

Saving Your Rotator Cuff

The rotator cuff and shoulder are of critical importance to archers. Due to the archery draw and hold, which causes an unequal and continuous, repetitive stress on the shoulder joint, rotator cuff and shoulder injuries are also the most common archery-related injuries. Most archers will suffer some kind of injury to the shoulder joint during the length of their careers. A well balanced development and maintenance program will help to prevent injuries and improve your archery draw and score.

The rotator cuff muscles are a group of four small muscles deep in the shoulder joint. Even though these muscles are small they are very important in the movement of the shoulder. The major function of the rotator cuff muscles is to hold and stabilize the arm when it is extended. The rotator cuff muscles are the supraspinatus, the infraspinatus, the teres minor, and the subscapularis. All of the muscles run between the humerus and the scapula (the upper arm and the back). The rotator cuff muscles provide stability to the shoulder during movement. The muscles are small and easily injured, primarily through overuse and secondarily due to improper development and errors in training.

It is important to work and build the 4 muscles in the shoulder joint which stabilize the arm during the archery shot. These exercises are performed with a Theraband or light (1-3 pound female, 3-5 male) weights.

1. **External Rotation.** Lie on your side with your elbow close to your ribs. Grasp the dumbbell in your hand. Slowly raise the dumbbell until it is pointed to the ceiling. Do not move your elbow away from your body. Pause before slowly lowering the dumbbell back to the starting position.
2. **Internal Rotation.** Lie on your back. Grasp a weight with your arm bent at the elbow. The elbow should remain close to the side of your body. Slowly rotate your arm raising the dumbbell toward the ceiling. Pause before slowly lowering the dumbbell back to the starting position.
3. **Inverted Arm Raise.** Stand comfortably grasping a dumbbell in each hand. This exercise is done with a straight elbow and with the thumb pointing down. Instead of lifting the arms straight out to the sides, hold the arms approximately 30 degrees forward of a straight side lift. Lift the arm about two thirds of the distance to shoulder level. Do not lift the arms up to shoulder height. Slowly lower to starting position.
4. **Butterfly.** From a standing position, grasp a weight in each hand. Bend arms 90 degrees at the elbows, hold arms in front of the face, palms facing in. Open arms by rotating at the shoulder, keeping elbows bent until palms are facing out. Return to starting position.