Pitching Tips

LEGAL PITCHING:

- The wrist must be inside the elbow and below the waist
- The pitching position on the rubber: hands at the pause position (this varies), shoulders
- should be in line with first and third base, two feet on the rubber, one step rule, (discuss leaping and crow hopping, as there are variances between the men's and women's rules).
- The pitching sequence must be as follows:
    - pitcher receives ball in 8 foot circle, but off the rubber,
    - now has 20 seconds to deliver the next pitch,
    - pitcher now steps on rubber with hands apart,
    - pitcher takes signal with hands apart (i.e. "looks in"),
    - takes the pitching position on the rubber and pauses for at least one second; this could be up to 10 seconds). No movement or motion of the body is allowed during the pause.

PITCHING STYLES: WINDMILL AND SLING SHOT (WHIP).

The wind-ups are different:

- the windmill style has the arm completing a full circle which goes fully over the head; the ball must also be delivered on the first or second forward passing motion of the pitching hand past the hip,
- the sling shot (whip) style does not have the overhead component in the wind-up; a lot of emphasis is on the body rotation. (The other basic mechanics are the same in both styles)
- For the purposes of instruction, the windmill style will be demonstrated in the clinic.

BASIC ELEMENTS OF PITCHING:

- a comfortable stance on the mound (approximately shoulder width apart, but this varies according to body differences.
- stride length and direction (controls hip rotation, power. and line of force).
- the arm circle brushes past the ear and hip, while keeping the arm fairly straight, but not stretched tightly; the larger the circle gives increased power and reduces injury to the elbow.
- the stride line and the pitching lines are slightly different, but form a bit of a "vee," where they meet at the target. (Note: The stride line is a line from the instep of the pivot foot to the target, while the windmill line (or pitching line) is the line from the release point to the target.

- the arm-hip coordination (aids in the cue to releasing the ball, snapping the wrist)

  NOTE – THE SEQUENCE NECESSARY FOR PROPER RELEASE IN THE THRUST AREA (just prior to wrist snap)

  (1) the stride foot starts to take the weight transfer from the pivot foot,
  (2) the pivot foot starts dragging,
  (3) then the wrist snaps at release point to deliver the ball.

- the basic fastball grips (2 or 4 seam): the number of fingers may vary according to your hand and finger size. The basic rule is the fewer fingers you use across the seams, means less friction on ball = more speed. More fingers across the seams causes more friction = less speed.
- show the rotating ball on a stick; promoting wrist alignment at release point, proper finger alignment across seams on ball, and thumb pointing at target. Make sure the palm of the hand is facing forward, directly at the target. When this is mastered, you will get good top spin on the fastball and more power with a better wrist snap. Make sure fingertip pressure is used with space between the palm of the hand and the ball.

THREE PHASES OF PITCHING

THE WIND-UP PHASE

- The pitcher must present the ball (pause position) during the wind-up phase. I prefer doing this in the early stage of the wind-up at the thigh level, just above the knee of the pivot foot leg. The advantage is you get the feeling of full momentum while going back and then forward in a continuous motion; you will have the feeling of how the body should be driving forward when you start into the power phase. The weight is on the ball of the pivot foot, slightly bent at the waist so the centre of balance is over the pivot foot.
- Some may prefer to present the ball up higher in the body (chest area), but remember once you have presented the ball (pause), your motion must be continuous or it will be an illegal pitch; you can only pause once.
- **It is important that the motion must be backward before going forward with no pause after going all the way back;** otherwise there will be no build up of momentum in the pitching style. Examples in other sports show this such as: basketball shooting, hockey shots, volleyball serves, golf swings, tennis strokes, etc. There is always a backward motion prior to going forward or you will lose momentum, balance, and power. **This is why the "pause," or presenting the ball, should not occur directly over the head,** or you lose these benefits.
- After the pause position has been realized (with the weight on the ball of the pivot foot), the hands come up together as the body leans backward and straightens up, so that the weight is taken on the heel of the stride foot (the back foot touching the pitching rubber). When the weight goes back far enough and you start to feel like you might be off balance or uncomfortable, keep the stride (back) foot flat on ground with weight on the heel so

your body will not be able to go too far back. **NOTE:** there is no pause at this point; the body immediately starts forward after going all the way back as noted above.

