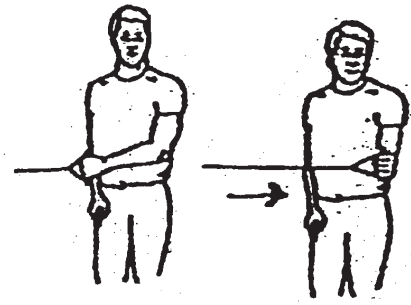


# Essential Seven Exercises

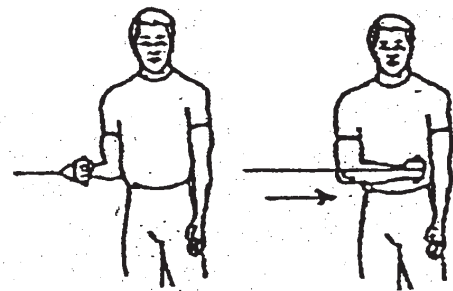
1. **TUBING, EXTERNAL ROTATION:** Standing with involved elbow fixed at side, elbow bent to 90° and involved arm across the front of the body. Grip tubing handle while the other end of tubing is fixed. Pull out with arm, keeping elbow at side. Return tubing slowly and controlled. Perform 2 sets of 30 reps.



Exercises 1 and 2:

Roll up a towel and hold between your arm and body.

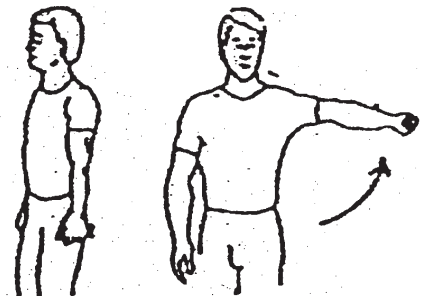
2. **TUBING, INTERNAL ROTATION:** Standing with elbow at side fixed at 90° and shoulder rotated out. Grip tubing handle while other end of tubing is fixed. Pull arm across body keeping elbow at side. Return tubing slowly and controlled. Perform 2 sets of 30 reps.



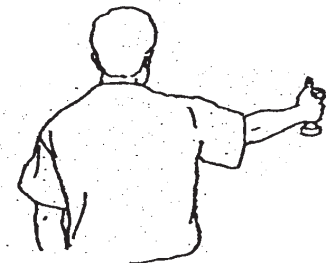
Exercises 1 and 2:

Roll up a towel and hold between your arm and body.

3. **LATERAL RAISES TO 90°:** Standing with arm at side, elbow straight, and palm against side. Raise arm to side, rotating palm up as arm reaches 90°. Do not go above shoulder height. Hold for 3 seconds and lower slowly. Perform 2 sets of 30 reps.



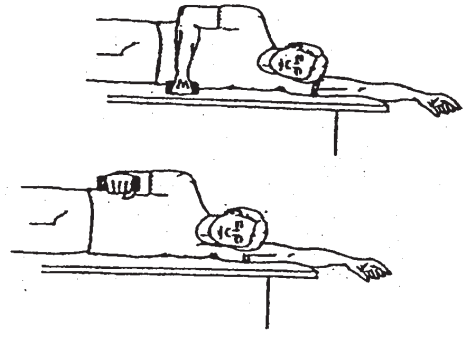
4. **"FULL CAN":** Stand with elbow extended and thumb up. Raise arm to shoulder level at 30° angle in front of body. Do not go above shoulder level. Hold for 3 seconds and lower slowly. Perform 2 sets of 30 reps.



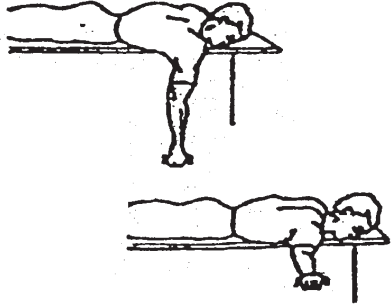
Do NOT raise arm above shoulder height. Never use weight over 5lbs. Start out using no weight and slowly work up to higher weight.

IMPORTANT: Thumbs up. Alternate exercise: Same as 3 and 4 except with palms down (*uses different muscles*).

