

**FROM BABE TO NOMAR:
IMPROVING ATHLETICISM
IN TODAY'S BASEBALL**

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“Start by doing what’s necessary, then do what’s possible, and suddenly you are doing the impossible.”

-St. Francis of Assisi



What are we talking about?

- Injury Reduction
- Performance Enhancement
- Improving Athleticism
- General



Physical Trends in Baseball

- Game has changed due to athletic evolution
- Bigger
- Stronger
- Leaner
- Faster
- More Athletic
- Also get hurt more!



10 Year Difference: *Then*

- Professional baseball players (Coleman et al., 1992)
- Outfielders:
 - Body fat: 9%
 - 60 yd: 6.9
- Infielders:
 - Body fat: 10%
 - 60 yd: 7.0
- Catchers:
 - Body fat: 10%
 - 60 yd: 7.1
- Pitchers:
 - Body fat: 11%

10 Year Difference: *Now*

- Collegiate Baseball Players (2003-2004)
- Outfielders:
 - Body fat: 7%
 - 60 yd: 6.6
- Infielders:
 - Body fat: 9%
 - 60 yd: 6.8
- Catchers:
 - Body fat: 9%
 - 60 yd: 6.8
- Pitchers:
 - Body fat: 10%

Training in the Past

- “I’m a ball player not an athlete” mentality
- Non-existent
- LSD
- Do what the other guy does
- He looks big, so he must know what he’s talking about



Training in the Present

- Necessary just to keep up
- Year round playing requires year round training
- Strength & Conditioning Profession
- Scientifically based
- Functional and specific
- Holistic
- Fun



Why is training necessary?

- Overview of the demands (Gambetta, Building and Rebuilding)
 - 4.3-4.4 to first base
 - 3.6 or less on a steal of second
 - 7.3 or less first to third
 - 9 minute – average half inning
 - One pitch ever 25-30 seconds
- Pitchers (National League) (Andrews et al.)
 - Starting Pitcher = 6 1/3 innings per game
 - 9 Inning game = 15% of all starts
 - Average number of pitches/inning = 15
 - Average fastball velocity – first – 87mph
 - Velocity decrease 2% for 6 1/3 innings = 1.45mph
- Catchers (Unpublished study by Mick Smith, University Of Miami)
 - Total Throws = 221; standing = 89; from knees = 76
 - Total Sprints distance – 15-30 yds
 - Total Squat Movements = 238
 - Time on Defense = 1 hr 40 min 50 sec.

Why Distance Training is wrong

- “Train fast to be fast, train slow to be slow”
-Mike Boyle
- Baseball is a game of explosiveness and power
- Muscle fibers take on the characteristics of training
- LSD teaches the body to move slower and at slower rates
- LSD has been shown to decrease power and strength

What is Athleticism?

- “An athlete is someone who can contract and relax muscles at right times at right speeds and at right forces.”

-Jay Schroeder (EvoSport)

- Qualities of Athleticism:

Rhythm

Coordination

Balance

Agility

Speed

Reaction

Quickness

Power

Flexibility



Methods in Developing Athleticism

- “Plan your work; Work your plan”
-*John Wooden*
- “Failing to Plan, is planning to fail”
-*Tudor Bompa*
- 3 P’s: **PLAN, PROGRESS, PLASTIC**
- Believe in what you are doing and make sure it fits into your program
- Don’t use things blindly, just because somebody else is doing it
- Put everything into Context!!!!

Rhythm and Coordination

- Movement Coordination is a basis for developing efficiency in movements and perfecting technique.
- 3 Types: **General, Directed, Specific**
- The richer the athlete's store of movement skills, the more skills he or she can easily learn or change
- Rhythm is the ability to match movements to a rhythm the athlete hears, sees, or feels.

Balance

- The ability to maintain a position
- Static – Stationary; before a play happens
- Dynamic – losing and regaining center of gravity

Agility

- The ability to perform well-coordinated, fluid changes of movements of the whole body quickly.
- Bompa: “combination of coordination, power and speed.”

Speed

- Can be expressed as reaction time, time of a single movement, or as time of performing a number of movements.
- Someone can have poor reaction time but high speed of a single movement, or higher speed of single movement than someone else who has high frequency of movements.

Power

- Strength x Speed
- Basis of all sporting movements

Flexibility

- **DYNAMIC**- *Dynamic stretching*, according to *Kurz*, "involves moving parts of your body and gradually increasing reach, speed of movement, or both." Do not confuse dynamic stretching with ballistic stretching!
- **STATIC**- *Static stretching* involves holding a position. That is, you stretch to the farthest point and hold the stretch
- **BALLISTIC**- *Ballistic stretching* uses the momentum of a moving body or a limb in an attempt to force it beyond its normal range of motion

How to Implement

- Warm-up
- 15-20 minutes a day
- Work accumulates over time
- “Little but often” will make a huge difference
- Perform when fresh
- Off-Season application



Summary

- Baseball players are changing the game
- Physical Training plays a huge role
- Do not be left behind
- Make sure all aspects of athleticism are covered
- Make complete athletes –
BALANCE!