- When starting this forward motion, the hands are still together, and the body may have a slight forward lean to get that feeling of the power surge as the hands come back down in front of the body. The hands will come up together as the windmill circle begins, and will separate at about chest level.
- As the body begins to open up toward third base (for right handers**), the pivot foot which was originally aligned at a 45 degree angle towards third base, begins pivoting closer to 90 degrees (but not past this)** which allows the hips and shoulders to turn and be in line with home plate and second base when the ball is at the top of the windmill circle. Note that the non-pitching arm is pointing directly at the target at this point. **Also, as the pitching arm nears this 12:00 o'clock position, the front shoulder (of the glove hand) begins leaning forward towards the target creating momentum for the body just ahead of the power phase; otherwise full power will not be achieved.**
    - **NOTE**: This takes the stress off the pitching shoulder and lower back, allowing for a better weight shift in the power phase, and also allows for less stress on the stride leg knee when it is re-planted properly. As the pivot foot drags up in the power phase, the pivot foot knee should start pointing toward home plate to enable a better power shift to the stride foot just before releasing the ball.
- The head starts coming to the right of centre of the body's balance here, allowing you to create the windmill circle completely outside of the body. This takes stress off the shoulder and lower back. The head position turns to where it is basically over the pitching line (created by the pitcher's release point and the target).
    - **Note that during the wind-up phase, the stride foot is completely off the ground when the weight has been shifted back to the pivot foot while the hips and shoulders are opening.**
    - SHOW THE GLOVE – When the pitching hand has reached the top of the circle, the glove hand should be pointing directly at the target. This helps stop the front shoulder and arm from closing back again too early in the delivery.
- **It should be noted here that a slight variation of the original windmill mechanics in the wind-up phase has become somewhat popular lately, probably spurred on by the likes of the very successful pitchers Jennie Finch and Danielle Lawrie, in the U.S.** This variation is nothing new as it has been around as far back as the 1970's that I know of. The only difference occurs where the hands separate just before the arm circle begins its upward motion. Instead of the throwing hand going immediately up in front of the body to start the windmill circle, it proceeds further backwards past the hip before starting its forward motion to start the circle rotation process. It then proceeds forward past the hip (towards the plate) and then completes a full rotation of the windmill circle. Some feel it gives a little more wind-up (pump) or momentum in the motion. This is why the pitching rule has stated for many decades that the ball must be released on the first or second forward motion past the hip. None of the other mechanics or elements of pitching change. **In both variations of the windmill style, the body does not start to open up toward third base until the pitching hand (once separated from the glove hand) starts coming up in front of the body to start the circle.**

THE POWER PHASE (Ball travels from top of the circle until it is released)

- At the top of the power phase, the body is erect, the arm and body are as long as possible without being too stretched; this promotes power. The arm should be relaxed though for coordination. The arm brushes by the ear at top of the circle.
- As hand starts down the back side, the pivot foot digs in hard, in order to thrust the body towards the target. This is called "EXPLODING OFF THE MOUND,: and is where the power originates, and is transferred throughout the body.
    - NOTE: Keep the glove hand pointing at the target until the pitching hand advances to the same parallel level opposite the glove hand. Then both the glove and ball hands travel down to their respective sides. Never "throw" the glove hand out to the left side (for right handed pitchers); this will distort the hip rotation in the follow through as the body closes too quickly and usually before the proper release of the pitch. It will throw off your control and power.
- The stride is completed during the power phase, and lands down slightly ahead of the release. The stride foot lands with the toes pointing a little to the right of centre of the target **(i.e. around the 1:00 o'clock position),** NOT AT RIGHT ANGLES to the stride line. If you plant the stride foot at right angles, you put undue stress on the knee of the stride leg, and also retard a good weight shift from the pivot foot to the stride foot. Planting the stride foot properly gives better balance and proper follow through for the hips. The arm speeds up to maximum acceleration during the power phase.
- THE STRIDE is a critical component in creating power. The length of the stride should be at least longer than a normal step, and should be as long as comfortably possible when stretching it out. **REMEMBER**, in women's fastball, the crow hop is not allowed; (this means replanting the pivot foot, and essentially means you are taking two steps instead of one, making you much closer to the batter when releasing the ball; **THIS IS ILLEGAL Fastball hitting is tough enough without allowing crow-hopping. It is hurting the game, and umpires should be more aware of it. We are losing huge numbers to slow pitch because hitters can not deal with those who pitch illegally.**
    - NOTE: It is very important that during the power phase, the hips and shoulders do not create the thrust or power required in the motion, but follow the motion in the power phase, allowing the hips to close naturally with the pivot foot dragging up. This takes the stress off the lower back and shoulders. Power is created by the explosion off the mound, arm speed, and the wrist snap, and should be in a linear line forward, and is enhanced by dragging the pivot foot up quickly to the stride leg creating more power; (the knee bends in the pivot foot leg and points to home plate as it drags up toward the stride leg; the faster the pivot foot drags up to the stride leg, more power and thrust is created). It is also important that as the pivot foot drags up, it must remain in contact with the ground in front of the pitching rubber; if there is a hole in front of the rubber and the pivot foot cannot contact the ground, it is still considered a legal pitch as long as the pivot foot crosses the plain (that means

the pivot foot stays on the same level as the surrounding ground; as if there was no hole there). **Previous national team star pitcher, recent National Team and Olympic Coach**, **and Associate Coach at Nebraska University, Lori Sippel**, also is a proponent of this "linear line approach" to pitching.

- Snap the wrist forward when the forearm brushes by the hip. **This is your "CUE" to release the ball.** If the hand gets away from the side, it puts stress on the shoulder, and you can end up pushing the ball; it may well be an illegal pitch if the wrist ends up outside the elbow.

