

## **YOUTH: AGES 11 – 13U: 90 DAY OFFSEASON HITT-ing SWING ENHANCEMENT PROGRAM:**

The following 90DAY VeloPRO hitt-ing and swing enhancement program is designed specifically for usage with the VL Harness, and is intended for the high school to pro levels. USAGE WITHOUT THE VL HARNESS IS NOT RECOMMEND, AS (1) SENSORY FEEDBACK, (2) MOVEMENT DEVELOPMENT, AND (3) UNSUPPORT OF THE BARREL WEIGHT WOULD NOT BE ASCERTAINED TO THE WORK LOAD, TRAINING GOALS, AND/OR OVERSIGHT REQUIREMENTS SET FORTH BY THIS PROGRAM.

Develops swing efficiency, hand speed, offensive power, and hitt-ing skill sets that are supported and compete for the quality at bat - **rather than just swing mechanics**. Over 7 years of analytical hitting data and research (from the University, lab, and on field perspectives) supports this program's usage. Data is **INDEPENDANT** of VeloPRO Baseball, which is highly important to the accountability and integrity of this program. **USAGE DURING GAME COMPETITION OR SEASON IS NOT ADVISED BECAUSE PROGRAM DOES NOT TAKE INTO ACCOUNT PERFORMANCE STRESS, RECOVERY, OR WORK LOADS.**

The different aspects of the program are described below - with the actual daily hitting, lifting, running, and recovery routines listed under "Week 1" to "Week 12". Read over all the information BEFORE you start.

Use your VL Harness (as directed by the program) with all aspects of hitting. It provides the necessary sensory feedback and peaked athletic movement required to develop a (1) proper swing, (2) increased plate coverage, (3) improved swing plane, and (5) enhanced offensive tools of barrel speed, power, and quickness to the pitch.

To better understand how to use your VL Harness, refer to our [Tutorials page](#).

If you wish to have oversight or additional training, find a certified VeloPRO Baseball instructor near you or email [Info@veloprobbaseballnj.com](mailto:Info@veloprobbaseballnj.com).

## **RECOVERY AND WORK LOAD RATIOS:**

The relationship between your work load and recovery rates should dictate how you utilize this program. Too much soreness/tightness the day after means your body is not ready for the work load requirement. Do NOT push your body to the point it is not recovering in time for your next training session. Follow these steps (IN ORDER) to procure recovery/work load ratio(s):

1. If you are experiencing too much "day after" soreness/tightness, back off on rep amounts - not frequency.
2. If you still are not recovering (after completing Step 1), back off one drill per training section of each day's hitting regimen. Repeat until proper recovery levels are attained and work from there.
3. No matter how your body recovers, if you feel pain - stop and re-evaluate frequency, fitness levels, and recovery times.

4. When evaluating, know the differences between (1) fatigue, (2) soreness, (3) tightness, (4) achiness, and (5) pain. Some soreness and fatigue is good, but too much will lead into post hitting achiness that does not subside (tendonitis). It can also lead into "day after" tightness that does not work itself out quick enough. Any type of pain is not good and you should stop immediately.

5. "**PAIN**" is a sharp painful sensation when you perform a certain movement. "**FATIGUE**" is your body feeling tired. "**SORENESS**" is similar to "**TIGHTNESS**", but the later does not loosen itself out or subside quickly. "**ACHINESS**" is a throbbing sensation - indicator the presence of tendonitis or start of such. Remember that your body needs to be used, but NOT overused.

6. Proper monitoring of recovery rates will require you to stop hitting once you feel like your body is used. Stop after you feel this "sensation" - as it is the start of fatigue. Do NOT push past this, or your next day's hitting regimen will suffer.

7. Build and plateau your hitting frequency and reps to maximize recovery rates. It will take about a month to fully understand how your body is responding to the below training regimens.

8. Adhere to all rest requirement(s) between drills, exercises, or sets - even if you feel you are recovered.

This is an off season swing and hitting enhancement program, and does not take into account performance work loads. If you are currently in a season, do NOT use this program - as recovery rates will not be ascertained.

