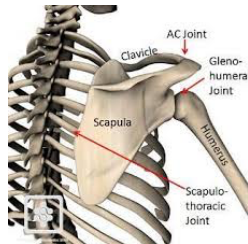


### The Shoulder

- High degree of mobility with limited stability
- Relies heavily on muscles and ligaments for support and stability
- For the arm to move more efficiently there has to be a coordinated movement of the scapula and humerus- scapulothoracic rhythm

### The role the T-spine has on the shoulder

- Scapula attaches to T-spine
- Need T-spine mobility and stability for proper shoulder movement
- Need scapula control to assist with centration of the humeral head in the GH fossa- as arm moves, scapula also moves- should rotate- scapulothoracic rhythm
- Important to have t-spine extension with shoulder overhead movements



### Exercises:

#### T-spine rotation:



Lying on your side, knees bent and stacked- arms straight out in front of you- do not move hips during the movement, let top arm sweep behind you

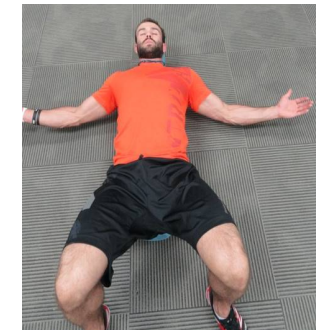
#### T-spine extension over foam roller:



Start with the foam roller just beneath where a bra strap would be, placing your hands behind your back. Take your chest up and extend back over the roller as far as you can go, then come back up. Move the roller one vertebrae at a time towards your head (approx. 1 inch)

#### Scapula Control Exercises:

##### Snow Angel on the roller



Lying on a foam roller, back and head on the roller  
Bring shoulder blades down and back and squeeze the roller  
Engage core so

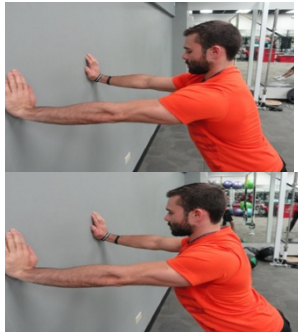
back is flat and have palms up  
Raise arms off the floor, keeping the position raise your arms up above your head and back down 3 sets of 10

### Alphabet on the Wall



Shoulders down and back  
Hand on wall at shoulder height on wall  
Keep scapula stable and draw alphabet with ball on wall

### Scapula Push ups on wall:



Hands shoulder height on the wall  
Push your chest away from wall only using your scapula in the back  
Then bring the scapula together into your back pockets  
Alternate between the two movements (ensuring the movement is only from the scapula)

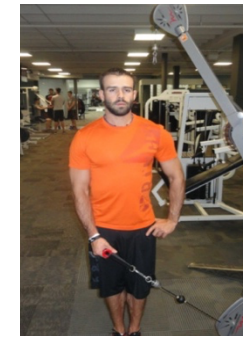
### Exercises for the force couples of the shoulder

### Band or Cable Shoulder Flexion and Abduction (anterior Deltoid and supraspinatus)

#### 1) Shoulder Flexion:



Attach a band to something low or put cable machine at lowest hole (can also do with free weight)  
Shoulder down and back then raise your hand forwards without raising your shoulders  
3 x 10

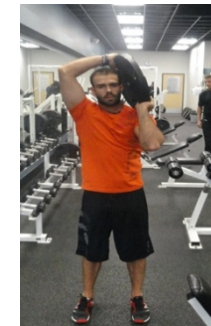


#### 2) Abduction

Standing sideways with band attached low or cable low (can use a free weight), arm farthest away from the machine grabs the handle.

Shoulder down and back  
Raise hand up sideways ensuring you don't raise your shoulder with you

### Around the worlds: Internal and external rotation



Place a weight in your hand and raise your hands so the weight is in front of your face- you are going to rotate your hands one way around the head (circumnavigating the head), and then the other way 2 sets of 10 (infraspinatus and subscap)

### **T's & Y's:**



1<sup>st</sup> photo: T's body on ball, feet on the floor, hanging over the ball, engage scapulas by bringing them down and back, as you raise your hands up sideways like a T make sure thumbs are up  
Easier: Do this lying on your stomach on the floor (mid-traps)  
2<sup>nd</sup> photo Y's: Same as the T's but you are going to raise your hands up above your head (low traps). Be mindful not to raise your shoulder up- keep the scapula down and back during the whole movement

### **Seated High Row (Mid- Traps)**



Shoulders down and back, feet on platform pulling your elbows high

so hands and elbows are at shoulder height- squeeze between shoulder blades (can use a band or free weights as well) 3 x 10

### **Seated Row: Rhomboids**



Seated with shoulders down and back  
Bring hands to body by squeezing elbows into ribcage, as well as squeeze between upper mid back 3 x 10

### **Shoulder Stability Exercises:**

#### **Push-up perturbation**



Plank Position on bosu- take chest to bosu and shake side to side for a

count of 10 repeat 5 x's. Make sure core is engaged, hips, stomach, and head/neck are not dropping towards floor