THE PROPER RELEASE SEQUENCE

- As the weight starts to come down on the stride foot, the weight shift is completed by next,
- Dragging the pivot foot forward (note – dragging the pivot foot up quickly, clearly shows all the weight is on the stride foot at the time of release. Slow motion video shows pitchers dragging the pivot foot before releasing the ball.
- Snap the wrist to release the ball (at the "cue").
    - NOTE: THESE THREE ELEMENTS HAPPEN VERY CLOSE TOGETHER AND MUST BE PRACTICED FOR PROPER EXECUTION OF SEQUENCE. **IT IS A BANG*BANG*BANG MOTION; PLANT STRIDE FOOT, DRAG PIVOT FOOT, SNAP WRIST. IT HAS TO HAPPEN QUICKLY!**
- **Importantly, most new pitchers have difficulty getting the feel of/and learning the snap of the wrist at the release point.** Some instructors will tell you to try one knee pitching, while you practice snapping the ball under your thigh into the glove on the other side of the thigh. I much prefer a spin off of this method in order to save your from being on the ground. You can put your "pivot foot leg" up on a chair or bench so that your thigh is about parallel to the ground and right in front of you. For right-handed pitchers this would be the right leg. Then stretch the "stride leg" out to your left as if pointing at the target. Let your right arm hang straight and loose and against the outside of your right thigh; the pitching hand should now be just below the thigh. Position your glove hand close to the inside of the right thigh, creating a lane between the pitching hand and the glove (under the right leg). Throw the ball into the glove by only snapping the wrist forward, while the rest of the right arm remains in contact with the upper right leg. Many repetitions may be required until you get the right feel for it. **This wrist snap must be mastered or you will not succeed as a pitcher!**
- Another trick you can do is have somebody hold your pitching wrist by a finger on the inside part of your wrist, at the release point. Practice keeping your arm still, and only flick the wrist forward, so that only the hand proceeds past the release point. Do this many times as well.

THE FOLLOW THROUGH PHASE

- The hand continues on the windmill line up in front of the body to about shoulder height when throwing the fastball. I find the two seam fastball has slightly more speed (less friction on the ball), and will not drop as much. The four seam fastball has more friction against the ball, leading to slightly lower velocity, but will drop more because of more spin on the ball. It is normal for the elbow to bend a bit after the release to allow the hand to follow through up in front of the body. The arm is straight until the release point has been achieved.
- The pivot foot continues to drag until it is uncomfortable to go further. The pivot foot should come up close to the stride foot, then steps to the right (right handers) to come into a good fielding position. Do not let the pivot foot go past the stride foot, or the hip rotation will be thrown off. It is also important that the pivot foot does not drag up too far to the left or right of the stride foot, or again power and control will be jeopardized.
- **NOTE**: **Upon completion of the follow through, it is essential that the head and shoulders should end up over the stride foot. This will ensure that maximum power is being created, and coaches should look for it in practice. It will also show how far forward the body has traveled in the pitching sequence.**

DEVELOPING THE WRIST SNAP & RELEASE TECHNIQUE (Arm/Hip Coordination)

Quickly review the sequence of weight shift to the stride foot as the pivot foot drags up, and the wrist snap at time of releasing ball.

<u>From the Stride Position</u>

- when practicing from this position, the pivot foot is pointing close to a 90 degree angle to the target, but not past that, (hips and shoulders are aligned with 2nd base and home plate, and gloved hand is pointing at the target (**show the glove**) which is right of centre of the body on the "pitching line"). **Head position is also to the right of centre and over the pitching line.**
- the arm pendulums from back shoulder to front shoulder height
- as the arm starts forward from the back shoulder, **the stride (by front foot) is completed by making sure it lands at about the one o'clock position** where home plate is at the 12:00 o'clock position (never plant the stride foot at the 3 o'clock position, 90 degrees, as this will retard the weight shift to the stride foot, the hips will not follow through properly, and undue stress is place on the knee of the stride leg, resulting in possibly injury.
- THE GROUP CAN IMITATE THE INSTRUCTOR HERE TO GET THIS STRIDE POSITION AND WEIGHT SHIFT CORRECT.

<u>Arm/Hip Coordination Drill</u> (No ball used in this drill)

- Using the stride position and showing the glove, start to pendulum the arm forward with the weight shifting forward to the stride foot; make sure the body moves forward with the weight shift. You do this drill by stopping the arm at the hip (to get the feel of feeling the

cue to release the ball, holding it for a few seconds, then push the arm through by snapping the wrist at the "cue," and continue dragging pivot foot up to the back of the stride foot.
- DO THIS DRILL WITH THE GROUP A FEW TIMES
- Then have the group do the drill without the arm pausing at the hip to coordinate the motion for several repetitions.