## **USAGE AND PROGRAM KEY:**

Always use your Velocity LOAD Harness with every aspect of the program (except strength and running). There are two ways to use your VL Harness (denoted in the program key). Back hip (**BH**) contours your back hip to train linear drive, ground reaction force (GRF), and sync of front HEEL strike. Front hip (**FH**) contours your front hip to train rotational torque and sync of lower-to-upper half kinetic reaction force. Refer to our [Tutorials videos](#) for more detailed usage.

There are 3 different training components PER DAY to the program - (1) Hitting, (2) Running/recovery, and (3) Strength. Ensure you have the right VL Harness placement PER DRILL (as denoted per drill below).

## **For drills within each training component:**

1. Each drill in the program has a number #1 - #3 that corresponds with the number of a drill in the videos shown at the top of this website page. For example, if drill #1 is listed in your day's hitting routine, you are to do the Stance LOAD-out Response Drill, which is described in video #1 at the top of this website page.

**Program key:**

1. **BH** - VL Harness is placed on back hip (application described above).
2. **FH** - VL Harness is placed on front hip (application described above).
3. **PEL** - Perceived effort level of swinging or running.  
100% is max intensity swinging or max intensity sprinting.  
90% is controlled high intensity swinging or sprinting.  
80% is medium intensity swinging or medium intensity sprinting.  
50% is relaxed swinging to just feel barrel weight or medium rate jogging.

## **90DAY SWING AND HITT-ING ENHANCEMENT PROGRAM\***

The following program includes every required aspect of swing and hitt-ING development. It is a general guideline that gives your offensive approach a fully comprehensive process to impact the win at the plate. This is an off season training plan that does not take into account performance requirements and/or work loads. Constantly monitoring recovery is the key to ensuring success. If you have questions, email Info@veloprobaseballnj.com.

### **-ACTIVE WARM UP (CONDUCT BEFORE EACH TRAINING DAY)-**

Before every training day, you will conduct Steps 1 - 3 (below) **BEFORE** you start the day's training regimen. Do not skip, as this is a portion of your daily routine that gets your body kinetically synced with muscular response.

1. **Active body warm up** - Conduct an active body warm up. 5min of agility and flex warm up, 5min of static stretching of both upper and lower half, and 5min of band work for your shoulder and scap load. Agility and flex warm up exercises can include high knees, bounders, jogging, side shuffling, etc. Band work needs to include rotator cuff protraction, retraction, and scap load drills. Ensure you activate internal and external ROMs for all cuff muscles - IN ALL BODY POSITIONS. For band work, find a program that works for you. There are many readily available on the internet that will suffice.
2. **Interval KCR warm up** - It is important to get your entire body working as one unit to sync your kinetic chain reactors (KCR) - once it is stretched and you have blood flow. To do this, do about 5-10 sprints at 90' length. Conduct them at 50%, 75%, and 100% PEL.
3. **Active swing warm up** - Swing off a tee for 2-3MIN (hitting baseballs at 50% PEL) wherein you are just feeling barrel weight move through the zone. Work wrist range of motion (ROM), barrel whip through fingers, and lower half movements. Higher than normal leg kick or longer linear back hip drives are encouraged during this portion of warm up to increase blood flows and muscle response activation.

## **-RUNNING AND RECOVERY TRAINING COMPONENT DESCRIPTION-**

Immediately after you finish your hitting, do your cardio cool down. Each day will provide a few cardio conditioning options (choose one only). If you are playing in a game - **THE DAY BEFORE**, you should do ten 150' long sprints at 100% PEL after your daily training routine. Disregard any required daily program running. Then start on Day 1 (the day after you play in a game).

There will be some adaptations to this running program - based upon game frequency. Just make sure you are recovering enough to be "fresh" for your next game or training regimens. Conduct all running **AFTER** your entire training day is complete. Do NOT do it beforehand. Additionally, all below running routines are to be conducted on an age specific baseball field or area that provides ample room to conduct regimen. If you do not have access to a field, use the last option within each day's running routine.

For cuff band work, there are many popular programs available. Jaeger Sports has a great sequence and we highly recommend its usage. Most implement the same exercises and application components. Find one that suits your needs.

