

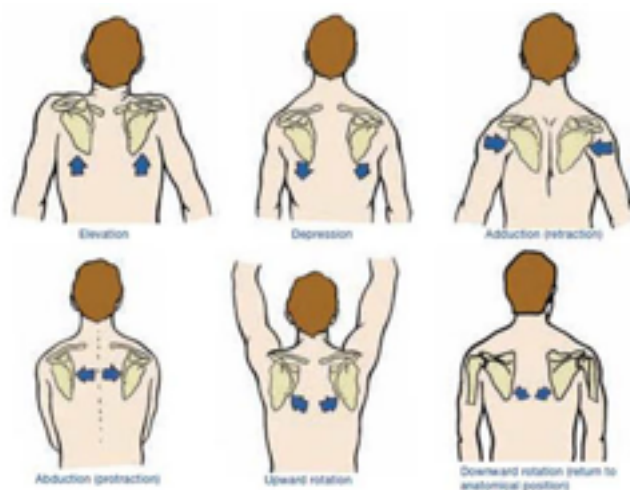
## The Shoulder



We lift, reach, and carry items with our shoulders everyday. Until something goes awry with our shoulders we take it for granted how much we depend on that movement on a daily basis. We generally think of the shoulder movement coming purely from the glenohumeral joint (where the arm bone connects to the scapula) but there is so much more to shoulder movement and the health of our shoulder than that joint alone.

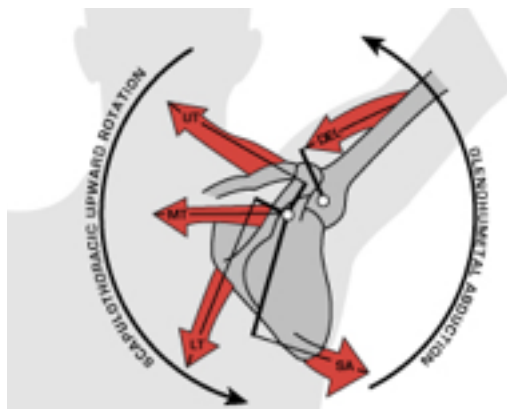
The shoulder consists of the humeral bone (upper arm bone) and the scapula bone (shoulder blade) which houses the shoulder socket. The humerus rolls around in the shoulder socket to produce movement of the arm. However, what is often under appreciated is the role of the scapula or shoulder blade. It also has to move for proper shoulder mechanics.

The shoulder blade can move in multiple movements as shown in the image to the right. Generally when people are taught good posture they are taught to keep their shoulders down and back which is called downward rotation of the scapula. This is perfectly good advice if you keep your arms below your shoulders, however, most people get in trouble when they move their arms higher. In order to raise the arm above the shoulders a scapula needs the ability to upwardly rotate or impingement of something in the shoulder will most likely occur.



### Upward Rotation:

Upward rotation of the shoulder consists of the following muscles working together in sync: serratus anterior, upper traps and lower traps. The deltoid and middle traps also contribute but are usually not the culprit of poor motion. One of the ways to improve this motion without irritating an already painful shoulder is to work on protraction strength first. This motion strengthens the serratus anterior one of the most important muscles of the shoulder blade.



### Protraction:

Protraction sometimes gets a bad wrap because it is often thought of as the motion that rounds the shoulders forward but whenever you have to reach for something in front of you or push open a door you need protraction. Check out the picture below, which shoulder looks better when reaching forward?

The serratus anterior & the abdominals contribute to this motion.



Protraction

Retraction

## Improving Shoulder Elevation

Sarah Petrich, PT, DPT, PRC, PMA®-CPT  
[www.SarahPetrich.com](http://www.SarahPetrich.com)

## Improving Upward Rotation

### The Towel Reach & Lift

- 1) Grasp a towel in both hands in front of your chest. Hands should be a little wider than shoulders.
- 2) Exhale & reach both arms forward, your shoulder blades will widen apart.
- 3) Reach pinky fingers away from each other to further engage the shoulders.
- 4) Inhale & raise the towel above your head. The inside border of your shoulder blade will drop. The point of the shoulder blade will swing out to your sides  
\*\*Do not move into pain or force movement
- 5) Lower & Lift 10 times.

Option 1: You may perform this exercise laying down for more support and less gravity resistance.

Option 2: Extra lat stretch: You may add a shoulder shrug at the top of the movement, take several deep breaths to expand the ribs wide and increase the shoulder stretch.

