

## **CORE STRENGTH WITH PITCHING**

**Cheryl Barnes** 

Pitching with proper mechanics is necessary for prevention of injury and performance enhancement. A biomechanically sound pitcher puts less stress through his joints and soft tissues, and does not require as much energy or muscular exertion to throw controlled pitches with velocity. Improper mechanics lead to increased stress on the shoulder and an increased risk for injuries. Athletes need to have an adequate amount of strength and flexibility to attain optimal mechanics.

Most exercises recommended to pitchers focus solely on the shoulder. While adequate shoulder strength and flexibility are important components to a healthy throwing arm, pitchers should not ignore core and leg exercises. Maintaining a strong core is essential to decreasing the amount of stress put through the shoulder. Inefficient core strength makes it very difficult to attain proper mechanics at the shoulder joint. Core stability and leg strength also allow pitchers to throw with more control and velocity, while helping to reduce the incidence of injury.

You do not have to perform hundreds of sit-ups to improve the strength and stability of your core; instead, focus on engaging your abdominals with all of your exercises. Think about where your tummy is when you are exercising your arms or your legs. Do you notice that your lower back is really arched or that your hips are not underneath your trunk? If so, this means that you are probably not engaging your core and maintaining a neutral spine. Your core should be utilized with all activity/exercise to allow for a stable base of support for the arms and legs to move from.

A great exercise that you can do at home that helps to build core stability is the "plank." Lying face down on the floor, prop up on your toes and forearms so your body is suspended in the air (like a board/plank). You should form a straight line from your heels to the back of your head. There should not be a large arch in your low back or a rounded hump in the mid back. Athletes should be able to hold the plank position for at least 30 seconds, for 3 sets.

Cheryl is a native of Union City, where she played both volleyball and softball at James Logan High School. She went on to play division I softball at the University of Rhode Island, and graduated with her bachelor's degree in exercise science in 2005. She received her doctorate in physical therapy at Samuel Merritt University in 2010 and is currently practicing outpatient orthopedics/sports medicine physical therapy at ValleyCare Health System's LifeStyleRx facility in Livermore.