Other Drills

- from the stride position, practice "snapping" the ball into the glove hand which continues to stay out in front of the body, longer than normal in a game situation, (this helps keep the shoulders and hips aligned with the target, and allows for proper hip rotation in the follow through. Obviously the hips will close slightly when the stride foot is planted properly, but are not forced through to create power. The hips follow through as the body continues to move forward over the stride foot, and close naturally with the pivot foot dragging up.
- once you become proficient pitching the ball into the glove (which is held low, and out front of the stride leg so it is pretty close to the release point), practice this drill with your eyes closed so that this release technique becomes automatic, where you don't have to think about it.
- you can do this drill in front of a mirror (body and pitching line aligned parallel to the mirror), so you can watch the whole body's movement in the delivery, in particular the weight shift with the body moving forward from over the pivot, to end up over the stride foot.
- from the stride position, start out by throwing pitches from short distances, stressing proper wrist snap and top spin on the ball, as well as the body moving forward during the release sequence (throw 15-20 pitches, or as many as required to get mechanics straight).
- ***DON'T MOVE FURTHER BACK UNTIL YOU MASTER THE TECHNIQUE
- discuss "dry pitching" (full motion); doing it in front of a mirror without the ball.
- you can also have pitchers (no ball), do the windmill motion against a wall to get the feeling of the full circle required and the arm being close to the body and hip at point of release at hip.
- now practice throwing the ball into the glove using the complete windmill motion including the wind-up, power, and follow through phases.
- then start by throwing short distances to a partner; do not proceed to greater distances unless you have perfected the pitching mechanics and release (snapping the ball), and making sure the correct rotation is on the ball. Gradually move back increasing speed and distance, but again, only if ball rotation and mechanics are maintained. Never get to your regulation distance if your mechanics and rotation are not correct.
- it may take up to 2000 pitches to coordinate the motion.

PROMOTING FURTHER COORDINATION OF THE PITCHING MOTION AND DEVELOPING CONTROL

Discussion of what comes first; power or control. My feeling is you must throw the ball hard enough that you do not just "arm" the release, but snap the ball well. In other words, practice for control with a good wrist snap; **(i.e. Don't push the ball at target, throw it!)**

The two essential components of CONTROL are the two "C's"; Consistency and Concentration. Consistency means developing your mechanics where they are always the same and you don't have to think about it once you master it. Concentration means shutting out any noise or heckling that would interfere with focusing on your target.

DRILLS FOR PRACTICING CONTROL

ONE KNEE DRILL; only do this drill on soft grass, or with padding under your pivot foot knee. You lean on that knee, while stretching the stride leg out towards your target. You keep your throwing arm straight and pendulum it forward (from shoulder to shoulder), releasing the ball at the hip area by "snapping the wrist forward." The arm should be brushing by the body at the release point, while focusing on the wrist snap.

THROWING FROM SHORT DISTANCES; this should be done after warming up with the "stride position" drill. You start by pitching from a short distance, 20 feet or so, using a catcher and focusing on proper stride, pitching line, and wrist snap while not throwing too hard from this distance. Do not move back or increase speed until control and mechanics are maintained.

USING TARGETS; Various targets can be made cheaply by hanging a sheet on a fence and painting a target on it, using an old mattress with a target on it, and even rolling up a few wet socks into a ball, and throwing it at a wall. See how many times you can hit the target in 20 pitches, and when you become proficient, try and hit the corners of the target. Of course there are many commercial targets with netting, etc available that can be purchased if you have some spare cash; these are not necessary, but are beneficial by trapping your balls in a confined space.

THE STRING TARGET; this is a target that can be constructed with strings and elastic attached to poles (you can make them), which has a target in the middle of the apparatus. This target area can be moved up or down to practice different pitches and control. This gives you immediate feedback, and a catcher is also used for lots of repetition.

MIMIC PITCHING is a good fun drill for concentration while using only a catcher. It also gives you immediate feedback and lots of repetition without having to have a huge supply of balls to round up to start over. Catchers call balls and strikes; you can see how many pitches it would take you to strike out 3 batters (in series of six pitches), while counting all the pitches thrown before 3 outs are made.

FIELDING THE PITCHING POSITION

- ground balls hit back at the pitcher (check the pitcher's ready position after delivery of the pitch to make sure they are ready to move side to side as well)
- fielding balls hit to the 3rd base side of pitcher (make sure the pitcher sets pivot foot to make a proper overhand throw to 1st base
- fielding balls hit to 1st base side of pitcher (may require a short underhand toss to first base while moving toward the 1st baseman)
- checking lead runners (holding them close); after ball is hit at pitcher, you must pivot properly while not getting turned inside out depending on which base you are throwing to, and also trying to get the runner at first base. THIS IS A CRITICAL DRILL THAT SHOULD BE PRATICED, ESPECIALLY IF THERE IS A LEAD RUNNER ON 3RD BASE.
- covering home plate on pass balls if your team has you cover the plate. You want to square up to the throw from the catcher. Remember you cannot block the plate (the 3rd base line between home and 3rd) unless you have the ball. The pitcher should never try to block the plate at all as they have no protection on; DON'T GET KILLED! The pitcher should set up in front of home plate, and just slightly towards 3rd base, leaving the sliding path to the runner so there is no collision between the runner and pitcher. Do not turn your back to the runner, so that you can see the line she is running on. All you have to do is lean in with the glove hand to tag the runner out just before her feet get to home plate, slightly up the line towards 3rd. I have seen some bad injuries to pitchers who do not know what to do.
- backing up third and home on fly balls (ahead of the lead runner)
- holding runners at their bases when you have possession of the ball in the 8 foot circle; while in the 8 foot circle you can fake a throw at the runner leading off. That lead runner must now decide which way she is going to go at this point; once starting, he/she can't change direction after this fake throw or they are out.
- also know how to participate in run-downs of runners trapped between bases; you might be required to jump in, as it usually takes 4 players to execute it properly.