### **POST COOL DOWN AFTER A GAME:**

#### **15min on a treadmill or general running at 50% PEL.**

1. Treadmill should be at a 7 speed with incline of about 3.
2. General running is a jog at 50% PEL to flush your system.
3. Finish out with cuff band work.

### **DISTANCE FLUSH:**

#### **25min of constant running at 50% PEL.**

1. Constant running provides no rest and is a flush with limited cardio intensity.

### **SPRINT INTERVALS:**

#### **10x bow and arrows OR 10 JSWs.**

1. Bow and arrows are sprints at 100% PEL to centerfield. Jog at 80% PEL to opposite foul line. 60sec rest between.
2. JSWs (jog/sprint/walk) is jog at 80% PEL to 1st gap, sprint at 100% PEL to opposite gap. Walk to foul line. No rest.
3. 10x 30/30/30s. Sprint for 30sec at 100% PEL. Jog for 30sec at 80% PEL. Walk for 30sec. No rest between.

### **LIGHT INTERVALS:**

#### **10x Poles OR Center and Gaps at 75% PEL.**

1. Poles are a medium jog from foul line to foul line on the warning track. Rest 30sec between reps.
2. Center and Gaps are a medium sprint to centerfield wall, jog to gap, walk to foul line. No rest between reps.
3. 10x 45sec medium jogs with 30sec rest between reps.

### **MEDIUM DISTANCE FLUSH:**

#### **15min flush or jog at 50% PEL AND 10min of jump rope.**

1. Jog for 15min anywhere to get a flush.
2. In addition to jog, do 10min of jump rope with a 90sec active / 30sec recovery ratio.

### **AGILITY LADDERS:**

#### **20min of any type of speed ladder training OR Sprint work at 75% PEL.**

1. Speed ladder training can utilize any popularized agility exercise. 90sec at 75% PEL with 30sec rest. 20min regimen includes exercises and rest.
2. Sprint work is 75yd sprints at 75% PEL. Rest for 30sec in between sprints.

## **-STRENGTH TRAINING COMPONENT DESCRIPTION-**

Ensure you have oversight for this portion of the program. **FORM IS EVERYTHING**. Improper form can lead to injury and a lack of proper strength development. If you lack experience in strength training, working with a certified trainer is highly recommended.

Always conduct this portion of the program **AFTER** you finish hitting. If you must lift before hitting, allow for 60min recovery time before commencing any type of hitting. If you have a game, do NOT strength train that day. If you feel too much soreness or tightness, cut back on your day's strength training to ensure proper recovery. You can upload any of the following regimens with more reps, higher intensity, more weight, incline or decline, and/or weighted vests, medicine balls, or physioballs.

There is NO rest in between reps. Take ONLY 15sec between reps or sets to get set up and ready for your next exercise. This type of high intensity training increases endurance, recovery rates, and cardio fitness levels. This is a push/pull routine developed by top baseball strength trainers whom have decades of expertise at the MLB levels. A push/pull strength routine trains the accelerator (while indirectly training decelerators) - and vice versa. This builds your body as one moving unit that connects your entire KCR. Such routines are NOT readily available to the general public and require proper form, recovery levels, and intensity levels to ascertain.

### **CIRCUIT #1: LOWER HALF FUNCTIONAL STRENGTH CIRCUIT**

**Use body as weight ONLY. Upload with medicine ball if desired. 35sec per exercise.  
No rest. Repeat Steps 1-9 two times. After you finish this circuit, do cuff strengthening.**

1. **Squats.** 12rep minimum.
2. **Lower ab exercise of choice.** 12rep minimum.
3. **Forward alternating lunge.** 12rep minimum.
4. **Regular ab exercise of choice.** 12rep minimum.
5. **Backward alternating lunge.** 12rep minimum.
6. **Twisting ab exercise of choice.** 12rep minimum.
7. **Alternating box step ups.** 12rep minimum.
8. **Side lunges.** 12rep minimum.
9. **Lower ab leg lifting exercise of choice.** 12rep minimum.