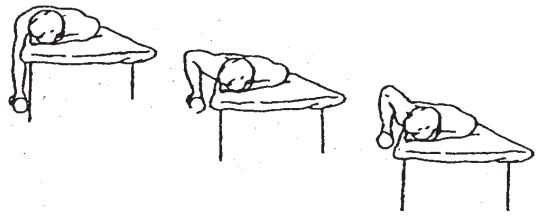
5. **SIDE-LYING EXTERNAL ROTATION:** Lie on uninvolved side, with involved arm at side of body and elbow bent to 90°. Keeping the elbow of involved arm fixed to side, raise arm. Hold 3 seconds and lower slowly. Perform 2 sets of 30 reps.



6. **PRONE HORIZONTAL ABDUCTION:** Lie on table, face down, with involved arm hanging straight to floor and palm facing down. Raise arm out to the side, parallel to the floor. Hold 23 seconds and lower slowly. Perform 2 sets of 30 reps.

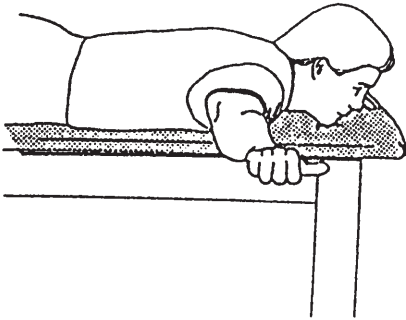


7. **PRONE ROWING:** Lying on your stomach with your involved arm hanging over the side of the table, dumbbell in hand and elbow straight. Slowly raise arm, bending elbow, and bring dumbbell as high as possible. Hold at the top for 3 seconds, then lower slowly. Perform 2 sets of 30 reps.

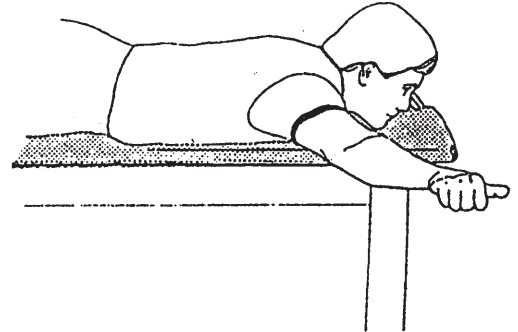


# Hughston Exercises

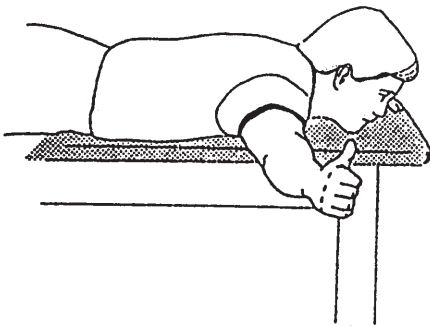
## SHOULDER: ROTATOR CUFF



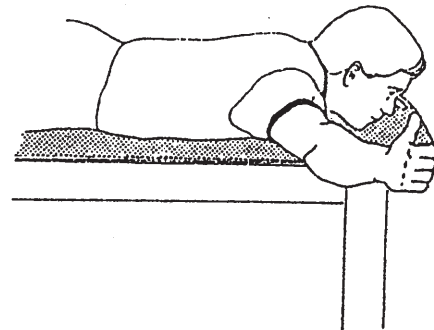
With thumb pointed towards head, lift arm at 90° pure abduction. Pause for 2 seconds, then lower. *Good overall.*



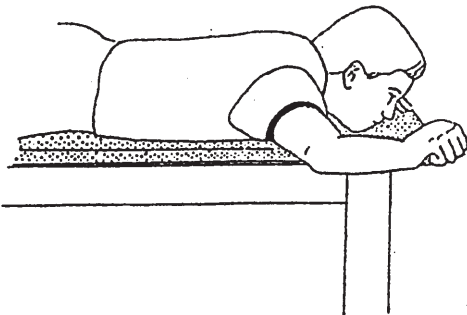
With thumb pointed towards head, lift arm with hand at eye level. Pause for 2 seconds, then lower. *Excellent for supraspinatus.*



