

NET RESULTS... PASS, SET AND CLIMB HIGHER !

## **SHOULDER EXERCISE AND INJURY PREVENTION FOR VOLLEYBALL ATHLETES**

Volleyball is a sport that requires several overhead movements- hitting, blocking, and serving.

Volleyball players may develop overuse injuries due to the repetitive nature of these overhead motions.

To prevent injuries, it is necessary to include a work out for shoulder strengthening exercises that focus on smaller muscle areas.

If you currently have shoulder pain..GET IT CHECKED OUT !

If you haven't experienced shoulder pain...pay close attention...  
Don't let your shoulders get in the way of your development of strength and power for volleyball !

## ANATOMY 101

The shoulder joint is designed for maximum mobility.

This allows for a wide range of upper body movement- like smashing the heck out of a volleyball.

This mobility comes at the expense of shoulder stability.

With such great mobility, the main muscles providing support to the joint must work very, very hard on an everyday basis.

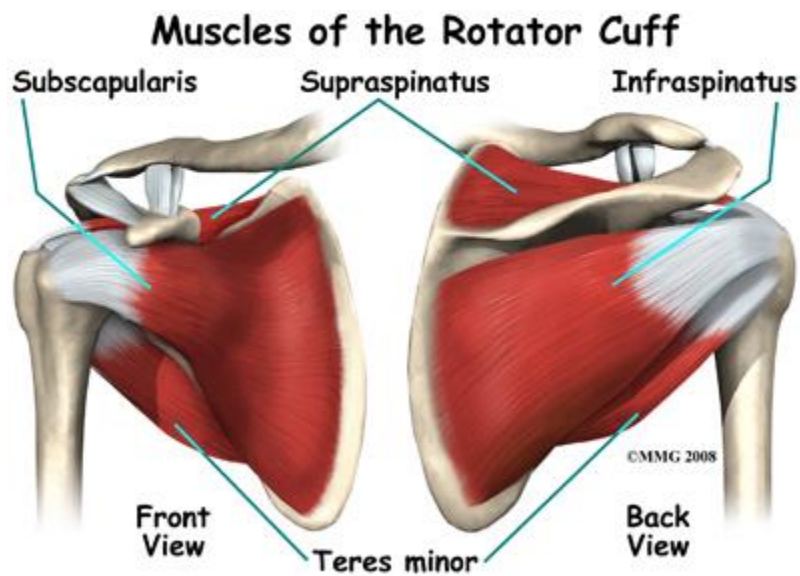
Overhead positions demand the muscles to produce power over and over and over again, and...you have a potentially unhappy shoulder 😞

It's no surprise the muscles and tendons of the shoulder joint are commonly injured.

The main muscles of the shoulder are the  
**ROTATOR CUFF MUSCLES.**

There are 4 of them:

1. Supraspinatus
2. Infraspinatus
3. Teres Minor
4. Subscapularis



## CAUSES OF SHOULDER PAIN

There can be many causes of pain and many are preventable.

### 1. POOR POSTURE

Over time, prolonged sitting leads to muscle adaptations.

Typical problems due to poor posture include:

- Tight pec muscles of the chest
- Tight levator scapulae muscles of the neck & shoulder blade
- Weak rhomboid muscles of the shoulder blade

SO.....

This causes shoulder problems by reinforcing dominance of the muscles on the front of your body in relation to the weaker muscles on the back of your body...NOT GOOD.

These muscle imbalances may lead to injury of the rotator cuff.

Your training should include stability exercises that target retraction (pulling back) the scapulae (shoulder blades).

## 2. TRUNK & HIP STABILITY

Really ? We talked about this in the last NET RESULTS..geesh..

Research shows a relationship between poor trunk/hip stability and shoulder injury.

I'm sorry to keep repeating ...for many reasons, including your shoulder health, you MUST do your core stability exercises !!

You get a 2 for 1 deal with this one ...

Prone and lateral planks engage not only the trunk, but also the scapular muscles.

PLEASE DO THEM.

Interesting tidbit....

Researchers believe that an indicator of shoulder pain is poor single leg balance- on the side opposite the painful shoulder.

## WEIGHT TRAINING TO BE AVOIDED BY OVERHEAD ATHLETES:

1. Heavy shoulder shrugs

2. Upright rows

3. Pec flys

4. Front and Lateral Arm Raises

5. Too many overhead exercises- it's not that overhead exercises don't have a place in your training- the problem is the amount of time already spent with arms above shoulders...so please...BE SENSIBLE.