### **CIRCUIT #2: LOWER HALF EXPLOSIVE STRENGTH CIRCUIT**

**6reps per exercise. One set equals 6 total exercises. After you finish this circuit. do cuff strengthening.**

1. **Front chops:** Above head to between legs. As you chop move into a body squatting position.
2. **Diagonal left chops:** Above head to left hip. As you chop, move into a body squatting position.
3. **Diagonal right chops:** Above head to right hip. As you chop, move into a body squatting position.
4. **Left lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with left leg and chop med ball diagonally. Spring back up and repeat.
5. **Right lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with right leg and chop med ball diagonally. Spring back up and repeat.
6. **Right side diagonal wall throws:** Start in squat position about 3' from wall with med ball at right hip. Throw ball into wall. Catch bounce and absorb energy with a twisting action of hips. Repeat.
7. **Left side diagonal wall throws:** Start in squat position about 3' from wall with med ball at left hip. Throw ball into wall. Catch bounce and absorb energy with a twisting action of hips. Repeat.
8. **Med ball slams:** Start with med ball overhead. Slam ball into ground. Catch the bounce up and repeat.

### **CIRCUIT #3: UPPER HALF STABILIZING LOAD CIRCUIT**

**30sec per exercise. One set equals 5 total exercises. After you finish this circuit, do cuff strengthening.**

1. **Wall bounces:** Stand 3' from wall w/ med ball overhead. Feet are shoulder width apart. Bounce ball against wall on fingertips. Limit forearm absorption rate. Works finger and wrist strength.
2. **Chest passes:** Stand 3' from wall w/ med ball at chest in a squat position. Bounce ball against wall and absorb with forearms. Elbows should stay stationary. Works finger and tricep strength.
3. **Overhead throws:** Stand 3' from wall w/ med ball overhead in stride position. Bounce ball against wall and absorb with entire arm - moving shoulders and scapula with a slight bend in elbows. Works shoulder and scapula load.
4. **Left side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.
5. **Right side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.

### **-DAILY HITTING, RUNNING, AND STRENGTH ROUTINES-**

There are 5 types of daily workout components (**Swing Efficiency, Plate Coverage/Barrel Speed Training, and Hitting Enhancement, Running/recovery, and Strength** - described above) you will utilize PER DAY. Each type of component is denoted within the program's daily hitting regimens (see below).

Ensure your recovery is peaked. If you cannot finish out the day's requirements, cut back and re-evaluate to ensure proper recovery. "Recovery" is defined as your body feeling fresh the next day. Some days, you will feel a bit tired or sore. Cut back on that day's hitting to ensure your following day's training is not effected. Additionally, to aid in recovery - ice or do therapy only **AFTER** you have finished out your running and lifting for that day. Monitoring your recovery rates is how you will discover at what levels your arm can be utilized.

Again, understand that this is an off season throwing plan that does not into account performance work loads. Additionally, this is **NOT** a post surgery program. For such, email Info@veloprobbaseballnj.com and we can get you a program to use.

Time limits denoted for hitting durations.

(BH) or (FH) denotes back hip or front hip placement of VL Harness. Unhooked means to unhook bungees.

(x) denotes amount of swings.

"ROM" is range of motion.

## **-WEEK 1 DAILY ROUTINE (GROUND REACTION FORCE DEVELOPMENT)-**

### **SWING EFFICIENCY COMPONENT (BH):**

**MON, TUES, THURS, FRI (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 10x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, THURS (60sec rest between drills):**

#### **GROUND REACTION FORCE DEVELOPMENT (GRF).**

Place cone #1 at back foot. Place cone #2 six inches in front of back foot (towards pitcher). When you swing, your back hip should start over Cone #1 and finish over Cone #2.

**TIP:** Drill is designed to increase GRF and drive of back hip into pitch. DO NOT DRIVE FRONT SHOULDER FIRST. DRIVE BACK HIP AT PITCH TO CREATE LOWER HALF SUPPORT OF UPPER HALF. This will cause your back hip to move underneath your midsection. If you lunge at pitch w/ upper half, you will be top heavy and the bungees will cause your back foot to pull off the ground prematurely. Goal is to NOT feel bungee resistance pulling back foot off ground prematurely.

### **APPLICATION:**

10x off tee w/ top hand.

10x off tee w/ bottom hand.

20x off tee w/ both hands.

10x off front soft toss w/ top hand.

