

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

## 4-Week Program Increases Velocity in Youth Baseball Players January 6, 2011

A study released in December 2010:

## EFFECTS OF A 4-WEEK YOUTH BASEBALL CONDITIONING PROGRAM ON THROWING VELOCITY

Put 2 groups of baseball players 11-15 years of age into 2 groups:

- 1. No program at all
- 2. 75 minutes/day, 3 days/week of:
- 10 minute warm-up (stretching, arm circles, wrist exercises
- **30 minutes of elastic tubing exercises** (1 set of 25 reps for 17 different exercises)
- 30 minutes of throwing that consisted of:
  - o 5-minute warm-up throwing at 50 feet
  - o 15 minutes of "Pivot Throws" (5 minutes each at 60, 75, and 100 feet)
  - o 10 minutes of Long Toss
    - (13-15 year old group threw no further than 150 feet)
    - (11-12 year old group threw no further than 125 feet)
  - o 5 minutes of cool-down stretching

By the end of the program, those in the conditioning group had a 4.1% increase in velocity (56.1 to 58.4 mph) compared to a 1% decrease in the control group (54.1 to 53.7 mph)

Why Do I Believe Velocity Increased?

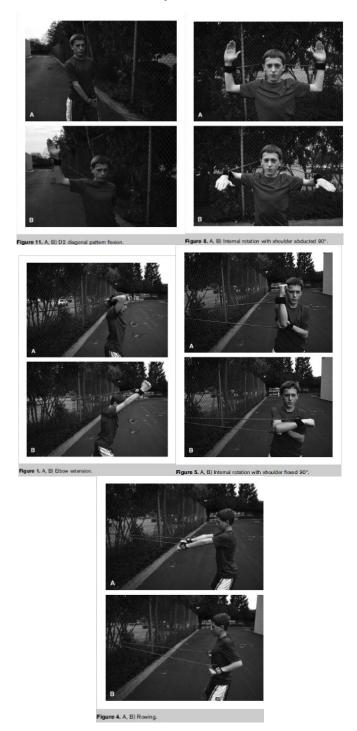
The best part of the tubing exercises was the emphasis on the "negative" part of each exercise, called the **"eccentric phase"**:

Each resistance exercise was performed in a 3-second repetition (1 second for the concentric phase and 2 seconds for the eccentric phase). Each subject was instructed on how

<u>The eccentric phase</u> is the most ignored yet perhaps <u>most important way</u> to train the throwing shoulder.



Of the tubing exercises showed in the study, the 5 I would most recommend are:



Have A Question With This Newsletter?

Email (PitchingDoc@msn.com) or Call (631-352-7654) Dr. Arnold!