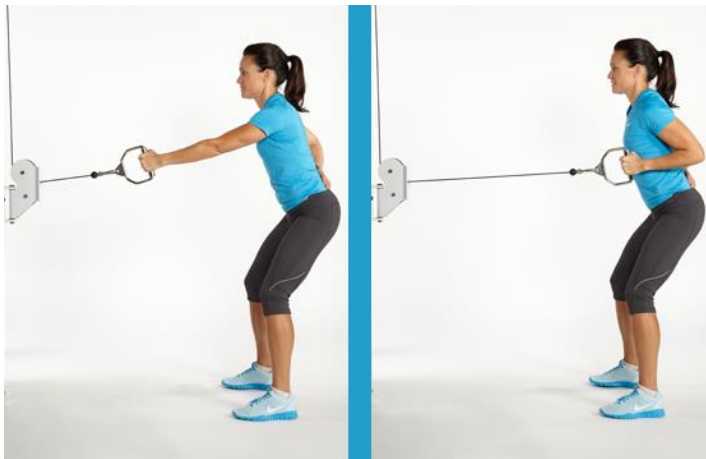
Here we go ladies !

Strategies to maintain healthy shoulders...

### STANDING CABLE/ THERABAND ROWS

Brace core muscles while performing standing rowing action.

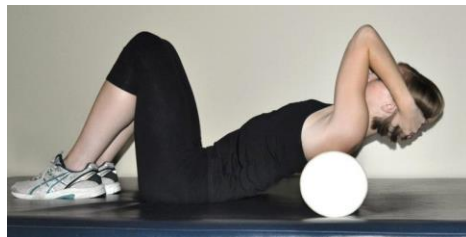
15 REPS X 3 SETS



### THORACIC SPINE EXTENSION

Perform lying on your back over a foam roller placed between shoulder blades. Keep your lower back pressed into the ground.

Take 2-3 deep breaths as you relax over the roll.



## THORACIC SPINE ROTATION

For lying on the right side, keep right leg straight.

Bend left hip and knee to 90 degrees.

Left knee rests on the ground on the right side of your body.

Rotate your head and upper body to the left.

Reach your left arm toward your left knee and then back up and out on a 45 degree angle.

Hold each end 3 secs and repeat x 6 each side.

(confusing- I know- just look at the picture below..)





## EXTERNAL ROTATION STRENGTH

Use a resistance band for this one.

Stand sideways to the band and bend elbow to 90 degrees

Keep thumb pointing up.

Pull the resistance band across your body to 90 degrees.

Keep your elbow tucked in to your side.

Do 2 sets of 30 reps.

OR..

Use a light weight (2-3lbs).

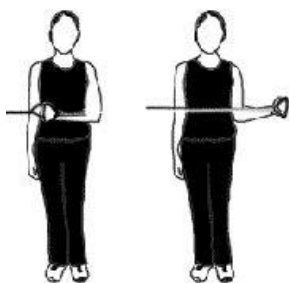
Same as standing, but lye on your side.

Bend elbow to 90 degrees.

Lift weight up toward ceiling.

Keep your elbow tucked in to your side.

Do 2 sets of 30 reps.



In a few weeks, make this harder by progressing the exercise to shoulder height.

Done in standing with weight or resistance band.

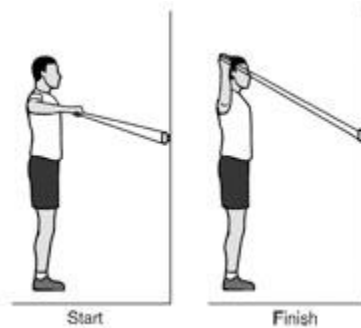
Elevate arm to shoulder height.

Bend elbow to 90 degrees.

Start with palm down.

Rotate the shoulder back to 90 deg.

Do 2 sets of 30 reps.



## PUSH UP PLUS

Do a regular push up, at the top position, emphasize pushing away from the floor.

Do 3 sets of 10 reps.



Progress by performing on an unstable surface. Eg- medicine ball or foam mat.

Psst....this one will work your core as well !

## OFF SET PUSH UP

Perform a push up with one hand on a medicine ball. Lower body to the height of the ball.

Do 3 sets of 10 reps.



## MEDICINE BALL WALKS

Start in basic push up position.

Perform with one hand on a medicine ball.

Place the opposite hand onto the ball as well.

Place the original hand on the ground.

Repeat moving in the opposite direction- walking hands back and forth.

Do 3 sets of 8 reps.



## T'S and Y'S

Strengthens scapular stabilizers and rotator cuff muscles simultaneously.

Lie on stomach. Try over top of a bench or exercise ball to make more challenging.

**SQUEEZE SHOULDER BLADES DOWN AND IN BEFORE LIFTING ARMS.**

T's- Start with arms at side of body at shoulder height and raise to level of body. Look! You are in the shape of a T.



Y's- Start with arms at 45 degree angle between head and side of body. Raise both arms to level of body. Look ! You are in the shape of a Y.

**AS YOU FATIGUE- DON'T LET YOUR SHOULDERS MOVE UP TOWARDS YOUR EARS !!**



Give yourself a pat on the back (or shoulder) for a job well done



Success – and happy shoulders- comes with persistent hard work.

Stick with it !