

The Little League Shoulder and Elbow

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About Me

- 5 Years Working at Moore
- 5th Season w/ SHU Baseball
- Former Collegiate Pitcher
- Competed in Powerlifter
- Competed in Olympic Lifter
- Coached Little League for 6 years and Legion for 3.
- Undergrad in Exercise Science
Masters in Human Movement with a
Specialization in Sports Psychology

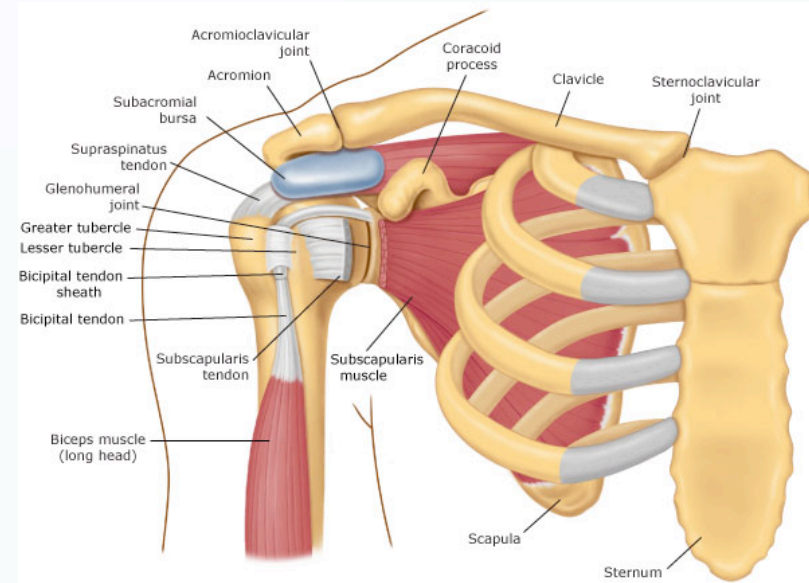


Common Complaints and Injuries

- Shoulder Impingement
- Frozen Shoulder
- Little Leaguers Elbow

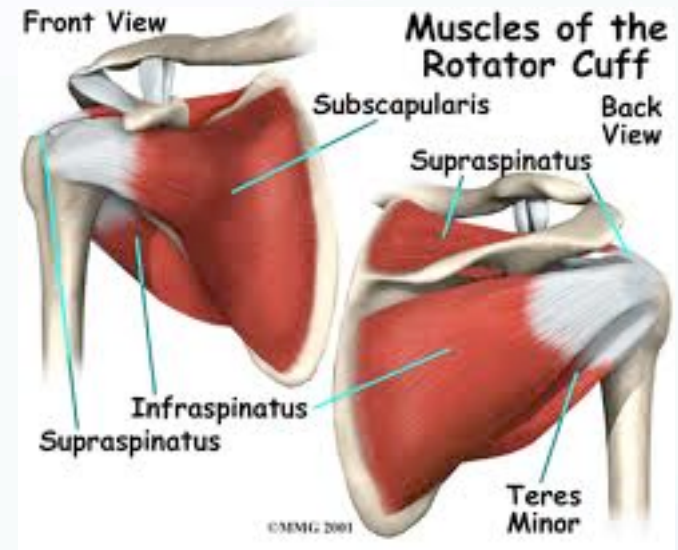
Shoulder Impingement

- Clinical:
Impingement refers to mechanical compression and/or wear of the rotator cuff tendons.
- Coaches Test:
Hand on opposite shoulder lift elbow to the sky. Pain?
- What to do?
If painful, refer out.