PROPER PITCHING PRACTICE

It is important that you strive for pitching workloads in practice, and concentrate on the SPECIFIC areas you might be weak in. PLEASE SEE ATTACHMENTS AT END.

For Example – This could be a novice age practice schedule –approximately 150 pitches/practice, three times per week. (NOTE: During the regular season schedule, a pitcher must pitch at least 3 times per week in order to progress. This means if you pitch two full games in a week, you must practice at least once a week. If you are only pitching only a few odd innings in games, you must practice that much more, or you will stagnate, and not progress!

warm up (after stretching)	20 pitches
delivery (mechanics)	20 pitches
control	20 pitches
STUFF - change up	25 pitches

- peeling drop ball	25 pitches
speed/power	20 pitches
weakness	20 pitches
TOTAL	150 pitches

DEVELOPING POWER AND SPEED

The three components of power and speed are:

1) COORDINATION; making all the mechanics working smoothly together and developing rhythm,
2) STRENGTH; natural athletic strength, and ways to increase it through training "workloads" and exercise
3) FLEXIBILITY; the ability to extend the arm and shoulder; a larger circle creates more power.

Strengthening Exercises

- **use of a weighted softball or other weight** (2-3 lb or more, whatever makes you work the wrist). Let the arm hang down loosely, keeping it straight, and bending only at the wrist, move the hand slowly backward and forward through the "snap and release" position. Make sure the fingers point down and under the ball, with the thumb and palm of the hand facing forward at the target. **(It is most important to strengthen the wrist, as a proper wrist snap is a huge component in creating power).**
- **do push-ups** for total arm, wrist, and finger strength.
- **dry pitching** with weights (do slow repetitions of the full windmill circle)
- **do bike riding, sprints/running**; increases leg strength and improves cardio for stamina; you will need it on hot days and at tournaments.
- **Isokinetic drills**; (resistance training using a bat; by pushing the bat hard at both ends with the palms of the hands. The top hand (pitching hand) is at the top of the power phase, and pushes downwards until it gets just past the release point). NOTE: Isokinetic means moving a resistance at a constant speed.
- **Dynamic tension**; (clench the arm and fist, and complete slow circles; each one should take about 30 seconds).
- **use "squeeze grips**" for finger and wrist strength
- **wrist roll-ups**; tie a weight at one end of a rope, and at the other a dowel or rod. Roll the weight up the rope a number of times (start with light weights and increase as you progress).

Practice Drills

For Flexibility: have pitchers make windmill circles against a flat surface (wall), so that the arm is fully extended without tension (no ball is used).

Dry Pitching: make full windmill circles coordinating the hip rotation and weight shift; (as the arm starts up in front of the body the hips open towards third base (for right-handers); then as the arm starts down the back side, the hips start closing at the release point. No ball is used with this drill.

- speed circles can be used with this drill to promoted flexibility (no weights used).
- slow windmill circles can also be done with this drill using light weights or weighted balls (no throwing).

Wall Pitching: throwing into a screen or mattress starting from short distances promotes coordination and drive (strength). Targets can also be used for control, while increasing distance.

Speed Pitching: a good power drill; **i.e**. throw five pitches from short distances to begin with into a screen or mattress. Throw the first pitch as hard as you can; then each successive pitch harder than the last. As you get more proficient, increase distance until you get to regulation pitching distance, throwing sets of five as described until you tire, (don't overdo it). Use a regulation ball.

Distance Pitching – The emphasis is on power by driving the body hard toward home plate, while maintaining and coordinating all of the pitching mechanics. Throw 5 pitches hard; then move back 5 feet and repeat with 5 more pitches. **Progress further back in increments of 5 foot intervals, as long as you can pitch the ball to the catcher without the ball bouncing on the ground, and as long as you can maintain your forward drive along with your pitching mechanics.** Some think this distorts the release point slightly, but as long as you focus on keeping your mechanics and drive coordinated, it should not be a problem.

This is the best method to get the feeling of **"exploding off the mound"** and rushing toward home plate. It is interesting to see how some experienced pitchers at the start of innings take their warm ups behind the mound. Then when they face a batter, they feel more confident and powerful pitching from regulation distance once the inning starts. It doesn't seem to affect their control (i.e. release point).

