

## How to get more Velocity:

### 1. Use leading Leg as Leverage

- Use your front leg as a leveraging tool to propel yourself forward toward home plate - as long as you are leading with your front hip.
- Keep your head over your belly button (your center of gravity) while you propel yourself forward (leading with the hip). Do not drag your head or keep your head towards your back leg as this will slow your momentum toward home plate.

I see this frequently when pitchers try to throw hard, they lay their head back trying to put everything into it, when all they are doing is creating less leverage and momentum going forward - they are dropping an anchor so to speak.

### 2. Push off the Ball of Back Foot

- Important to push off the ball of back foot to maintain balance and posture. It is not enough to just say, "push off the rubber as hard as you can" - this will lead to balance, momentum (head can lag behind) and alignment problems.
- One way to help emphasize this is to start with the ball of the foot in contact with the rubber rather than the entire side of your foot.

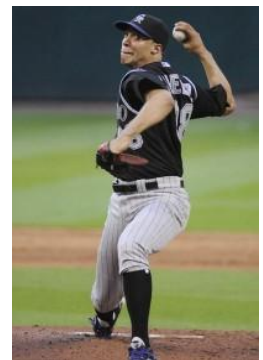
To do this, take your normal Starting Position with the side of your foot against the rubber (we are not standing on top of the rubber) and simply move your heel away from the rubber a small distance (really only needs to be 1-2 inches).

- We put our weight on the ball of the foot in the beginning to ensure Proper Posture to foot strike - keep it there and push from the ball of your foot.
- Push straight out or straight toward home plate with ball of foot. Do not jump or lift toward home plate - the back foot stays on the ground until release of the baseball.

Think push off for 50 % and throw hip and leg forward for 50% to achieve velocity.

### 3. Delayed Shoulder Rotation

- As a pitcher propels himself forward, you want to make sure that the shoulders stay closed to create torque which allows the pitcher to use entire body to throw a baseball and not just the arm.
- As a pitcher lands at foot strike, the front foot will open towards home plate which allows the hips to open. While the foot and hips open, the shoulders remain in their closed position.



Often you will see a pitcher at foot strike already opening the shoulder (often caused by the front arm pulling open or simply aiming the ball) instead of staying closed in an equal and opposite throwing position. This early opening of the shoulders causes the momentum toward home plate to slow and the torque created to be released too early.

- A pitcher should not flex his arm when throwing, it should be a natural relaxed motion as you use your legs (hip leading) and your hips (with delayed shoulder rotation) to propel the baseball.

### **There is no big secret, other than genetics, velocity can be achieved through hard/smart work:**

- ❖ First, improve throwing mechanics. Throwing properly by itself can improve velocity.
- ❖ Train the body core in particular for strength and power.
- ❖ Properly increase flexibility. Generally speaking, the further a joint can move through its range of motion, the less injury prone it will be. Increasing one's Range of Motion is a good thing.