10x off front soft toss w/ bottom hand.

20x off front soft toss w/ both hands.

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, FRI (60sec rest between drills):**

#### **GROUND REACTION FORCE DEVELOPMENT (GRF).**

Place cone #1 at back hip. Place cone #2 six inches in front of back hip (towards pitcher).

When you swing, your back hip should start over Cone #1 and finish over Cone #2.

**TIP:** Drill is designed to increase GRF and drive of back hip into pitch. DO NOT DRIVE FRONT SHOULDER FIRST. DRIVE BACK HIP AT PITCH TO CREATE LOWER HALF SUPPORT OF UPPER HALF. This will cause your back hip to move underneath your midsection. If you lunge at pitch w/ upper half, you will be top heavy and the bungees will cause your back foot to pull off the ground prematurely. Goal is to NOT feel bungee resistance pulling back foot off ground prematurely.

**APPLICATION:**

10x off BP on middle pitches.  
10x off BP on outside pitches.  
10x off BP on inside pitches.  
10x off BP working middle of field.  
10x off BP working oppo.  
10x off BP working pull.  
10x off BP working situational hitting.

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Distance.

**Tues** - Medium Distance.

**Thurs** - Agility Ladders.

**Fri** - Sprint Intervals.

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Mon** - Circuit #1

**Tues** - Circuit #3

**Wed** - Circuit #2

**Fri** - Circuit #3

**Sat** - Circuit #1

## **-WEEK 2 DAILY ROUTINE (SPREAD AND ELASTIC ENERGY CREATION)-**

### **SWING EFFICIENCY COMPONENT (BH):**

**MON, TUES, THURS, FRI (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 10x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, THURS (60sec rest between drills):**

#### **SPREAD/ELASTIC ENERGY CREATION TRAINING**

Every drill (below) requires you to (1) load, (2) drive your back hip into the pitch, and (3) move your hands back. Hand move should be BOTH proportionate to linear back hip drive length AND hit the peak of hand move distance at the same time your front foot strike occurs. This creates the spread required to create and maintain elastic energy within your swing. MAINTAIN BACK HIP DRIVE LENGTH THROUGHOUT ALL DRILLS.

**TIP:** If you are NOT proportionate in both spread distance (compared to back hip drive) and sync of spread (timed with front foot strike), you will prematurely rotate with hips. This will cause bungees to pull back foot off ground prematurely. Goal is to NOT have bungee resistance pull back foot prematurely. To ascertain such, you MUST sync your spread with FFS and be proportionate in its move (with back hip move). SEQUENCING OF HAND MOVE IS MOST IMPORTANT. Start hands later into back hip drive if premature rotation occurs or bungee resistance is pulling back foot prematurely. If you are doing all above properly and still are prematurely rotating, it is because your back hip linear drive distance is not 6" or more. The longer your back hip drive, the less you will tend to prematurely rotate your hips, but hip move must be manageable for game speeds.

#### **APPLICATION:**

8x off tee w/ both hands.

8x off tee w/ both hands. Tee is outside.

8x off tee w/ both hands. Tee is inside.

8x off front soft toss w/ both hands. Outside pitches.

8x off front soft toss w/ both hands. Inside pitches.

8x off tee w/ top hand.

8x off tee w/ bottom hand.

8x off front soft toss w/ top hand.

8x off front soft toss w/ bottom hand.

10x off front soft toss w/ both hands.

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, FRI (60sec rest between drills):**

#### **SPREAD/ELASTIC ENERGY CREATION TRAINING**

Refer to above for drill focus, tips, and/or description.

**APPLICATION:**

10x off BP on middle pitches.  
10x off BP on outside pitches.  
10x off BP on inside pitches.  
10x off BP working middle of field.  
10x off BP working oppo.  
10x off BP working pull.  
10x off BP working situational hitting.