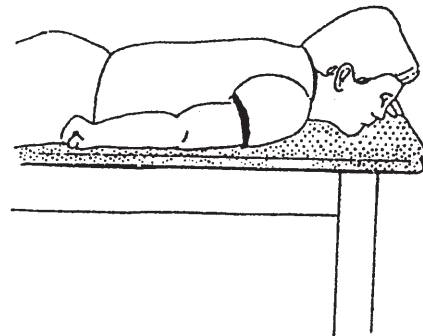
With thumb pointed up, lift arm at 90° pure abduction. Pause for 2 seconds, then lower. *Excellent for supraspinatus, teres minor and especially infraspinatus.*



With thumb pointed up, lift arm with hand at eye level. Pause for 2 seconds, then lower. *Excellent overall.*

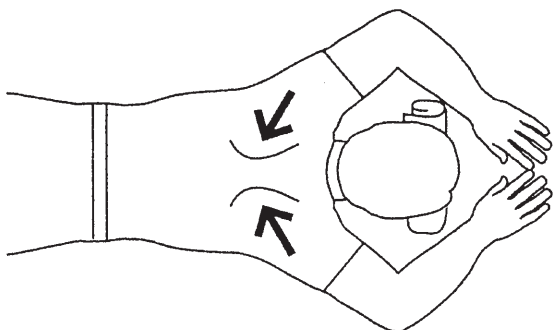


With elbow bent at 90°, rotate the humerus, bringing hand as high as possible. Pause for 2 seconds, then lower. *Excellent for infraspinatus and teres minor.*



With thumb pointed out, lift arm in extension. Pause for 2 seconds, then lower. *Strictly for teres minor.*

# SCAPULA STABILIZATION EXERCISES



## AROM shld retract/depress prone

- Lean forehead on counter and dangle arms at side
- Place a towel roll under forehead.
- Squeeze shoulder blades together and downward.
- Relax and repeat.

### Special Instructions:

NOTE: see written instructions for picture modifications. May hold hand weights to increase difficulty

Perform 3 sets of 10 Repetitions,  
once every other day.

Use 2 Lbs.

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## Prone press-ups

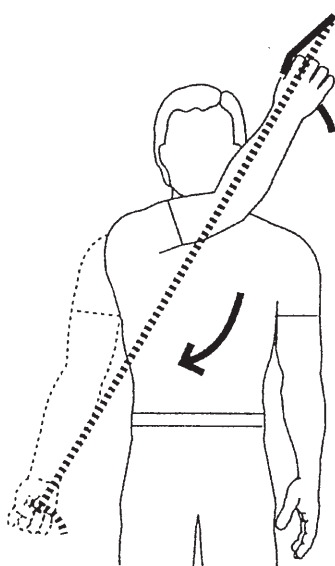
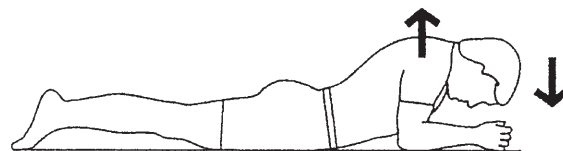
- Lie face down propped up on elbows.
- Allow shoulder blades to sink down and back
- Then round shoulders spreading shoulder blades apart
- Relax and repeat.

### Special Instructions:

Increase difficulty by coming up on knees then up on toes.

Perform 3 sets of 10 Repetitions,  
once every other day.

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## Resist shld diag D1 ext w/elastic

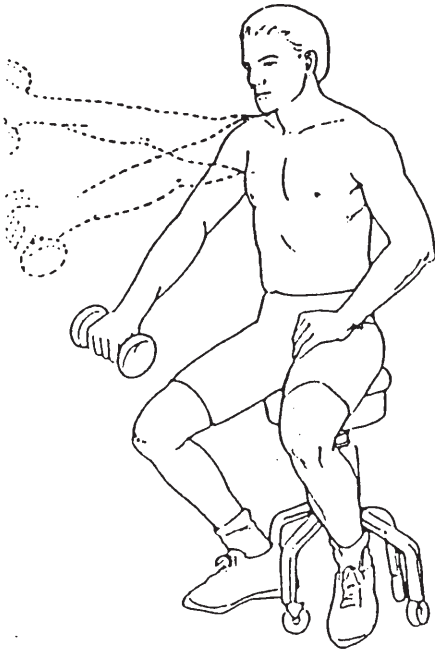
- Attach elastic to secure object as shown.
- Grasp elastic with hand at opposite shoulder, palm inward.
- Pull arm down and across body, ending in palm outward.
- Return to start position and repeat.

