

## THE SOFTBALL FASTPITCH WINDMILL MOTION

The following instructions describe how a typical pitcher executes the windmill style in fastpitch softball. They are not meant to be the last word about pitching fundamentals. Many very fine pitchers execute some of the mechanics differently than described here. However, this guide is useful in getting a young pitcher started and in helping a parent or coach teach basic techniques. All descriptions that follow are for right-handed pitchers and should be adjusted, as appropriate, for left-handers.

The pitcher initially stands behind the pitching rubber with both hands apart -- the ball may be in either the bare hand or the glove hand -- she then may step on the rubber -- before initiating the pitching motion, both feet must be in contact with the pitching rubber. The right foot should be placed over the front edge of the rubber -- the left foot should touch the back edge of the rubber -- feet should be comfortably apart.

The ball should be gripped with the padded parts of the fingertips and thumb resting on seams -- the ball should not rest in the palm. There should be space between the ball and the hand in the area between the thumb and index finger. The thumb should be opposite the fingers to the extent possible. Before initiating the pitching motion, the pitching hand and glove hand must touch for at least one second.

After hands touch (usually at or below the waist near the right hip) and after a slight rocking back motion, the initial forward motion should be to extend the arms towards the catcher -- the back foot also begins its stride forward as the arms are extended. The pitching arm should remain extended (but not locked) throughout the pitching motion -- the elbow should be relaxed (but not bent).

When extending the pitching arm forward, the hand should be on top of the ball or on the outside of the ball, but not under the ball. As the arm travels in a circle upward, back, down and forward towards the target, the wrist should rotate to present the ball towards third base and then second base (at the top rear of the arc).

The glove hand is pulled back and down past the left hip as the pitching arm is extended backwards and downward. The cocking of the wrist should occur naturally on the downward swing of the pitching motion. The arm circle must remain true to the "power line" between the pitcher and catcher -- any initial deviation from the power line must be towards the glove hand side, not the throwing hand side. Increase arm speed throughout the pitching motion with the highest speed occurring as the hand approaches the release point -- there should be no hesitation in the pitching motion once it begins.

At the beginning of the pitching motion, hips are square to the catcher. Hips open (towards third base) as the arms and stride leg are extended forward and until the ball is released -- full rotation is generally around 45 degrees at release point. Hips return to a closed or square position (facing the catcher) after release of the ball. Shoulders and hips must rotate together back to the square position.

Get as much leg drive forward as possible while keeping the upper body balanced. Stride length should be aggressive, yet comfortable -- the pivot (or rear) foot should stay in contact with the ground as it is being pulled forward the momentum generated by the leg stride -- the pivot foot should scribe a banana shaped figure in the ground from the pitching rubber to a point behind the stride foot --the closing of the hips creates the banana shape figure by pulling the pivot foot towards the third base line at the end of the pitching motion. The stride foot should be planted at a point on the power line between the pivot foot and the catcher and the toe should be aimed at a point halfway between third base and the catcher -- plant the stride foot so that the toe hits the ground first, then the heel.

Proper wrist snap is the key to control and speed. The natural cocking of the wrist on the downward swing of the arm should be followed by a strong snap of the wrist at the bottom of the arm circle just off the right hip -- the inside of the right forearm may actually brush the side of the hip as the wrist snap occurs. The snap of the wrist should be firm, but relaxed.

At the point of release of the ball, the body should be in an upright posture leaning slightly back, and body weight should be 70% over the rear leg. The fingers should close hard and the hand should make a fist. After release of the ball, forward momentum will carry the pitcher's weight forward while the toe of the pivot foot is being dragged towards the stride foot -- the pitcher's weight should remain balanced between the feet -- a toe first, then heel, planting of the stride foot helps achieve the proper balance.

After releasing the ball, the pitching arm should follow through in a natural motion -- the hand generally ends up in a position near the right shoulder.

As pitchers begin throwing a variety of pitches (e.g., drop, curve, rise ball), the different follow-through positions will be used to create the spin necessary to achieve the desired pitch.