DIFFERENT PITCHES

THE CHANGE-UP

The importance of having this pitch is to throw off the batter's timing off. If a batter sees an odd change-up, they never really know what speed is coming at them next, and they will be off balance.

There are three basic change-ups with various grips that you can experiment with. When you get comfortable with one, stick with it and refine it. They are:

1) The Palm Pitches
2) The Reverse Spin
3) The Knuckleball

- With the **palm pitch**, it is very important that the wrist is locked (**there is no snap or flexibility in the wrist**, as opposed to throwing a fastball).
- the arm, from fingertips to shoulder, has to remain straight throughout the pitch, almost rigid; as if it was like a yard/meter stick that doesn't bend. This will take speed off the pitch; YOU PUSH THE BALL AT THE TARGET, DON'T SNAP THE WRIST.
- With all change ups, deception is the name of the game. You do not want to "telegraph" the pitch; don't slow the arm motion up in the power and follow-through phases of your mechanics. Pushing the body hard towards the target, and also dragging the pivot foot up hard, makes it seem like you are throwing your fastest pitch.

<u>The Palm Pitch</u> (probably the easiest and most popular to learn)

- The palm pitch is held deeper in the palm of the hand (it helps lock the wrist up). The wrist alignment is very important and stops the wrist from snapping forward; the wrist rotates 90 degrees so that the thumb points toward 1st base, while the fingers and the back of the hand point toward 3rd base (for right-handers). A "V" is formed by the thumb and the fingers. NOTE THAT THE PALM OF THE HAND IS <u>NOT</u> FACING TOWARDS HOME PLATE at the release point, as opposed to a regular fastball. This is accomplished with practice: **If the ball has too much speed on it when delivered to the batter, you know right away that the wrist was not aligned properly,** as it is impossible to throw the ball hard if alignment is correct.

<u>The Reverse Spin Pitch</u>

- This pitch is more difficult to learn, but is quite effective. It does come out of the pitcher's hand quite slowly though, giving some batters time to adjust to it.
- By using the full windmill motion as the arm is progressing downward in the "power phase," the pitching hand reverses from the normal fastball release (180 degrees) just prior to release, so the "back of the hand" is facing the target at release. This release is very similar to the "orthodox" style of pitching used decades ago. It will naturally have some back/side spin on the ball. It will take much repetition to control and master this pitch. This style allows the pitcher to roll off the pitch providing some deception to the batter.

<u>The Knuckleball Pitch</u>

- This pitch is unusual in that it comes out of the pitcher's hand with very little spin and should flutter on its way to the target. The problem with this pitch is that it can change directions at any moment, mostly the result of wind currents around it. Catchers have no idea where it might end up; it may not be a pitch you would want to use with runners on base.
- There are different grips with 2-4 fingers being used on the ball, and either a 2 or 4 seamed knuckleball can be thrown. The fingers are bent in towards the palm of the

hand (kind of like a claw), and only the finger tips dig into the smooth part of the ball. The fingers are not putting pressure on any seems, as this would create spin on the ball. The thumb is only used as a balance at the side of the ball and is off a seam as well. You will have to experiment with different numbers of fingers on the ball, as well as a 2 or 4 seamed pitch.

- Just as an example, you could use a 2 seamed pitch, with 2 or 3 finger tips dug into the smooth section of the ball just under the arc of the horseshoe stitching on the ball. The thumb would just be off to the side. Wrist snap is limited as only the finger tips are dug into the ball, locking the wrist somewhat. This pitch requires an extreme amount of practice.

LEARNING THE CHANGE-UP

- FROM THE STRIDE POSITION - Begin by experimenting with the different types of change ups; try one for 15-20 pitches before trying the next. You should go through this process before finding the one you are comfortable with.
- When you get comfortable with one style, go to the full windmill motion. Start from about 20 feet, and only progress to greater distances when you have mastered the technique.
- Change-ups are normally thrown on the low and outside corner of the plate when you want a strike. The reason being the batter is probably a bit off balance, and the worst they might do is hit a ground ball into the infield without power. If you are using it for a waste pitch, make sure it is well out of the strike zone.
- WHEN DO WE USE CHANGE-UPS? – Almost every batter should see a change-up (not necessarily every time that individual comes to the plate). The exception could be the number 7-8-9 batters in the line-up, who are generally weaker hitters; you would probably want to overpower those hitters.
- BE CAREFUL of throwing change-ups with fast runners on base for obvious reasons. ALSO, if runners are in scoring position (2^{nd} & 3^{rd}), you may not want to throw change-ups in these situations as a cheap hit could score a run..

THE PEELING DROP BALL

A discussion of how "stuff" works with the seams on the ball (Bernoulli's Principle – spin on ball and air pressures).