### Special Instructions:

Focus on bringing shoulder blade down and back

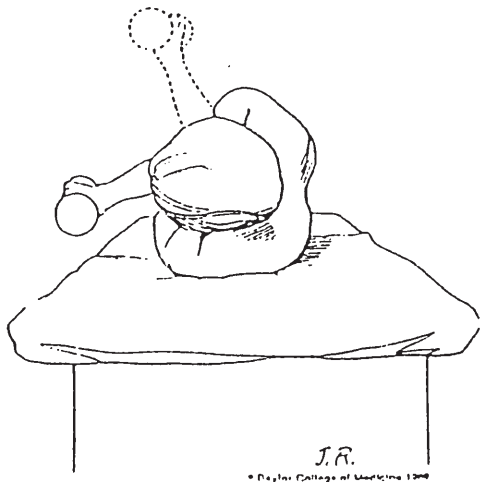
Perform 3 sets of 10 Repetitions,  
once every other day.

Use red Elastic.



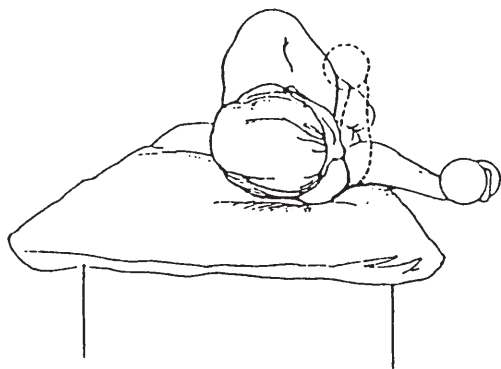
**FIGURE 1:**

Sit or Stand with a light (2 lb) weight in your hand. Thumbs pointed downward, slowly lift the weight up, with the arm slightly off to the side of your body. Do not put the arm completely on the side of your body nor directly in front of you but in between. Slowly lift the weight, keeping the elbow stiff, and not going above the head. Do 15-20 reps, if it is easy by the 20<sup>th</sup> rep, increase the weight.



**FIGURE 2:**

Lay down on your "good" shoulder. Start out with a very light weight (2 lbs). Keep the elbow tucked into the side (like you are holding a magazine under your armpit) Slowly lift the weight up keeping the elbow tucked in. Do 15-20 reps, slowly, controlling the weight. If it is easy by the 20<sup>th</sup> rep, you may use more weight.



**FIGURE 3:**

Now lay down on your "bad" shoulder. Slowly bring the weight Up toward your chest, controlling the weight. Do 15-20 reps, If it is easy to do by the 20<sup>th</sup> rep, more weight may be used.



# How to Prevent Shoulder INJURIES

BY JENNIFER A. MOSHAK

As a swimmer, it is very important to remember that properly balanced and aligned shoulder blades play an integral role in shoulder motion. The following Shoulder Blade Stabilization exercises are designed to help prevent shoulder injuries.

Talent is very important to an athlete's success, but that is only part of the equation—especially for a swimmer. Knowing how to use your body correctly in ways that prevent injuries is equally important because that is what makes a lasting difference in sports.

Like a smooth running automobile, a swimmer's shoulder joint is designed for motion. Think of your shoulders as the tires on your car. If your tires are not balanced or are out of alignment, they will experience abnormal wear and tear. So, too, if your shoulders are not balanced or are out of alignment, you may experience injuries such as tendinitis, bursitis or true impingement.

Even properly positioned tires that travel many miles wear out over time. Like the tread on a tire, your shoulder can wear out, eventually leading to arthritic changes on the bone surface. Your rotator cuff tendons can also wear down or "blow out," causing dysfunction or a serious tear.