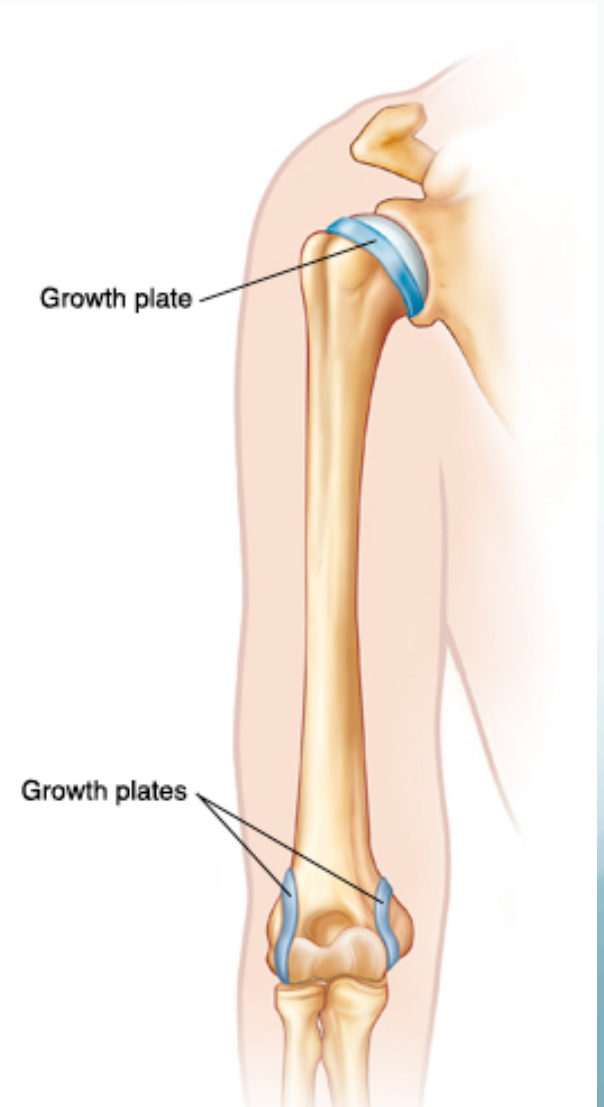
Frozen Shoulder

- Clinical:
When the shoulder is painful and loses motion because of inflammation.
- Coaches Test:
Generally weaker throwing motion, often with pain.
- What to do?
Look at throwing progression, lower # of throws.
No improvement, refer out.



Little Leaguers Elbow

- Clinical:
Overstress injury to the medial elbow that occurs as a result of repetitive throwing motions.
- Coaches Test:
Elbow pain or “new sidearm motion”
- What to do?
STOP THROWING, REFER OUT!!!



Why Are These Injuries Happening?

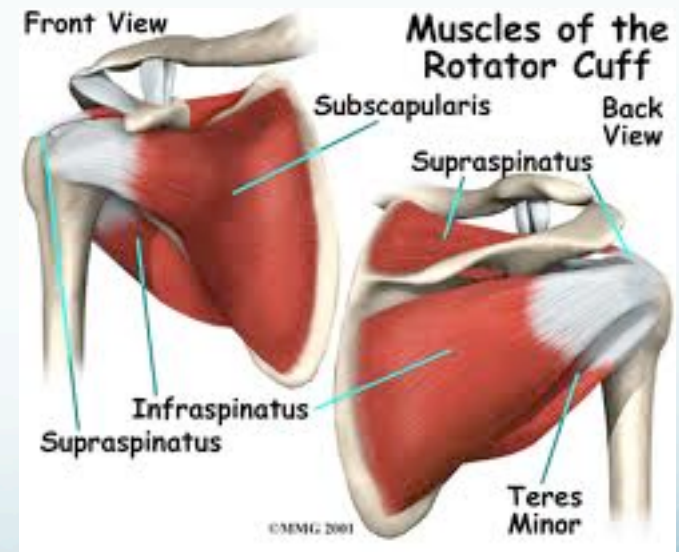
- Little Leaguer's Elbow wasn't common 10 years ago.
- Poor rotator cuff?
- Throwing too much?
- Too often?

Why Are These Injuries Happening?

1. Poor Posture/Weak Back
Posture dictates function
Kids sit too much and only play one sport... where are all the **athletes**?!
2. Poor Throwing Mechanics
3. Poor Throwing Progression

