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## The Full Windup vs. the Stretch

March 8, 2008

A recent study out of the American Journal of Sports Medicine:

<http://ajs.sagepub.com/cgi/content/abstract/36/1/137>

looked at the mechanics differences (if any) between the full windup and the stretch since

*"...many pitchers and coaches believe that pitching from the stretch produces less ball velocity or is more stressful on the throwing arm."*

they compared mechanics of 28 Major and Minor League pitchers.

### What Did They Find?

#### Velocity

The full windup increased velocity by only 0.5 mph which *"translated to a difference of only 0.002 seconds in time for the ball to travel"* from the pitcher's hand to home plate.

#### Stride Length

Nearly identical in both groups (71.2% of body height)

#### Arm Stress at the Elbow

Nearly identical in both groups (87.4 vs. 87.5 Newton-meters)

#### Arm Stress at the Shoulder

Higher in the full windup (98.5 vs. 97.5 Newton-meters)

### Therefore:

*"...pitching from the stretch is not necessarily more stressful the shoulder and elbow."*

**KEEP YOUR KIDS IN THE STRETCH. IT'S SIMPLER AND ALLOWS THEM TO FOCUS ON JUST MOVING AND BEING AN ATHLETE WHILE THROWING.**

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