The shoulder joint is attached to the trunk of the body where the breast bone (sternum) meets the collar bone (clavicle). The collar bone attaches to the shoulder blade (scapula) which is the socket part of the shoulder joint. Most shoulder motion occurs where the socket and the ball of the upper arm (head of humerus) connect.

This mobility is needed to perform the swim strokes. However, there must also be stability in the joint for function, performance and injury prevention. The shoulder blade acts as this stable platform.

## SHOULDER BLADE STABILIZATION EXERCISES

The average swimmer uses 15 to 18 strokes to cover the length of a 25-yard pool. Therefore, in a workout of 1,000 yards, a swimmer takes approximately 600 to 720 strokes. If your workouts exceed that distance, do the math to determine how many strokes you are taking. A 5,000-yard practice would result in 3,000 to 3,600 strokes. No matter the ability level, it is not uncommon for swimmers to experience shoulder pain.

An exercise program that focuses on the shoulder blade's function can improve shoulder stability considerably, thereby aiding in injury prevention.

The following Shoulder Blade Stabilization exercises (see Photos #1-9) are designed to help prevent shoulder injuries. Each exercise is performed as three sets of 15 repetitions. With time, you should be able to increase your yardage gradually. When performing these exercises, listen to your pain and modify your workouts accordingly. Also, it is important to have a qualified coach or instructor evaluate your stroke mechanics. ♦

Jennifer A. Moshak, MS, ATC/L, CSCS is the assistant athletic director for sports medicine at the University of Tennessee in Knoxville.



PHOTO #1  
"Angels" at 45 degrees

Sit against a wall with arms away from your body at a 45-degree angle, palms facing out. Then push your fingers, wrists, elbows and shoulders against the wall while squeezing your shoulder blades together for a total of 15 seconds.



PHOTO #2  
"Angels" at 90 degrees

Same exercise as "Angels" 45, except the arms are at a 90-degree angle.



PHOTOS #3a AND #3b  
Shrug Plus

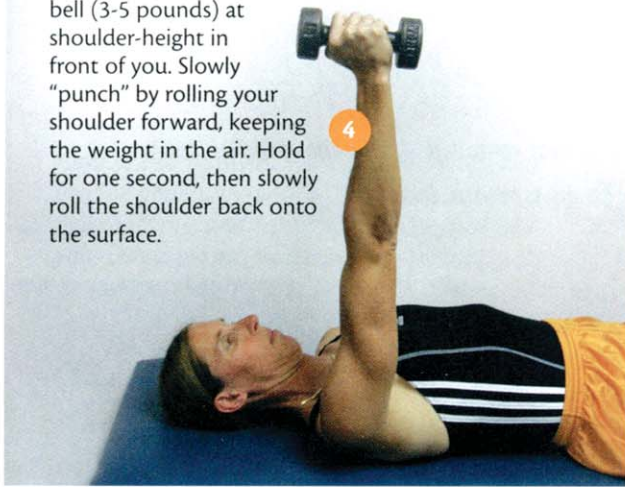
Hold a set of light dumbbells (3-5 pounds) in each hand. Shrug your shoulders and squeeze your shoulder blades together. Hold for one second. Release the squeeze and return shoulders to neutral.



**PHOTO #4**

**Supine Protraction**

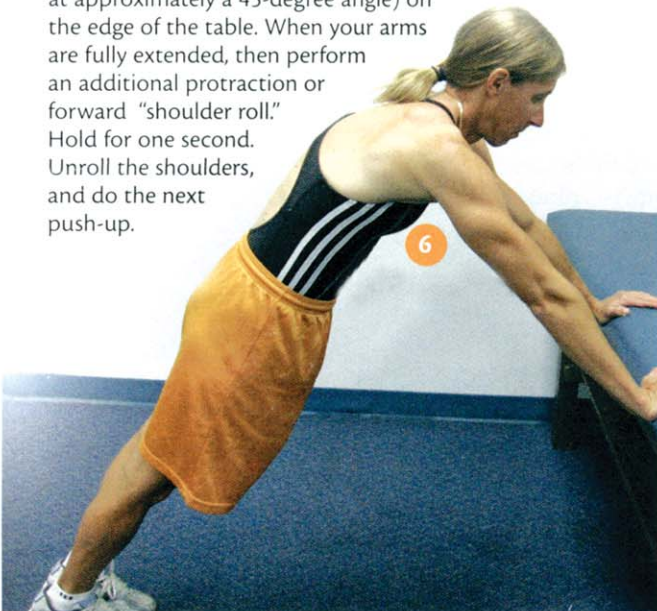
Lie face up on a firm surface, holding a light dumbbell (3-5 pounds) at shoulder-height in front of you. Slowly "punch" by rolling your shoulder forward, keeping the weight in the air. Hold for one second, then slowly roll the shoulder back onto the surface.