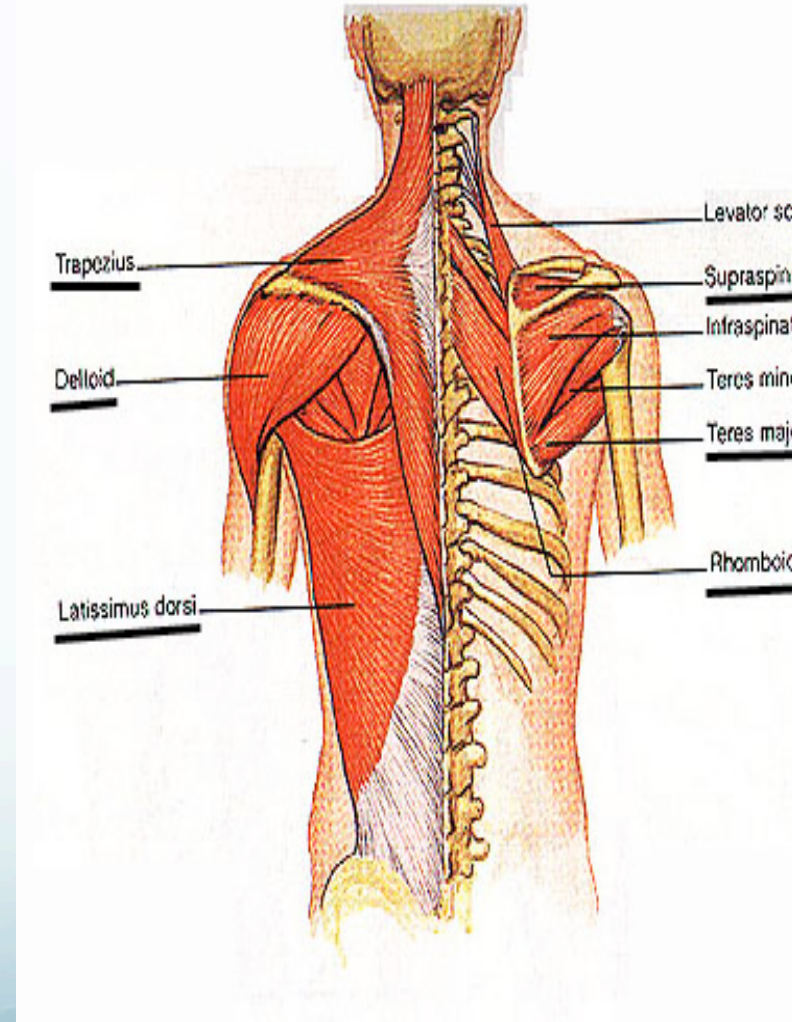
Posture and Rotator Cuff

- Rotator cuff muscles are as thick as shoe laces.
- The rotator cuff's job is to keep the humeral head (shoulder bone) centered and stabilized.



Posture and Back

- Back muscles control scapula (shoulder blade)
- Scapula's function dictates motion of the shoulder!
- Back muscles are decelerators when throwing.



Good Posture

- Shoulders down and back
- Engaged stomach
- Engaged abs/core



Mechanics

Thanks to Phil Rosengren from <http://betterpitching.com/>

Progression

1. Mechanics need to be efficient. Once fatigue sets in REST or shut it down.
2. Strategically adding throws AND RECOVER!
“coaches shoulder”
3. Strategically add intensity AND RECOVER!
Intensity could be distance or a mound.
A mound increases velocities or shoulder and elbow stresses.

Progression Rules

1. Mechanics Efficient on each throw, break it up!
2. Add more throws IF you can recover, limited or no soreness.
Goal should be ~45 deliberate throws then add distance.
3. Add distance by 15-30ft every other day IF they can recover.
Goal should be 3-4x the mound distance.
4. Add mound, but decrease # of throws, slowly increase # to target amounts.

Progression Rules

DO NOT ADD ALL PROGRESSIONS AT
ONCE!



Why We Want Athletes

- Movement efficiency
- Better body awareness
- Minimize overuse injuries

Case Study!



