

## Lower Body Mechanics

- I. 2 Main reasons to develop lower body mechanics
  - A. Drive baseball to outfield gaps and over fence
  - B. Allows for barrel of bat to go in a direct line to the ball
- II. 4 Points of lower body mechanics
  - A. Short quick strides
  - B. Transfer of weight
  - C. Tall full pivot of rear foot
  - D. Tall firm legs

### A. Mechanics of a stride

- 1. Stride all pitches at point of release
- 2. Stride length 4 to 5 inches
- 3. Stride slightly toe to instep
- 4. Stride on ball of foot
- 5. 75% of weight transferred back when stride is taken

### Drills and Lead-ups

- 1. Line drill
- 2. Stride with a tap
- 3. Hand to front ear
- 4. Front foot in tire

### B. Transfer of weight - load up process

- 1. 75% of weight on back foot in this process
- 2. Transfer weight through ball with firm front side and flat bat through hitting zone
- 3. Sitting and spinning causes getting under ball with bat lag

### Drills and Lead-ups

- 1. Step back drill
- 2. High lift drill
- 3. Short lift drill
- 4. Step stride swing drill (Happy Gilmore)

C. Tall firm legs on point of contact

1. Break down in either front or back leg causes barrel to pull off ball and get underneath
2. Keep weight underneath shoulders and hips and hit with a firm front side
3. More energy is produced when legs are firm downward causing more bat speed (Ex. Shot-putter or discus thrower)
4. Break down in back leg causes loop and longer swing

Drills and Lead-ups

1. T or cone underneath legs during soft toss

D. Tall full pivot of rear foot

1. Creates bat speed through rotation of hips
2. Transfers weight through ball

Drills and Lead-ups

1. Hand on hip
2. Helmet drill
3. Bat in crook of arms behind back
4. Back foot in tire

E. Incorrect ways to pivot

1.  $\frac{1}{2}$  pivot - reduces bat speed
2. Low pivot - elevates shoulders underneath ball
3. Pivot up on toes rather than ball of feet - reduces strength in swing
4. Over pivot - reduces balance in swing