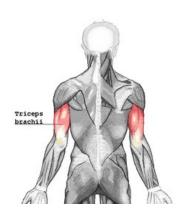


Greg Arnold, DC, CSCS 1745 Express Drive North Hauppauge, NY 11788 <u>PitchingDoc@msn.com</u> www.PitchingDoc.com

How to properly strengthen your throwing arm in the weight room December 3, 2015

As pitchers are (hopefully) hard at work in the weight room getting stronger for next year (click here for my "More/Less" newsletter), it's important to know which muscles in the arm to strengthen and which muscles to leave alone to help minimize your risk of injury

The most important arm muscle to strengthen: The triceps muscle



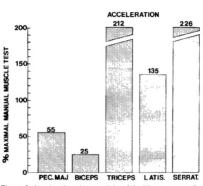
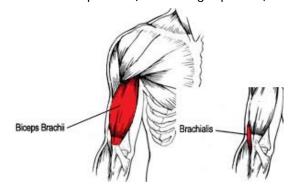


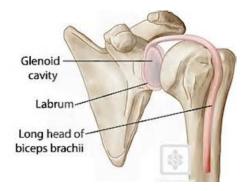
Figure 2. Acceleration phase activity of the biceps, pectoralis major, latissimus dorsi, triceps, and serratus anterior.

Few muscles in the arm work as hard to throw the ball as the triceps muscle. During the 'acceleration' phase of the throw, the triceps undergoes a maximal contraction (right picture).

The most important arm muscle to leave alone: the biceps muscle

No muscle in the arm contributes less to throwing the ball (see graph) and no muscle can cause more damage to the shoulder than the biceps muscle as one of the tendons attaches in the shoulder pocket (labrum, right picture):







Greg Arnold, DC, CSCS 1745 Express Drive North Hauppauge, NY 11788 <u>PitchingDoc@msn.com</u> www.PitchingDoc.com

During the pitching motion, the biceps goes from a shortened position in the 'late cocking phase' (left picture) to a lengthened position at release point (right picture) in one-tenth of a second:





How fast is one-tenth of a second? The blink of an eye. If the biceps is tight from being trained in the weight room, the shoulder will get injured in what's called a 'SLAP Lesion' and can require surgery.

What is the appropriate weight training program for baseball players? You can subscribe to my baseball video library and get access to a weightlifting program/presentation that will help minimize your risk of injury.

Have A Question About This Newsletter?

Contact (PitchingDoc@msn.com / 631-352-7654) Dr. Arnold!