**PHOTO #6**

**Push-ups Plus**

Do an incline push-up (with your body leaning at approximately a 45-degree angle) on the edge of the table. When your arms are fully extended, then perform an additional protraction or forward "shoulder roll." Hold for one second. Unroll the shoulders, and do the next push-up.



**PHOTO #8**

**Prone Arm Raise at 45 degrees**

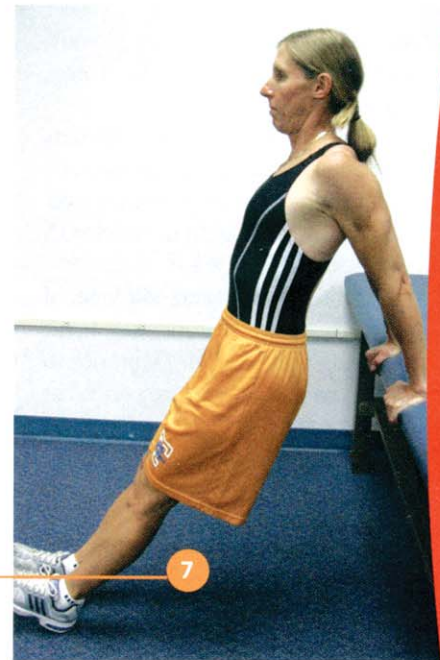
Lie face down on a table, holding a light dumbbell (3-5 pounds) off the edge. Slowly raise the dumbbell behind you to body-height at a 45-degree angle. Hold for one second, then lower slowly.



**PHOTO #5**

**Prone Retraction**

Lie face down on a table holding a light dumbbell (3-5 pounds) with your arm hanging over the edge of the table at shoulder-height. Squeeze your shoulder blade toward the center of your back, "rolling" the shoulder backward. Hold for one second, then slowly bring the shoulder back down to the table.



**PHOTO #7**

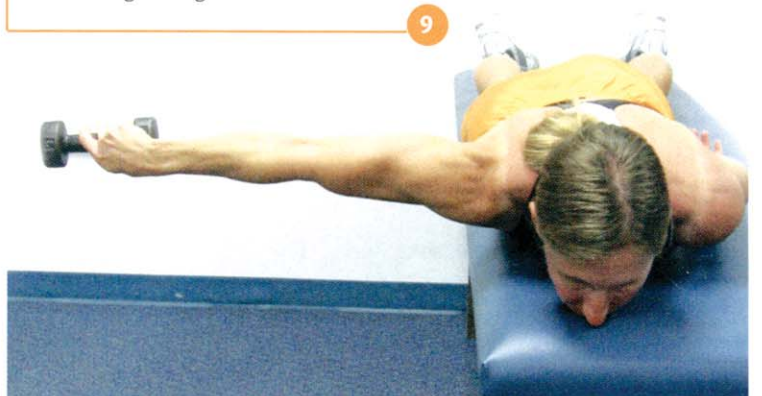
**Dips Plus**

Do a reverse dip (with your body leaning backward at approximately a 45-degree angle) on the edge of a table. When your arms are fully extended, stick your chest out and do a shoulder-blade squeeze, retracting or rolling your shoulder blades backward to the center of your back. Hold for one second. Return shoulders to neutral, and do the next reverse dip.

**PHOTO #9**

**Prone Arm Raise at 90 degrees**

Same exercise as Prone Arm Raise 45, except you raise the weight at a 90-degree angle.



swimmer's shoulder