Complete Chiropractic Healthcare

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Baseball Pitching/Throwing Mechanics

Concept #1: Keep Head Movement Steady to the Plate

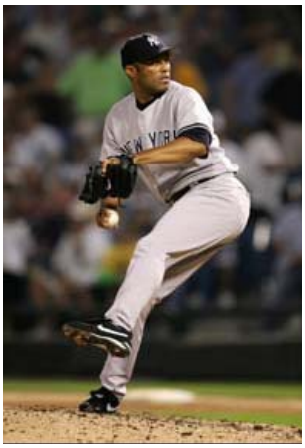
- ✓ Allowing the head to "drop" of "tilt" decreases both accuracy and velocity.[1]

1. Marsh, D. W., L. A. Richard, et al. (2004). "The relationship between balance and pitching error in college baseball pitchers." J Strength Cond Res 18(3): 441-6.

Concept #2: Momentum = Velocity

- ✓ Hip quickness directly affects velocity.[1]

'Be Quick but Don't Hurry'



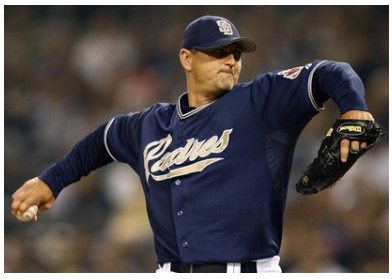
1. Stodden DR. Relationship of Pelvis and Upper Torso Kinematics to Pitched Baseball Velocity. Jou App Biomech 2001, 17, 164-172

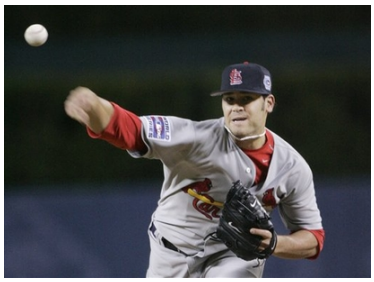
- ✓ DO NOT have a balance point during the leg kick
- ✓ Stride length must be at least 90% of your height
- ✓ Must get to Foot Strike in less than 1 second

'The Quicker You Go,
The Faster You Will Throw'

Concept #3: A Stable Glove = Accuracy & Velocity

- ✓ Leave throwing arm alone → Fix glove arm elbow angle to match throwing arm angle
- ✓ DO NOT 'Tuck the Glove' → increases glove movement → decreases velocity[1]
- ✓ To stabilize glove, control front elbow from Foot Strike (left) to Ball Release (center/right)





1. Murata, A. (2001). "Shoulder joint movement of the non-throwing arm during baseball pitch--comparison between skilled and unskilled pitchers." J Biomech **34**(12): 1643-7.

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Concept #4: Use Your Back to Increase Velocity

- ✓ Hip/Shoulder Rotation (left pic) + Back Extension (right pic) → 80% of velocity
- ✓ Quicker shoulder rotation = higher velocity[1]
- ✓ Bending your back before Ball Release will decrease your velocity and accuracy → Similar to a catapult (right)

'Throw with a Big Chest'

1. Werner SL. Relationships between ball velocity and throwing mechanics in collegiate baseball pitchers. J Shoulder Elbow Surg. 2008;17(6):905-8

Concept #5: Front Leg Balance = Consistency

- ✓ The goal of every throw is the have the same Release Point
- ✓ Front leg MUST control your momentum → 'Hit The Wall'
- ✓ Controlling momentum with your front leg = consistent Release Point