<u>The Grip on the Ball</u>

- You may use two, three, or four finger grips depending on finger size and comfort; remember the number of fingers used dictates the speed produced.
- The first knuckle of the fingers cross the seam so the finger tips push against the back of the seam.
- The thumb points at the catcher and is opposite the centre of pressure exerted by the fingers (in the middle of the ball). Force must remain constant in the centre of the ball, not to one side or the other.

- The wrist is aligned so the palm of the hand faces the target at the release point.
- The rotation of the ball must be down and forward as it travels toward home plate.
- The ball breaks best if thrown low in the strike zone. THE BALL BREAKS IN THE DIRECTION OF THE SPIN (ROTATION) PUT ON IT.
- Make sure there is some space between the palm of the hand and the ball (this allows for flexibility giving better spin, and ensures wrist doesn't lock up).
- The ball is released with the fingers under ball with the palm and wrist facing forward. Snap the wrist upward and forward to increase rotation, pulling fingers up hard and over the ball.

<u>Differences in the release from normal fastball delivery are</u>:

- The upper body is slightly further forward over the stride foot at the point of release (this allows for earlier release of the ball), helping to keep the ball low in the strike zone, or lower when you want a "ball" or waste pitch.
- After snapping the ball up hard and over the ball to create top spin, the hand continues to pull over the top of the ball as opposed to the fastball release, where the hand immediately continues straight upward in front of the body after release of the pitch.
- Some pitchers like to just "slightly" shorten their stride, so they feel they are leaning forward when releasing the pitch. You want to have the feeling that you are looking down over a cliff as you release the ball (this helps keep the ball low).
- This release can be demonstrated with the spinning ball on a dowel.

<u>Learning the Pitch</u> – "The Flipping Drill"

- Beginning with the pitching arm hanging down at the release point of the body, try to rotate the ball forward stressing the release position of the fingers, wrist, palm, and thumb.
- The drill is completed by pulling up hard on the seams, flipping the ball up in the air. The trick here is you want to try and catch the ball in the air with the same hand. This helps increase the friction on the ball since it requires a quick motion to accomplish it, and adds to the rotation on the ball.
- Gradually increase the spin on the ball by exerting more friction and snapping the wrist harder, while still trying to catch the ball with the same hand.
- Once this is mastered and you feel comfortable with the release, throw from short distances from the STRIDE position from 15 feet or so.

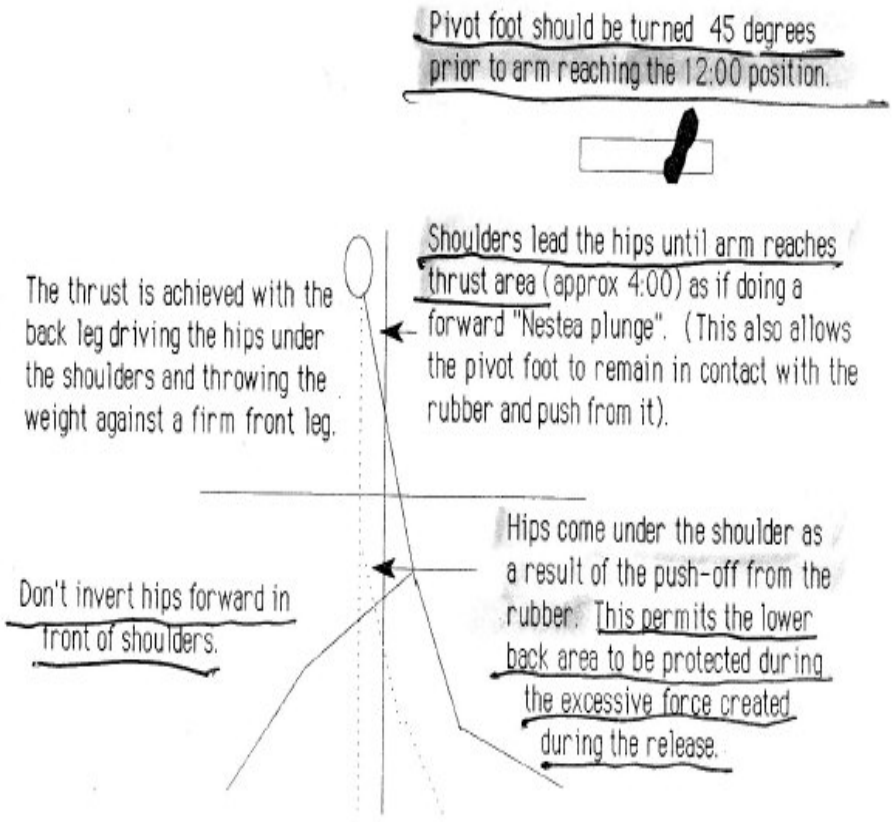
KEY NOTES:

- Never move further back until you become consistent with the rotation on the ball.
- Only move back in stages, increasing speed slightly, and only as long as the rotation on the ball is being maintained properly. Don't throw too fast until you are close to normal pitching distance.
- Go to the full windmill motion once you are comfortable with the release technique, are maintaining rotation on the ball, and are approaching the normal pitching distance.

