

FUNCTIONAL INJURY PREVENTION EXERCISES

Part 1

“The Shoulder Complex”

It does not matter what your discipline or philosophy of exercise is. If you are not doing injury prevention exercises you are inviting an injury to eventually happen. Let's face it, injuries will always occur in sports but we can help prepare the athlete by strengthening the small intrinsic muscles of the shoulders, hips, and ankles. I accomplish this through a series of Functional Injury Prevention Exercises. These exercises are commonly referred to by my athletes as the F.I.P. and are performed directly after their warm-up and before the core of our weight training program.

In this article, I will be focusing on the shoulder complex and the rotator cuff. The rotator cuff is made up of four muscles and tendons (Supraspinatus, Infraspinatus, Subscapularis, and Teres Minor) which stabilize the shoulder joint. When strengthening these muscles heavy weight and/or excessive resistance are not required. Too much resistance will call in the bigger muscles that surround the shoulder joint and take the focus off of isolating these smaller rotator cuff muscles. I like training these muscles using tubing and/or light 5-10 pound weights.

Some of the most common exercises are internal and external shoulder rotation. Internal rotation involves keeping the elbow close to your side, bent at 90 degrees and then rotate your arm internally towards your body. External rotation is just the opposite. You rotate your arm externally away from your body. The following are examples of internal and external rotation exercises using tubing.

Internal Rotation



External Rotation



Internal and external rotation exercises are a good start to shoulder health for the common person, but athletes tend to require a more complex circuit in my opinion. A friend of mine, Mike Winn (Physical Therapist from Evangelical Sports Medicine Center, Lewisburg, PA) developed a shoulder circuit which I use with my athletes almost weekly. I believe this circuit has increased the integrity of our athlete's shoulder strength and has helped to decrease the amount of overuse injuries associated with many sports. This circuit is a series of five exercises using rubber elastic tubing.

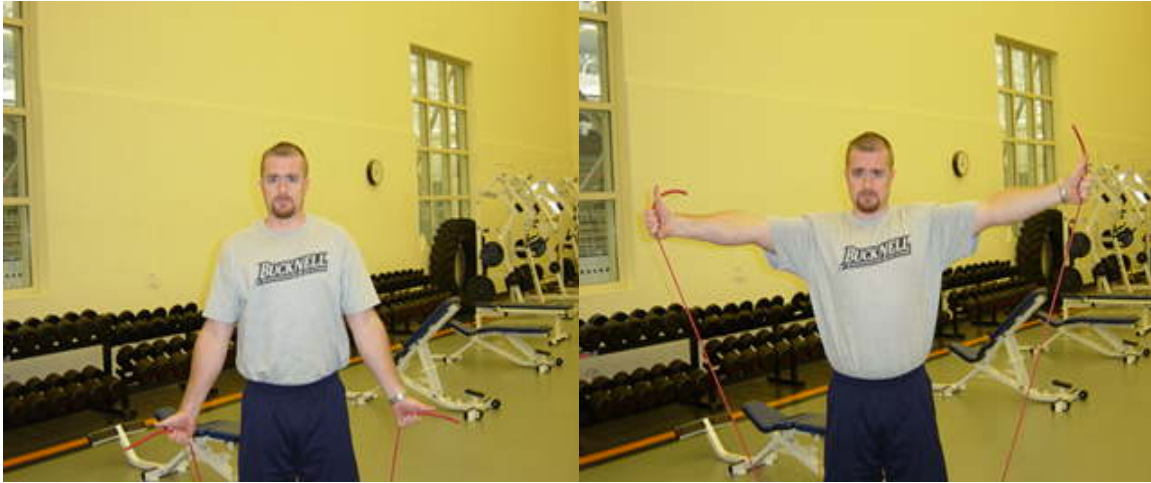
The first exercise is Thumbs Out. This is done with one tube held at arms length with your palms up. Arms will be parallel to the floor. Then horizontally abduct the arms and retract (pinch) the shoulder blades together and return back under control.

Thumbs Out



The second exercise is Thumbs Up. Grab a second tube and secure each of them under your feet so you will be holding one in each hand. Bring your arms forward about 30 degrees. With your thumbs pointing up, raise your arms up until they are parallel to the floor.

Thumbs Up



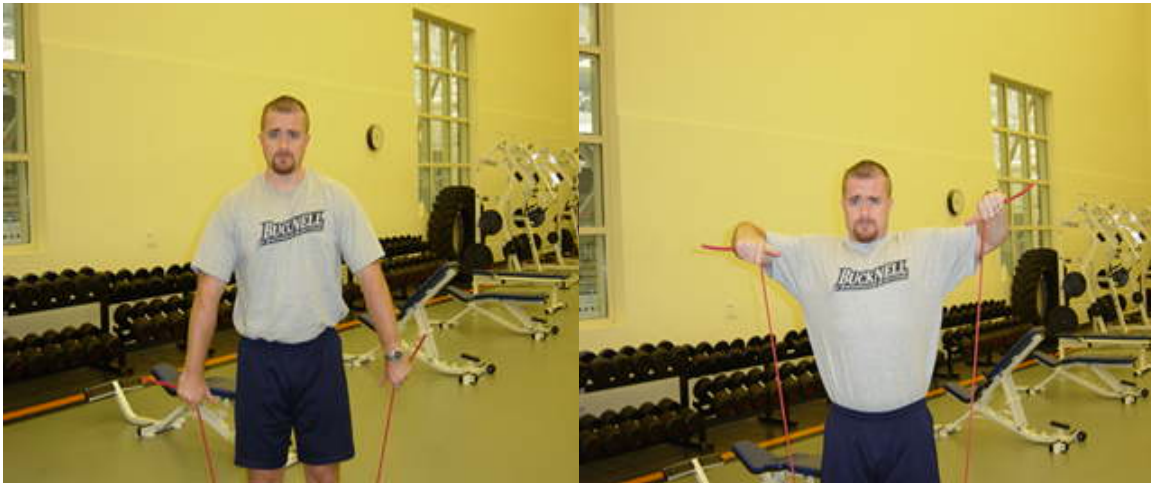
The third exercise is Thumbs Down. It is the same movement as Thumbs Up but you will switch your grip with the bands, so your thumbs will be pointing down when the arms are parallel to the floor.

Thumbs Down



The fourth exercise is High Rotation. You will start in the same position as Thumbs Down. Then raise your elbows high like an upright row. When your upper arms are parallel to the floor, externally rotate from the shoulder until your forearms are perpendicular to the floor. Return back to the starting position in reverse order under control.

High Rotation



The fifth exercise is High Diagonals. In the Thumbs Down starting position, keep the bands under your feet but switch the bands into your opposite hands. Then cross your arms so that your thumbs are pointing into your hips. Extend your arms out away from your body and externally rotate the shoulder as you raise your arms across your body and out above your shoulders. Reverse the order in a controlled manner to restart for the desired number of reps.

I typically have my athletes perform this complex shoulder circuit once or twice a week as part of their Functional Injury Prevention series of exercises. They will perform 1-2 sets of 10-12 controlled reps. For these exercises to be helpful in preventing injuries, the techniques of each exercise must be mastered. This is important and must be stressed to your athletes.

High Diagonals



I truly believe in Functional Injury Prevention Exercises and think it should be a mandated portion of every strength and conditioning program. Think about it. A healthy team has many more opportunities to win than a team missing a few starters because of injuries! If you have any questions or comments, please feel free to contact me at varietytrainer@yahoo.com.

Train Hard,

JERRY SHRECK

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