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Light Interval

**Tues** - Distance

**Wed** - Sprint Intervals

**Thurs** - Medium Distance

**Fri** - Light Interval

**Sat** - Agility Ladders

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Same as Week 1.**

## **-WEEK 3 DAILY ROUTINE (HIP ROTATION SYNC AND TIMING)-**

### **SWING EFFICIENCY COMPONENT (BH):**

**MON, TUES, THURS, FRI (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 8x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, THURS (60sec rest between drills):**

#### **HIP ROTATION SYNC AND TIMING DEVELOPMENT**

Every drill below will focus upon the timing of your hip rotation in comparison to when your hands start at the pitch. To ascertain such properly, you must implant your front HEEL first (before starting your hands). If you start your hands at the pitch at front toe strike, you will prematurely rotate. Your front HEEL must implant fully to create a strong front side to hit against.

**TIP:** To implant front HEEL and sync it to the start of your swing, you must drive your back hip fast at pitch. Do NOT drive your front shoulder at pitch. Do NOT be lazy with your hip move. Both top heaviness and lazy hips cause hip rotation sync and timing to misalign - resulting in prematurely rotating hips. Slam your front heel into the ground to give your brain a "key" from which to start your hands at the pitch. However, do NOT stop or pause after you implant your front heel (before starting your swing). All must be done in one movement. This is of utmost importance. If you feel bungees pulling back foot off ground prematurely, it is because your front heel is not down before your hands start at pitch. Goal is to not feel bungee resistance, and such is ascertained when you sync heel strike with hand move at pitch.

#### **APPLICATION:**

Same as Week 2

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, FRI (60sec rest between drills):**

#### **HIP ROTATION SYNC AND TIMING DEVELOPMENT**

Refer to above for drill focus, tips, and description.

#### **APPLICATION:**

Same as Week 2

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Light Interval

**Tues** - Medium Distance

**Wed** - Distance

**Thurs** - Sprint Intervals

**Fri** - Sprint Intervals

**Sat** - Distance

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Mon** - Circuit #1

**Tues** - Circuit #3

**Thurs** - Circuit #2

**Fri** - Circuit #3

**Sat** - Circuit #1

## **-WEEK 4 DAILY ROUTINE (HIP SEPARATION TRAINING)-**

### **SWING EFFICIENCY COMPONENT (BH):**

**MON, TUES, THURS, FRI (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 8x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, THURS, SAT (60sec rest between drills):**

#### **HIP SEPARATION TRAINING AND DEVELOPMENT**

Every drill is focused upon creating separation between the start times of your hip rotation and hand move into pitch. The later your hands start AFTER hip rotation, the more elastic energy you create into your swing - resulting in barrel whip and hand speed increases. Hip rotation starts your hand move into pitch. All is accomplished AFTER front heel implantation (as trained in Week 3).

**TIP:** To create hip separation, understand that your back knee and back elbow do not work in unison. Meaning, they do not move together, but a "gap" or separation of each must occur. This will increase rotational torque. Back knee and hip must rotate first (and after front HEEL implantation). Ensure you are not starting hip rotation at front toe strike. Head should be slightly behind center cut of body. If head is forward (top heavy) you will not be able to separate. This is why you must drive at pitch with back hip first, not front shoulder (as trained in Week 1). If you do not separate properly and in time, you will feel bungee resistance pulling your back foot prematurely off ground. Goal is to not feel bungee resistance, and separation must occur to neutralize bungee resistance.

### **APPLICATION:**

6x off tee w/ bottom hand.

6x off tee w/ top hand.

10x off tee w/ both hands.

6x off short arm BP w/ bottom hand.

6x off short arm BP w/ top hand.

10x off short arm BP with both hands.

10x off BP on outside pitches.

10x off BP on inside pitches.

10x off BP on middle pitches (pulling baseball).

15x off BP working situational hitting.

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, WED, FRI: (60sec rest between drills):**

#### **HIP SEPARATION TRAINING AND DEVELOPMENT**

Refer to above for drill focus, tips, and description.

**APPLICATION:**

10x off BP on middle pitches (pulling baseball).  
10x off BP on middle pitches (using middle of field).  
10x off BP on outside pitches.  
10x off BP on inside pitches.  
10x off BP hitting oppo.  
10x off BP hitting pull side.  
20x off BP working situational hitting.

