## **Pre-Swing Bat Motion Creates Added Bat Speed**

I propose by adding a pre-swing action to your swing the bat will feel lighter allowing you to swing faster, be able to wait longer, and be quicker to the ball with more power. So what makes the bat feel heavy and to swing slower? As we know the majority of the bat's weight is in the barrel region. The further the bat barrel is away from your hands the heavier the bat will naturally feel.

One way to make the bat feel heavy is to place it straight back behind your head in a level position. Don't let the bat rest on the shoulder when assuming your ready position to hit. Again this heavier feeling is due to the majority of weight being toward the end and particularly if the bat is end-loaded. To swing at the ball from this position requires a large overcoming of inertia of the weight of the bat.

Wikipedia's Definition of Inertia is the resistance of any physical object to any change in its state of motion even at rest (this includes changes to its speed, direction and state of rest).

Baseball hitting experts refer to this pre-swing phenomenon as the "unweighting" of the bat that comes prior to the actual swing. Others may see this action as the proverbial "hitch" in the swing or a timing mechanism which sometimes carries a bad connotation.

There are two basic ways to make the bat feel lighter before you swing:

- 1) Moving your bat to an almost vertical position unweights the bat,
- 2) When striding forward into the ball with a weight transfer; this also unweights the bat as it's in motion moving forward toward the pitcher (see snapshots that accompany this article).

Understand that a batter can start in the flat behind the head bat position as long as when during the pre-swing the bat is tipped up toward a vertical position. This action will make the bat feel lighter during the batter's windup motion. The pre-swing movement makes the bat feel lighter due to the center of mass of the bat being brought closer to your body when it's in the vertical position.

Here's a real life example to help understand this phenomenon of how the bat feels heavier when the barrel is held horizontally: try holding and extending a straw broom out in front of your body while gripping it from the end of the handle. Then ask a friend to place a small brick on the broom's straw area while you're still holding the broom; you'll get a real sense of the extra weightiness than just holding the brick in your hand.

When taking your swing try and create a rhythm by waggling the bat around and moving it to nearly a vertical position. This action is performed as you wind up and deliver the bat to the incoming ball. Also, don't step away from your hands when you stride but let your hands travel with your body toward the pitcher. This technique is also putting the bat in motion overcoming stationary inertia.

Remember, a stationary holding position of the bat without the pre-swing activity will make it much more difficult to get the bat up to your maximum bat speed; as you're battling the bat's inertia properties. Performing this pre-swing action and technique will allow you to actually swing faster as you free up the dead weight of the bat. Increasing bat speed will add exit speed to your hits making for more base hits and long bombs.

So, if you want to swing faster, you must free up the barrel by waggling it like in golf before address and bringing it to near vertical during the pre-swing. The purpose here is to get your bat moving before you begin your body rotation which begins after the front foot has landed. We don't want to begin the swing to the ball from a complete bat standstill which will result in a slower swing to the ball.

Happy hitting,

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