In addition to sound mechanics, a blazing fastball, and a live arm, a pitcher must know how to pitch—what to throw, when to throw it, and where to locate it. He must have that unique blend of confidence and determination to set the tone of the game, own the mound, and shut down the opponent. In The Complete Guide to Pitching (Human Kinetics, 2013), new Chicago Cubs minor league pitching coordinator Derek Johnson takes you inside the art and science of pitching. Packed with high-quality photo sequences, the book includes a 60-minute DVD, making it the most comprehensive pitching resource available.

In this exclusive excerpt from Chapter Five of The Complete Guide to Pitching, “Developing an Arsenal,” Johnson looks at the most important pitch in baseball—the fastball—and the version of the fastball that young pitchers should start with—the four-seamer.

Fastball

For many reasons, a well-located fastball is the most important pitch in baseball. First, the fastball is the pitch thrown most often, so it must be a pitch that the pitcher can truly command. Many big-league pitchers and coaches subscribe to the ratio of 65 percent fastballs, 20 percent of the second-best pitch, and 15 percent of the third-best pitch. Simple mathematics would tell us that if a pitcher threw 100 pitches in a game and subscribed to this ratio, he would perhaps mix 65 fastballs, 20 curveballs, and 15 changeups to arrive at his total of 100. I am not a brain surgeon, but if well over half of my pitches were to be fastballs, I would want to make sure that I truly owned that pitch!

The fastball and the delivery of the fastball also factor into the pitcher’s ability to throw good off-speed pitches. As mentioned earlier, the intent to throw the ball hard and with purpose will often fix mechanical deficiencies. This is also true for the way off-speed pitches are thrown. Many times, pitchers throw off-speed pitches with significantly less velocity and less efficiency than they could if they placed more intent on throwing the ball harder or with better tempo. As a result, pitchers end up having two or three different deliveries based on what they are throwing—one delivery for the fastball and a different delivery for the changeup and breaking ball. This creates inefficiency in the delivery and inconsistency in pitch location.

Finally, the fastball is the most versatile pitch in a pitcher’s arsenal. It can be thrown at many different speeds and to various locations. The pitcher usually doesn’t have the same luxury with his off-speed pitches because the spin he imparts on the ball will generally make it move in a certain direction. Changing speeds on off-speed pitches is also difficult because it requires a great deal of “feel” by the pitcher. As the chapter progresses, we’ll discuss how to add and subtract velocity for the fastball, as well as when speed changes may be used for particular pitches.

Four-Seam Fastball

The four-seam fastball is probably the most common fastball used today, and because many young pitchers are also position players, it makes sense to start with this pitch. The four-seam is aptly named because the four seams of the ball spin in the same direction that the pitcher throws the ball. The “horseshoe” of the ball can be placed either on the outside of the middle finger (see figure 5.2a) or on the inside of the first finger (see figure 5.2b), whatever is most comfortable for the pitcher.

The four-seam grip with the horseshoe on the outside of the middle finger will sometimes create a cutting action on the ball, a consideration for the pitcher looking for movement on a pitch. Again, comfort will dictate which four-seam grip will be used.

Figure 5.2 Four-seam fastball grip: (a) horseshoe outside the middle finger and (b) horseshoe inside the first finger.

Finger and thumb placement as well as spacing of the fingers on the ball are possibly the most important considerations when throwing a fastball. Anyone who’s been around baseball long enough has heard the phrase “staying behind the ball.” Staying behind the ball refers to applying force to the middle of the ball by keeping the fingers behind it during the throw. An easy way to do this is to hold the ball so that the middle finger and thumb bisect the middle of the ball (see figure 5.3). If the thumb and middle finger are in the middle of the ball at release, proper force can be applied, and the pitcher will stay behind the ball. This would also mean that the first finger (pointer finger) needs to rest on the ball close to the middle finger.
How to Get Started with the Four-Seam Fastball

I generally tell our pitchers that spacing between the first and middle finger should be approximately a pinky-width distance apart. The fingertips of the first two fingers should rest directly on the seams so that when the pitcher is releasing the ball, the fingertips rip or pull down and across the laces, producing more spin. Producing greater spin will often create more velocity and action on the pitch. Remember, speed and movement are a pitcher’s friend.

Figure 5.3

Figure 5.3 Proper finger and thumb spacing for the four-seam fastball grip.

Preventing Overuse Injuries in Young Athletes

by Jeff Gormley, CSCS

Young baseball players today are more involved year-round with baseball than ever before. The days of the three-sport athlete are more and more rare. Today parents have their young baseball player playing Little League, Travel ball, Mickey Mantle, etc. Sometimes these children are playing in more than five games per week. This is on top of school, homework, and any other activities these children may be involved in. These young athletes are playing a major leaguer’s schedule while not getting the rest, recovery and TLC that professional ball players get. This type of load on young athletes can eventually lead to overuse injuries. These can be anything from muscle strains to ligament tears to avulsion fractures. Each will keep the athlete out of action anywhere from a week or two up to almost a year if surgery is required in some injuries.

Parents and coaches of young athletes need to remember that just because the athlete says he is fine, knowing that his body is not as developed and is still developing is what should be a factor instead of the athlete’s word. Some leagues are adding more limitations to how many pitches pitchers can throw in so many days. The problem is that if the athlete is playing on three different teams, it is not always easy to track how many pitches they have thrown.

This is where the parent and coach need to step in and do what is best for the player and let him rest. Even if that decision in the short term may seem like it hurts the team, in the long run it will help that athlete stay healthy and be there for the team in the long run. These young athletes are not making millions of dollars so hopefully preventing an injury should be more important than having them pitch three games in one week.

In this instance, it is beneficial to encourage the athlete to learn another position. This will allow the athlete to stay in the game along with working other muscles that may not be involved while pitching. Keeping the young athletes learning new positions will work the athletes’ minds and bodies more because they would be required to learn new aspects of the game (i.e., outfield positions and infield positions). Every position in the game has a whole new set of learning techniques that go with it. This will help keep their arms and bodies fresh while keeping their minds sharp.

When young athletes are focused, they are determined to be their best. It is our job, as the adult, to help them stay healthy and teach them that sometimes a little rest and time away from the sport does much more good to them than playing six days per week. So remember the key word when a developing athlete has school, homework, practice, games and time with friends—the best thing for them may be REST!

Healthy Playing!

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About the Author • Derek Johnson, named college baseball’s National Pitching Coach of the Year in 2004 and National Assistant Coach of the Year in 2010, is widely considered one of the top pitching coaches in the country. In October 2012, he accepted a position with the Chicago Cubs as their minor league pitching coordinator. Before his appointment with the Cubs he spent 11 years as pitching coach at Vanderbilt University. While at Vanderbilt, four of his last five staffs led the Southeastern Conference in earned run average. More than 25 of Johnson’s past pitchers have been drafted, including 2012 American League Cy Young Award winner David Price, the number-one overall pick in the 2007 draft. The Complete Guide to Pitching is now available in bookstores everywhere, as well as online at www.HumanKinetics.com. It is also available as an enhanced e-book edition with video, compatible with the iPad, iPhone, iPod Touch, NOOK Color, and NOOK Tablet. Look for more from Derek Johnson in Baseball The Magazine throughout 2013.