

Behind Neck Shoulder Press

By Tracy Anderson

The behind neck press is a basic compound movement. To perform this movement grasp the barbell with an overhand grip from rack. Position bar directly overhead. Lower the bar to the upper neck area, behind your head, making sure it feels comfortable. Then press the bar until your arms are extended overhead, but do not lock out the elbow joint completely. During motion, don't raise your shoulders, or lose balance of the bar. If you have a lower back problem, make sure to use a back supported bench. If you feel pain in the joint, then avoid this exercise.

This exercise targets the anterior and lateral heads of the deltoid. The anterior, or front, head of the deltoid performs shoulder abduction, flexion, medial rotation and horizontal adduction. (Abduction is moving your arm away from your body, flexion is raising the arm upward, medial rotation is turning your whole arm inward and horizontal adduction is moving your arm toward the middle of your body on a horizontal plane.) The lateral, or side, head mainly performs only shoulder abduction. Both heads have a common insertion point at the deltoid tuberosity, but have different origination points. While the lateral head originates from the acromion process, the little knobby bone felt on top of the shoulder, the anterior deltoid originates from the outer third of the clavicle.

The glenohumeral joint (shoulder joint) action during the concentric portion of this exercise is shoulder abduction in the frontal plane on a sagittal axis. The frontal plane divides your body into front and back half, and a sagittal axis runs from front to back horizontally. The humerus is in external rotation, putting the anterior deltoid in a more direct line of pull, over the lateral deltoid head. The anterior deltoid is involved in shoulder abduction when the shoulder is externally rotated. The lateral deltoid is involved in shoulder abduction when the shoulder is internally rotated, such as during upright rows.

The assisting muscle involved in this exercise is the supraspinatus, because of the external rotation, and the triceps brachii, because of elbow extension. The middle and lower trapezius and the serratus anterior assist synergistically, because of the rotation of the scapula.

The long head of the triceps brachii acts as a dynamic stabilizer. A dynamic stabilizer is a biarticulate muscle (a muscle that crosses more than one joint) that simultaneously shortens at the target joint and lengthens at the adjacent joint with no appreciable difference in length. Dynamic stabilization occurs during many compound movements. The upper trapezius and the levator scapula act as stabilizers, while contracting but contribute no significant movement.

Tips:

- * Using a back support will take a lot of pressure off of your back, but your back muscles will not come into play as much as if you did it on a flat bench.

- * Push the bar straight over your head. Any leaning of the bar toward the front or the back will cause you to move out of the plane of action. Some force will have to bring your back into that plane of action, and it is usually your rotator cuff.

- * Make sure you use your feet to stabilize your lower body. Tighten your abdominal muscles to ensure proper body balance and posture.

* Inhale as you lower the bar, eccentric portion, and exhale as you raise the bar, concentric portion. Proper breathing will ensure oxygen is being delivered to the muscle and will help stabilize your torso during exertion.

What is it good for?

Powerful and strong shoulder muscles are useful in other activities and sports other than a bodybuilding contest. Strong shoulders are useful for boxers, football players, gymnasts, baseball, and tennis, just to name a few. Most all throwing motions involve the anterior deltoid, and a gymnast working on the rings or uneven bars uses the shoulders extensively.

Check with your therapist or doctor before beginning an exercise regimen or if you have shoulder problems before performing this exercise. This article is excerpted from Tracy Anderson's book Movement Science for Personal Trainers. Questions and comments are welcomed and can be given at www.LFNOnline.com.