



By now, we all know the importance of breathing. In not-so medical terms, when we stop breathing, we are in major trouble—a sure sign that the ability to breathe is our greatest power source.

In every day living and on athletic fields, taking a deep breath to relax the mind and body is a no-brainer. The first thing we are taught as youngsters is to take a deep breath when either stressed or anxious.

In meditation and in martial arts, the focus on the breath as a centering piece is well-documented. As coaches and trainers, we suggest to players—as part of their pre-pitch or pre-hit routine—to take a deep breath to clear the mind and relax the body. And all of this advice is useful. But now science and research is telling us that certain parts of breathing may have a greater impact on performance.

A recent study out of Northwestern discovered, for the first time, that the rhythm of breathing creates electrical activity in the human brain that enhances emotional judgments and memory recall. To read the full study, check out this link.

In laymen's terms, these effects on behavior depend critically on four breathing variables—whether you inhale or exhale and whether you breathe through the nose or through the mouth.

How can a hitter take advantage of this intel? We can all agree that most hitting models are premised on a "loading, trigger, coil" action to initiate the swing. Consistent with these findings, the slow inhale with the nose as an internal starting point may help a hitter's rhythm and, as the study suggests, improve memory recall. Remember, hitting at the higher levels is all about visual recall and being able to retrieve past ball flight patterns stored in the hitter's visual "rolodex." Anytime a hitter can execute a slow, rhythmic and consistent start to their swing, that is a good thing.

The use of breathing through your nose is perhaps a less evasive suggestion a coach can make to help hitters stay back, relax and let the ball travel during an at-bat, instead of the usual hitting jargon that can oftentimes fall on deaf ears or can't be repeated during high-stress at-bats.

With these findings, hitting coaches may have found a new teaching cue to improve the timing puzzle that makes hitting so tough. The slower and longer the inhale, the more time the hitter has to let the ball travel deeper. The exhale portion of the breath naturally happens when the eyes tell the body it's time to swing. The mouth exhale—watch someone lift weights or a pitcher grunt in an effort to reach higher velocities—is the adrenaline time of the swing.

It's a simple concept, really. Inhale to get ready and see, and then exhale when the body needs to deliver the barrel toward the ball. As one hitting coach said in simple terms, "If you are sitting on an offspeed pitch, inhale longer."

A recent discussion with a major league pitching coach on this exact topic brought out an interesting exchange.

"First time I asked one of my pitchers to nose inhale and mouth exhale on release, he looked at me like I was crazy," the pitching coach said. "The first time he tried it in a game, he said his delivery felt smoother and it gave him something else to think about other than throwing strikes. He also said his ability to visualize his pitch flight was improved. Coincidence or not, he retired the side in six pitches—a rarity for him."

We all need to breathe in order to live and to play. We can use the power of breathing, and its effect on "recall and rhythm," to our advantage by knowing that we always have four choices with each breath we take. We can practice these breathing-to-brain-connection techniques every day as we go about our daily life. Don't underestimate the importance of rhythm in breathing; it is the gateway to seeing the ball clearer and playing in open focus.