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Sprint Interval

**Tues** - Medium Distance

**Wed** - Distance

**Thurs** - Light Interval

**Fri** - Sprint Interval

**Sat** - Agility Ladders

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Mon** - Circuit #2

**Tues** - Circuit #3

**Thurs** - Circuit #1

**Fri** - Circuit #3

**Sat** - Circuit #2

## **-WEEK 5 DAILY ROUTINE (BARREL SPEED/WHIP ENHANCEMENT)-**

### **SWING EFFICIENCY (BH):**

**MON, TUES, THURS, FRI (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 8x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, WED, FRI (60sec rest between drills):**

#### **BARREL SPEED AND WHIP ENHANCEMENT TRAINING**

Every drill focuses upon increasing barrel speeds and whip of such. Whip is created with elastic energy - a result of hip separation (trained in Week 4). Barrel speed is developed with top hand power. Bottom hand gets the barrel positioned to hit the pitch - popularly known as "barrel lag", but top hand brings the barrel around to actually hit the pitch. If you do not utilize your top hand to bring the barrel around to hit the pitch, barrel lag will turn into barrel drag. This also causes "lateness" to the pitch, foul balls over oppo dugout, and jamming. Hands are often to the pitch, but barrel is not - all due to barrel lag turning into barrel drag. Top hand is crucial to hitting.

**TIP:** Your bottom hand cannot get outside of your front hip (until after contact). Meaning, you must stop your bottom hand at centercut of your body, and then from this point, your top hand takes over and brings the barrel to the pitch. To ascertain such, you must (1) create spread, (2) sync HEEL strike with hand move into pitch, and (3) hip separation. Two ways of creating properly timed top hand dominance can be explained by, "Throw your barrel at the pitch" or "Point your top hand AND BARREL at the pitch to swing the bat". Additionally, too much bottom hand pulling the bat through the zone causes reduced swing plane and angle into contact point. Many hitters overrotate hips to bring the barrel to contact point. Avoid this by stopping your bottom hand at centercut and then finishing your swing with your top hand by "throwing your barrel".

### **APPLICATION:**

Same as Week 4.

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, THURS, SAT (60sec rest between drills):**

#### **BARREL SPEED AND WHIP ENHANCEMENT TRAINING**

Refer to above for drill focus, tips, and descriptions.

### **APPLICATION:**

Same as Week 4.

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Sprint Interval

**Tues** - Medium Distance

**Wed** - Distance

**Thurs** - Light Interval

**Fri** - Sprint Intervals

**Sat** - Agility Ladders

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Mon** - Circuit #2

**Tues** - Circuit #3

**Thurs** - Circuit #1

**Fri** - Circuit #3

**Sat** - Circuit #2

## **-WEEK 6 DAILY ROUTINE (RECOGNITION ENHANCEMENT TRAINING)-**

### **SWING EFFICIENCY COMPONENT (BH):**

**MON, TUES, THURS, FRI, SUN (60sec rest between drills):**

#### **MOVEMENT / MECHANICAL EFFICIENCY TRAINING**

Drills 1-3 off tee (described in videos). 8x per drill at 80% PEL.

### **PLATE COVERAGE/BARREL SPEED TRAINING COMPONENT (BH):**

**MON, WED, FRI (60sec rest between drills):**

#### **PITCH RECOGNITION ENHANCEMENT TRAINING**

Every drill focuses upon increasing your pitch recognition capacities and enhancing your quickness into the pitch. Great hitters give themselves more time to (1) see the pitch, (2) recognize its location, and (3) attacking the pitch with increased aggression. To ascertain such, BP is focused upon increasing pitch recognition time and decreasing attack and swing time requirements. Accomplishing these two goals requires a slow and steady "anticipated" start of the back hip linear drive with a HEEL implantation that matches the pitcher's front heel strike. Matching these two baseball movements syncs load and front heel strike of your swing. Once pitch is released, you will accelerate back hip energy into pitch.

Prematurely accelerating the energy creates lunging and/or premature rotation. You MUST implant your heel IN SYNC TO THE PITCHING DELIVERY FRONT HEEL STRIKE (NOT PITCH) and also accel energy of the back hip after heel strike. These two moves will increase pitch recognition time and decrease the time it takes to swing your bat.