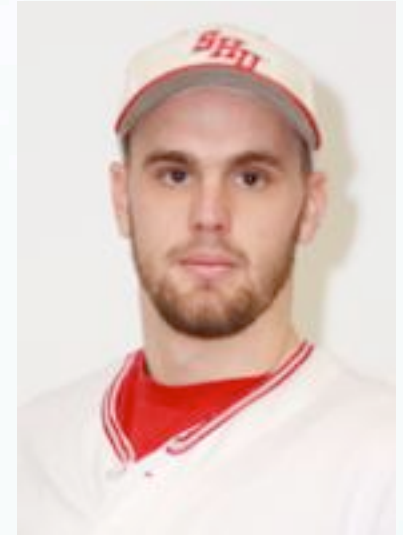
Steve

- Baseball
- Basketball
- Started Playing Football in HS



Mike

- Baseball
- Gymnastics
- Soccer



Matt

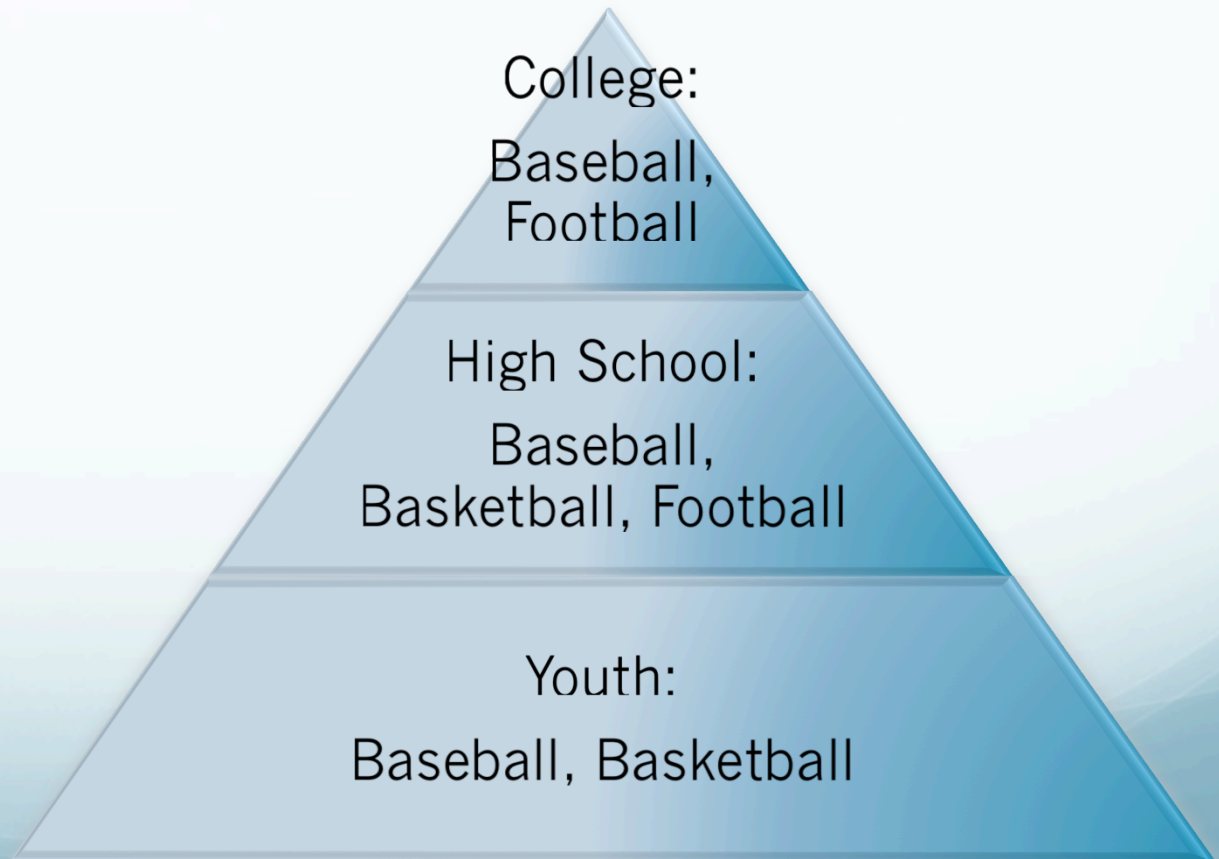
- Baseball
- Basketball
- Soccer

Case Study!



