

Review of Basic Sprinting Mechanics

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Softball is a multidirectional sport; an athlete needs to be able to change direction quickly and move as fast as possible in multiple directions. However, part of running the bases require to be able to accelerate and sprint linearly for 60 feet. Thus, it doesn't hurt at all to learn basic sprinting mechanics in order to maximize acceleration and speed on the base paths or in the outfield when chasing a fly ball. Here is a review of the basics of sprinting.

Acceleration Phase

- Eyes focused on the track to keep low to allow the build up of speed
- Forward lean of the whole body with a straight line through the head, spine and extended rear leg
- Face and neck muscles relaxed (no tension)
- Shoulders held back and relaxed, square in the lane at all times
- Arms move with a smooth forward backward action - not across the body - drive back with elbows - hands move from approx. shoulder height to hips
- Elbows maintained at 90 degrees (angle between upper and lower arm)
- Hands Relaxed - fingers loosely curled - thumb uppermost
- Legs - fully extended rear leg pushing off the track with the toes - drive the leg forward with a high knee action with the knee pointing forward and with the heel striking under the backside (not the back of the backside as the knee is low and pointing down to the ground) - extend lower leg forward of knee (rear leg drive will propel the foot forward of the knee) with toes turned up - bring foot down in a claw action with a ball of foot/toe strike on the track vertically below the knee - pull the ground under you into a full rear leg extension - (elbow drive assisting the whole action)
- On the ball of foot/toes at all times - feet pointing forward straight down the lane
- Elbow drive commences just before rear leg drive
- Fast leg action, good stride length allowing continual acceleration
- Appearance of being smooth and relaxed but driving hard with elbows and legs
- The drive is maintained for approx. 20-30 metres and then the whole body slowly comes into a high tall action
- Appearance of being Tall, Relaxed and Smooth with maximum Drive

Stride Phase

- Smooth transitions from acceleration phase to stride phase
- Eyes focused at the end of the lane - tunnel vision
- Head in line with the spine - held high and square
- Face relaxed - jelly jaw - no tension - mouth relaxed
- Chin down, not out
- Shoulders held down (long neck), back (not hunched), relaxed and square in the lane at all times
- Smooth forward backward action of the arms- not across the body - drive back with elbows - brush vest with elbows - hands move from shoulder height to hips for men and from bust height to hips for the ladies
- Elbows held at 90 degrees at all times (angle between upper arm and lower arm)
- Hands relaxed - fingers loosely curled - thumb uppermost
- Hips tucked under - slight forward rotation of the hip with forward leg drive to help extend the stride
- Legs - fully extended rear leg pushing off the track with the toes - drive the leg forward with a high knee action with the knee pointing forward and with the heel striking under the backside (not the back of the backside as the knee is low and pointing down to the ground) - extend lower leg forward of knee (rear leg drive will propel the foot forward of the knee) with toes turned up - bring foot down in a claw action with a ball of foot/toe strike on the track vertically below the knee - pull the ground under you into a full rear leg extension - (elbow drive assisting the whole action)
- On the ball of foot/toes with the feet pointing forward straight down the lane
- No signs of straining or tension in the face, neck and shoulders.

Lift Phase

- High knee action (prancing)
- Leg action fast and light as if running on hot surface
- Fast arms - more urgency
- Hands slightly higher at the front

General Notes

As you monitor the athlete's technique look for:

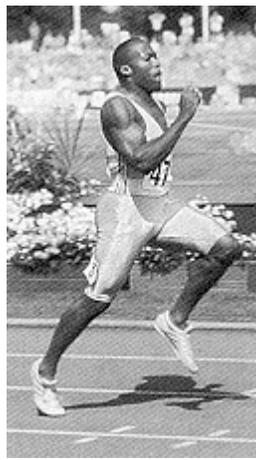
- a *Tall* action
 - This means erect, running on the ball of foot/toes (not heels) with full extension of the back, hips and legs as opposed to 'sitting down' when running
- a *Relaxed* action
 - This means move easily, as opposed to tensing and 'working hard' to move. Let the movements of running flow. Keep the hands relaxed, the shoulders low and the arm swing rhythmically by the sides.

a *Smooth* action

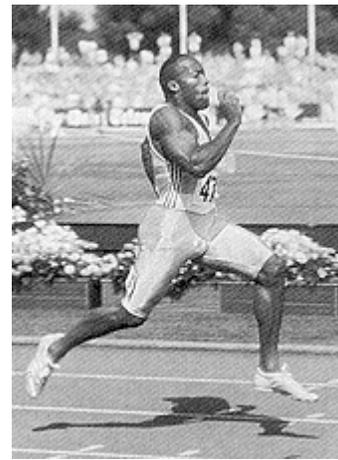
- This means float across the top of the ground. All motion should be forward, not up and down. Leg action should be efficient and rhythmic. The legs should move easily under the body like a wheel rolling smoothly along.
- *Drive*
 - This means push from an extended rear leg, rear elbow drive with a high forward knee drive followed by a strike and claw foot action just behind the body's centre of gravity.



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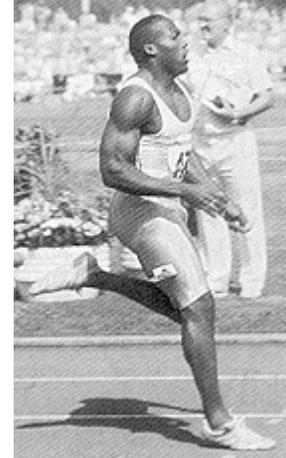
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