**TIP:** Start your load once the pitcher starts his leg kick down (when in wind up). Start your load once pitcher starts leg kick upwards (in stretch). This gives you enough time to load in time with pitch delivery and heel strike of pitcher. Match your heel strike with pitcher's heel strike. Back hip linear drive should be short, powerful, and crisp. Lazy hips are the leading cause of poor swings. Drive back hip - not front shoulder into pitch. Additionally, front heel strike must be firm. After heel strike, you then accelerate back hip energy into pitch. If you accelerate energy prematurely, you will prematurely rotate your hips due to energy overloading a weak front side. This will cause the bungee resistance to prematurely pull your back foot off the ground. Goal is to move properly so that you neutralize bungee resistance.

#### **APPLICATION:**

Same as Week 5.

### **HITTING ENHANCEMENT COMPONENT (BH):**

**TUES, THURS, SAT (60sec rest between drills):**

#### **PITCH RECOGNITION ENHANCEMENT TRAINING**

Refer to above for drill focus, tips, and descriptions.

#### **APPLICATION:**

Same as Week 5.

**SUN (2min rest between distance ratings):**

**OFF SPEED PITCH DEVELOPMENT**

2min at 90' w/ crow hop. 80% PEL. (BH)

2min at 90' w/ crow hop throwing CH. (3 breaking pitches to 3 FBs). 80% PEL. (BH)

2min at 70' w/ crow hop throwing breaking pitches (3 breaking pitches to 3 FBs). 80% PEL. (BH)

1min at 60' w/ pitching delivery throwing CH (alternate CH/FB). 80% PEL. (BH)

1min at 60' w/ pitching delivery throwing breaking pitches (alternate BB/FB). 80% PEL. (BH)

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Mon** - Sprint Interval

**Tues** - Agility Ladder

**Wed** - Distance

**Thurs** - Sprint Interval

**Fri** - Light Interval

**Sat** - Medium Distance

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Same as Week 5.**

## **-WEEK 7 DAILY ROUTINE (GROUND REACTION FORCE TRAINING)-**

**SAME AS WEEK 1, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Tues** - Sprint Intervals

**Wed** - Light Intervals

**Thurs** - Distance

**Fri** - Agility Ladders

**Sat** - Light Intervals

**Sun** - Medium Distance

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Tues** - Circuit #1

**Wed** - Circuit #3

**Fri** - Circuit #2

**Sat** - Circuit #3

**Sun** - Circuit #1

## **-WEEK 8 DAILY ROUTINE (SPREAD AND ELASTIC ENERGY CREATION)-**

**SAME AS WEEK 2, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Same as Week 7.**

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Same as Week 7.**

## **-WEEK 9 DAILY ROUTINE (HIP ROTATION SYNC AND TIMING TRAINING)-**

**SAME AS WEEK 3, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Tues** - Light Interval

**Wed** - Sprint Interval

**Thurs** - Distance

**Fri** - Agility Ladders

**Sat** - Light Interval

**Sun** - Medium Distance

**STRENGTH COMPONENT:**

**Description of strength circuit listed above.**

**Tues** - Circuit #1

**Wed** - Circuit #3

**Fri** - Circuit #2

**Sat** - Circuit #3

**Sun** - Circuit #1

## **-WEEK 10 DAILY ROUTINE (HIP SEPARATION DEVELOPMENT)-**

**SAME AS WEEK 4, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Same as Week 9.**

**STRENGTH COMPONENT:**

**Description of strength circuit listed above.**

**Same as Week 9.**

**-WEEK 11 DAILY ROUTINE (BARREL SPEED/WHIP ENHANCEMENT)-**

**SAME AS WEEK 5, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Same as Week 10.**

**STRENGTH COMPONENT:**

**Description of strength circuit listed above.**

**Same as Week 7.**

**-WEEK 12 DAILY ROUTINE (RECOGNITION ENHANCEMENT TRAINING)-**

**SAME AS WEEK 6, BUT FRONT HIP PLACEMENT OF HARNESS.**

**RUNNING/RECOVERY COMPONENT:**

**Running plans listed above. Do arm care/recovery after throwing.**

**Same as Week 11.**

**STRENGTH COMPONENT:**

**Description of strength circuits listed above.**

**Same as Week 7.**