Steve

- Baseball
- Basketball
- Started Playing Football in HS

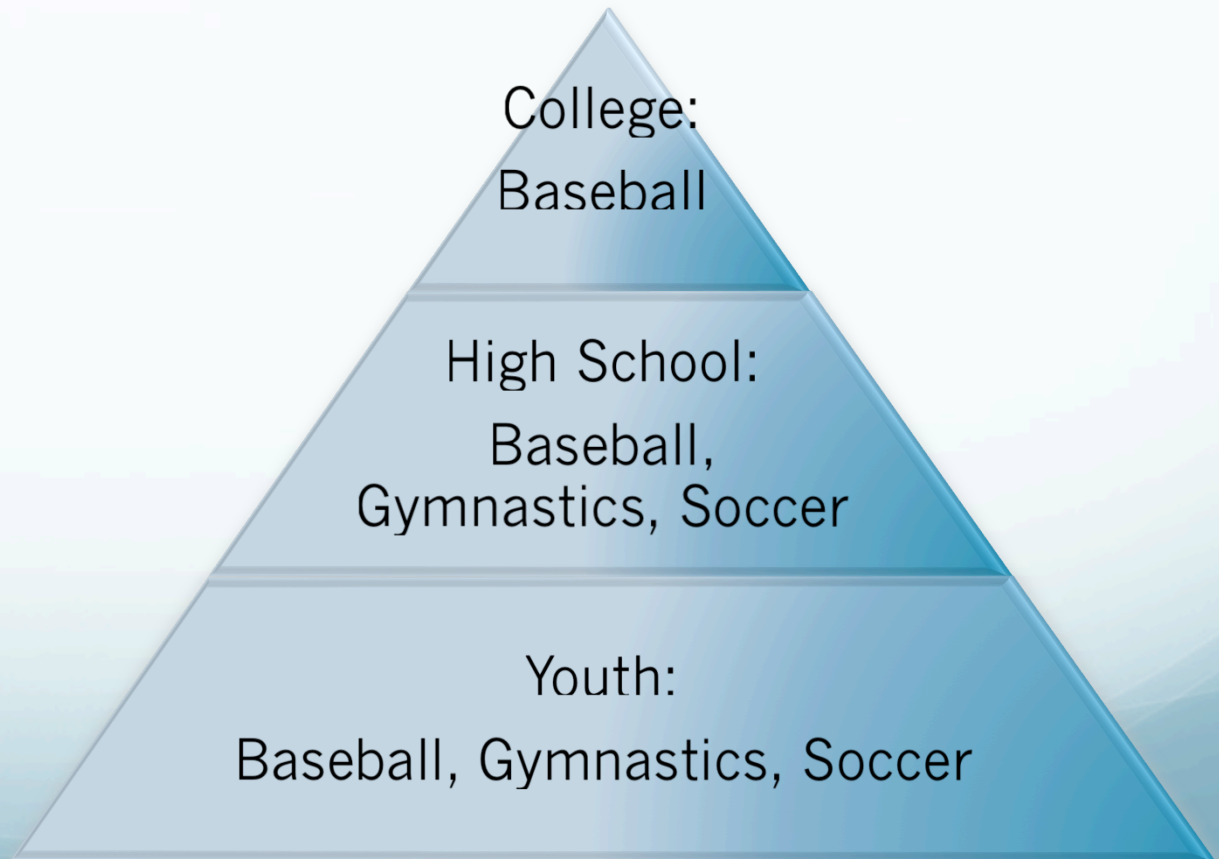


Case Study!