SIMPLE BASIC PITCHING STRATEGY

1. Throw the first pitch for a strike; get ahead of the hitters in the count, so that you can play with them a bit.
2. Try and get two strikes in the first three pitches. Now the batter is on the defensive and must swing at anything close to the plate.
3. Work the count to 2 and 2 (if you are confident of throwing the next pitch for a strike). Try and make the batter hit a bad pitch when you are ahead in the count.
4. If the count goes to 2 and 2, you need a strike. Throw your best pitch at the batter's weakness.
5. When learning "stuff" (i.e. the change-up and peeling drop), experiment with them in early season when you are ahead in the count (i.e. 0 balls and 2 strikes). This gives you a chance to develop your pitches in game situations and some much needed confidence, when you know you don't have to throw a strike. Later in the season, you'll be able to throw your "stuff" with more confidence in critical situations as a result.
6. NEVER throw a strike when the count is 0 balls and 2 strikes. The batter is on the defensive and will try to hit anything close. Waste at least one pitch; don't make it easy.
7. Set up some simple signals with your catcher for the fastball, drop ball, and change-up. They must know this strategy as well, and will be able to call the game. If you are not confident with a certain pitch at times, you have the right to shake the catcher off until he/she gives you the signal you are comfortable with.

Chalk Talk


Pivot foot should be turned 45 degrees prior to arm reaching the 12:00 position.
Shoulders lead the hips until arm reaches thrust area (approx 4:00) as if doing a forward "Nestea plunge". (This also allows the pivot foot to remain in contact with the rubber and push from it).
The thrust is achieved with the back leg driving the hips under the shoulders and throwing the weight against a firm front leg.
Hips come under the shoulder as a result of the push-off from the rubber. This permits the lower back area to be protected during the excessive force created during the release.
Don't invert hips forward in front of shoulders.

SOFTBALL PITCHING PRACTICE RECORD

Sample: Practice #__ Date: _____

ACTIVITY	ACTIVITY AND DRILL DETAILS	WORKLOAD
WARM-UP	1. Run/jog 200 yards minimum. 2. Stretch- focus on calfs, thighs, lower back and shoulders. 3. Calisthenics - include shoulders, hips and knees. 4. Pitching (include at least 25 overhand throws) at slow speed. N.B. overhand throws first.	15 mins.
DELIVERY	Work on mechanics (ie. in the three phases of pitching motion), arm motion contacting hip at release; 3/4 speed.	
CONTROL	Use string target: upper half of zone- lower half of zone- (not quite full power), but hard.	
STUFF	DROP BALL: concentrate on ball rotation first, gradually increasing distance and speed as long as good rotation is being achieved; keep ball in lower area of strike zone, or lower.	
	RISE BALL: as for drop; move back only when good ball rotation is being maintained, & increase speed gradually. Keep ball in high area of strike zone, or higher.	
	CHANGE-UP: motion must look the same as a fast ball; particularly strong surge in upper body and good pivot foot drag.	
	CURVE BALL: for right-handers, make sure hand comes across body towards first base in follow through.	
SPEED Note (only do one drill)	1. SPEED PITCHING: from regulation distance. Throw first pitch as hard as you can; each successive one harder. 2. DISTANCE PITCHING: start at regulation distance. Move back gradually; POWER.	
WEAKNESS	Go back and work on something you had trouble with in practice; not too hard!	
CONDITIONING	1. pick-ups... 25 to left side, 25 to right side; use lateral motion. 2. sprints: 10 x length of gym. 3. any other conditioning drill that strengthens arm through full range of motion.(see level 2 manual)	
FIELDING	Practice proper fielding skills from pitching position; throwing techniques from close and long distances.	

PITCHING PRACTICE SUGGESTED WORKLOADS
Chart 12-1

ACTIVITY	1 MINORS AGE 7-10	2 PEE WEE, BANTAM & MIDGET 11-16	3 JUVENILE TO SENIOR AGE 17 AND UP	4 NATIONAL OPEN
WARM-UP	As Required	As Required	As Per Section #2	As Per Section #2
DELIVERY	60 Pitches	75 Pitches	100 Pitches	100 Pitches
CONTROL	40 Pitches	50-100 Pitches	100-150 Pitches	100-150 Pitches
SPEED	20-40 Pitches	30-75 Pitches	40-100 Pitches	60-150 Pitches
STUFF	Extra work on Delivery & Control 30-50 Pitches	20-40 each Pitch or extra work on Control	Total 60-150 ÷ # of Pitches	Total 80-200 ÷ # of Pitches
CONDITIONING	Sprints for Form	12 Minuts Jogging and Windsprints	12-20 Minutes per practice	20-30 Minutes per practice
TOTALS PER PRACTICE 3 TIMES/WEEK	150-190 Pitches 450-570 Pitches	175-290 Pitches 525-870 Pitches	300-500 Pitches 900-1500 Pitches	340-600 Pitches 1020-1800 Pitches

12-1