head of the humerus and is involved in shoulder abduction, or raising your arm laterally. The lower and upper trapezius and the serratus anterior are involved in upward rotation of the scapula.

Stabilizing muscles for this exercise are the middle trapezius, levator scapula and the wrist extensor muscles. The middle trapezius and the levator scapula help to isolate and stabilize the scapula.

Tips:

- * You can start with your hands in different positions, such as in the back, side or in front.
- * By raising your arms above the 90° mark, you can stress your upper trapezius.
- * Moderate to higher repetitions with low to moderate weight work best with this exercise. Try 3-4 sets with 10-25 repetitions.
- * Use a lateral raise machine or cable for variety.
- * As the side deltoid gets tired, many people have a tendency to slowly move the dumbbell forward, this brings the anterior deltoid into play more, and should be avoided to isolate the lateral head.
- * Do lateral raises and other isolation movements prior to a compound exercise to pre-exhaust the shoulder muscles.
- * Don't get caught up in the more weight is better attitude.

Strong and shapely looking shoulders have many uses, not only in bodybuilding, but in most all other sports such as basketball, baseball, football and gymnastics. Not to mention they make you look good in the summer without a shirt. Also a wide set of shoulders will make your waist appear smaller.

This article is excerpted from Tracy Anderson's book *Movement Science for Personal Trainers* and is intended for your personal information only. Questions and comments are welcomed and can be given at www.LFNOnline.com.