Mike

- Baseball
- Gymnastics
- Soccer

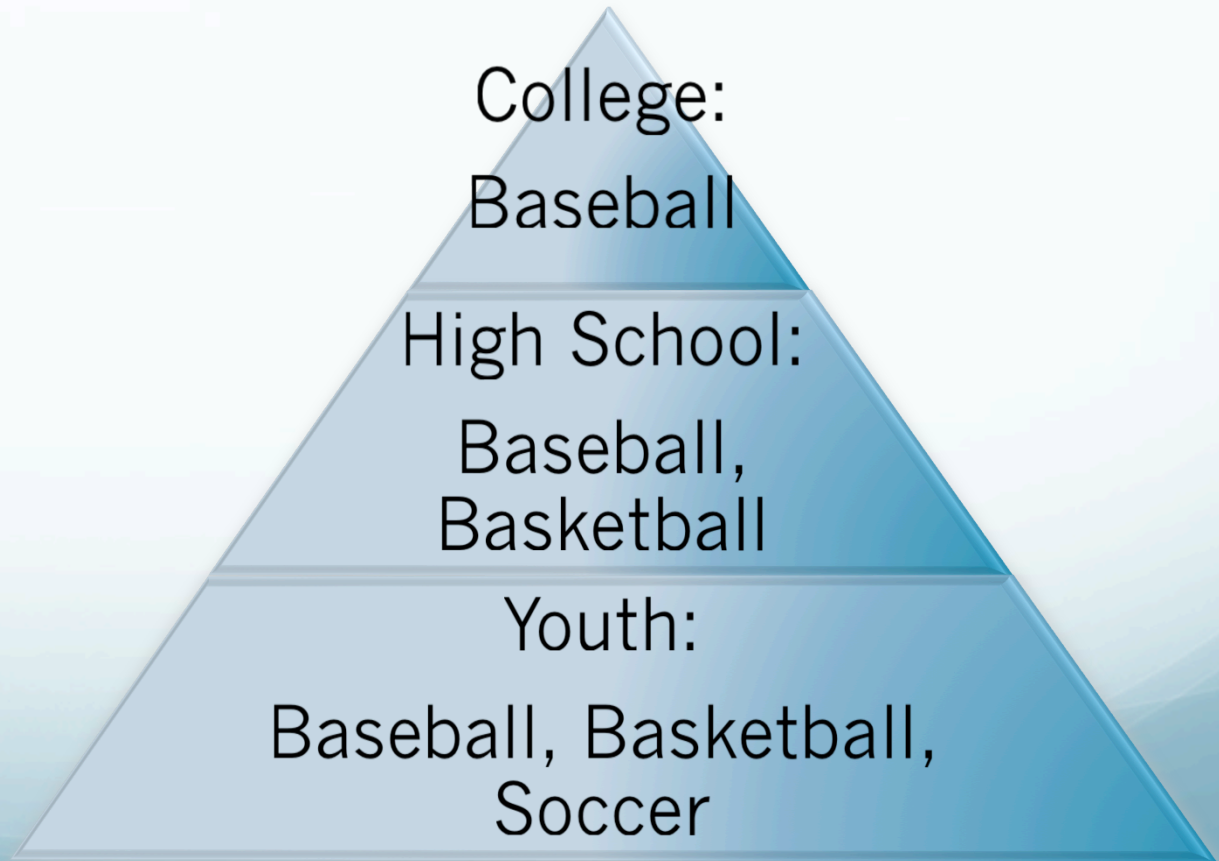


Case Study!



Matt

- Baseball
- Basketball
- Soccer



Case Study!



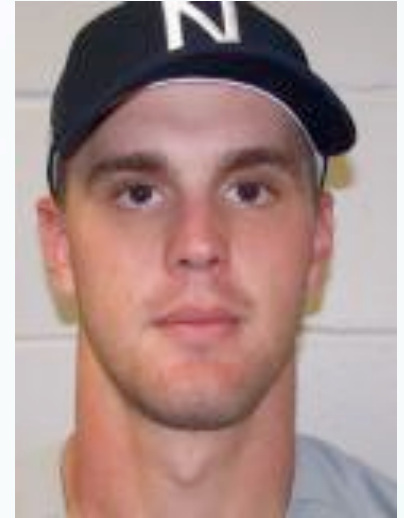
Steve

- 11 SHU Football Receiving Records
- Pro Baseball in Hawaii (OF)



Mike

- Drafted by Dodgers
- Converted Pitcher Touching 94 MPH



Matt

- Pro Baseball Pitcher in NJ
- Sits 90-93MPH

Overuse Injuries in Adolescent Baseball Pitchers

- Control Group: had no history of arm pain lasting more than 2 weeks.
- Surgery Group: had elbow or shoulder surgery.

Table 1. Comparison between the control group of pitchers and pitchers that required reparative surgery.¹⁸

Variable	Control n=45	Reparative Surgery n=95
Months Pitched/Year	5.5 ± 2.3	7.9 ± 2.5
Games Pitched/Year	18.6 ± 13.0	28.8 ± 14.7
Innings Pitched/Game	4.3 ± 1.7	5.6 ± 1.4
Pitches/Game	66.2 ± 25.3	87.8 ± 21.8
Pitches/Year	1269 ± 1040	2563 ± 1506

1. Olsen SJ 2nd, Fleisig GS, Dun S, Loftice J, Andrews JR. Risk factors for shoulder and elbow injuries in adolescent baseball pitchers. Am J Sports Med. 2006;34(6):905–912.

Overuse Injuries in Adolescent Baseball Pitchers

- Pitchers whom played competitive baseball 8+ months a year are 500% more likely to have a shoulder or elbow surgery!!
- Pitchers whom through through arm pain or fatigue are 500% more likely to have a shoulder or elbow surgery!!

1. Olsen SJ 2nd, Fleisig GS, Dun S, Loftice J, Andrews JR. Risk factors for shoulder and elbow injuries in adolescent baseball pitchers. Am J Sports Med. 2006;34(6):905–912.

“My kid plays multiple sports, but coaches still prefer athletes from the south”

- Coaches like them more because they play “year round”--- what do coaches really think.
- The Football Mentality... may be right.
 - Play football 3-4 months a year
 - Flag football 2-3 months a year
 - Coaches encourage athletes to play other sports
 - EVERYONE WEIGHT TRAINS=

BIGGER FASTER STRONGER



Take Home Points

- Pain is a **RED FLAG** from the brain to stop what you are doing, refer out!!!
- Focus on good posture
Technology Posture– Computer, Texting, Video games is garbage!
- Learn and teach proper throwing mechanics.
No one right way, but there is optimal and more efficient.
- If you want to keep kids healthy and have them play at “elite” levels, play multiple sports.

“Elite” less than 1% of high school athletes play professional sports and only 2% of high school athletes play in college.

Thank you!
For more information
www.joshheenanan.com

Questions?
Comments?