In the age of analytics, sabermetrics and computer-based instructional programs that are often just video games, I present to you a new way to analyze and improve players ability to estimate time to collision; aka, hitting.

Yes we all need traditional BFF's (best friends forever) in our lives, but improving and increasing our Ball Flight Frequency is a must for today's little league and big league hitters in their never-ending quest to dominate the strike zone.

We know live pitching is one of the best ways to prepare hitters and provide them with true ball flight processing. However, even live pitching to a hitter that has inefficient visual search strategies will hit a wall at some point (hence the minor leagues and why most ML hitters generally don't make major jumps year to year in K/BB and OBP).

When live pitching is not available from the true distance (I know coaches are not built to throw true distance everyday), try these easy to execute visual challenges on a daily basis:

When playing catch, spend more time at the actual pitching distance you play at and put your "hitters" eyes on to read spin and predict ball flight. Your glove becomes your barrel as you quickly move the glove to your catch/contact point. Take it to another level and catch and stick (hold the glove for a second) at the end of the catch. As early as possible, say to yourself, your prediction on whether the oncoming ball would have been a strike if you had a bat in your hand. Take it to another level and position yourself sideways (in a hitting stance) and catch/hit the oncoming ball. Alternate between top/bottom/left/right quad tracking; the four personal focus points all great hitters choose based on the pitchers tendencies and their zone preference for that particular at-bat.
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Every time you throw a ball, "devour" the spin and trajectory as it moves toward your partner or during long toss.

The more reads and flight focus you amass during practice, the larger your hitters-eye memory bank becomes.

The eyes and brain want more information to store for retrieval later on; you never know when in the middle of a big at bat your eyes "remember" and help in predicting time to collision more accurately.

Short-toss/tee-work. All hitters use it to work on their swing. Problem is there is no ball flight to simulate the speed and location variation. Good hitters have great imaginations. Every swing taken during center/short toss or tee time must be preceded by a simulated ball flight action. It's a simple but overlooked piece of training. It's no different than pilots who master their trade in a flight simulator, hitters can build their "visual Rolodex" with a slight change in their hitting drills.

Work short and look long. Before each swing, gaze out to the distance (markers or cones are helpful in giving the hitter's eyes the true distance of game ball flight in the tunnels) and create in your mind's eye the speed and trajectory of the pitch you will "see" before taking a swing from the tee or from center toss. In center/front toss, keep your focus "open" and when you see the coaches hand prepare to release the ball, take your gaze from the true distance of ball flight to the oncoming ball. This challenge gets the eyes stretched and moving over the true distance of "real" pitching.

Ever wonder why offensive production in the first few innings is less efficient than later in the game? There are several factors for this but one is that it takes the hitters' eyes one at-bat minimally to re-calibrate the true distance of ball flight after spending pre-game rehearsing ball flight from short range.

Machine hitting. Assuming you can vary the spin and speed, machine BFF'S are helpful. The key is to make sure the hitters are not "visually stuck" on the wheel or ball chute too early in this fine focus fiction that still exists in the teaching world.

Hitters still have to be reminded to stay "open" and free prior to ball release, a must for live hitting as they scan and sweep the pitchers body for pre-pitch "cookies" and don't get stuck in the "tunnel" pitching people describe.

Avoid cardio hitting. You need to use the 10-15 seconds between ball feeds to practice doing "nothing" to reset.