

SPRING 2015

For all Jericho Little League Baseball Coaches:

To better prepare our baseball players for the upcoming season, Jericho Baseball Association would like to incorporate **standardized pre-game warm ups and post-game stretches**. This will help our young athletes to get in the habit of preparing themselves for sport and preventing injury. Not only will they learn correct training techniques, but they will also improve their musculoskeletal system (which consists of the muscles, tendons, ligaments and bones).

A **Dynamic Warm Up** should be done **pre-game** to warm up the muscles to prepare them for sport, and **Static Stretching** should only be done **post-game**, when the muscles are warm and able to hold the stretch, to help prevent injury.

To best prepare any athlete for sports participation, it is essential to incorporate movement fundamentals for the entire body. The seven athletic components for success in any sport are: flexibility, co-ordination, balance, stamina, strength, speed and agility. Incorporating drills into your practices or pre-game warm ups that help train your players in any of these areas, will benefit their overall performance. Although sport specific training is necessary (i.e. Baseball drills), movement training in each of these areas will help athletes to be physically well-rounded and better prepared for sport. It will also help prevent potential injury from overtraining in one area.

In the following pages you will find a **Dynamic Warm Up (6 min)** and a post-game **Static Stretch (8 min)** that is **recommended for all players**. There will also be examples of different drills that incorporate the seven athletic components mentioned above, as well as nutrition & fluid recommendations. These drills and recommendations will vary based on age groups.

The following books are good resources for more information regarding training young athletes:

Athletic Fitness for Kids by Scott Lancaster and Radu Teodoresu

Strength & Power for Young Athletes by Avery Faigenbaum, EdD and Wayne Westcott, PhD

Have a safe, fun and successful baseball season!

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Dynamic Warm Up (Pre-game) 6 min

shoulder rolls (forward & back) 15 sec each direction	= 30 sec	Figure 1
arm swings (forward, back & across) 15 sec each direction	= 45 sec	Figure 2 a & b
forearm extension and flexion (prone)	= 15 sec	Figure 3
leg swings (forward, back & across) 15 sec per leg /per swing	= 60 sec	Figure 4 a & b
hip rotations (15 sec each leg)	= 30 sec	Figure 5
knee hugs (alternating)	= 15	Figure 6
butt kicks	= 15	Figure 7
forward lunges (with 2count torso twist) 30 sec right leg then 30 sec left leg	= 60 sec	Figure 8
reverse lunges (alternating legs)	= 30 sec	Figure 9
squats	= 30 sec	Figure 10
jumping jacks	= 15 sec	Figure 11
squat jumps	= 15 sec	Figure 12

(Refer to figures beginning on page 3)

Dynamic Warm Up



Figure 1



Figure 2 a



Figure 2 b

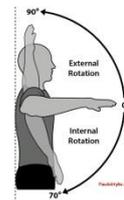


Figure 3



Figure 4 a

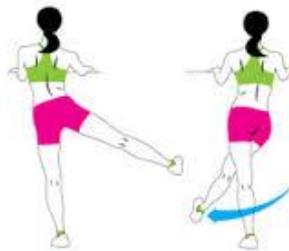


Figure 4 b



Figure 5



Continued next page...



Figure 6



Figure 7

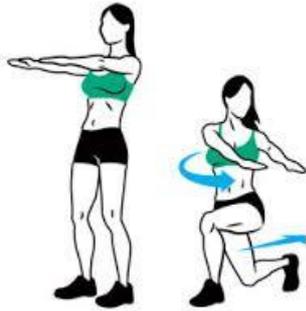


Figure 8

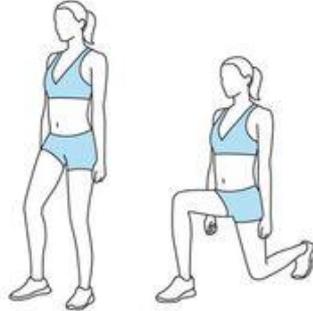


Figure 9

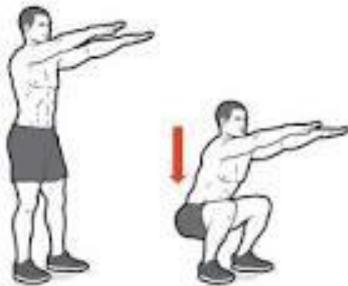


Figure 10



Figure 11



Figure 12

Static Stretch (Post- game) 8 min

It is important for each stretch to be at least 15 seconds, preferably 30. Though it may be hard to round up the players after a game, it is essential for injury prevention to stretch after sport. You may want to hand out snacks for the younger players, after your post-game stretch and debrief.

For the stretch routine below, the last 3 stretches last only 15 seconds each as the kids will be eager to move on by then, especially the younger ones. If 8 minutes is too long for the younger players, have them hold each stretch for 15 seconds, therefore reducing the total stretch time to 4.5 minutes.

quadriceps (30 sec each leg)	= 60 sec	Figure 1
hamstrings & calves (30 sec each leg)	= 60 sec	Figure 2
glutes (30 sec each leg)	= 60 sec	Figure 2
hip flexors (30 sec each leg)	= 60 sec	Figure 4
groin (30 sec each leg)	= 60 sec	Figure 5
biceps (30 sec each arm)	= 60 sec	Figure 6
triceps (30 sec each arm)	= 60 sec	Figure 7
chest (15 sec)	= 15 sec	Figure 8
put chin to chest & do front neck stretch at same time		
neck (15 sec each side and back)	= 45 sec	Figure 9

(Refer to figures on page 6)

I would recommend doing the same stretches in the same order after each game and practice, so the players (especially the younger ones) will learn to do them automatically. On page 7 there are a number of variations and additional stretches that might be helpful for your older players and pitchers who are training at a higher intensity.

Static Stretch – Post-game



Figure 1



Figure 2



Figure 3

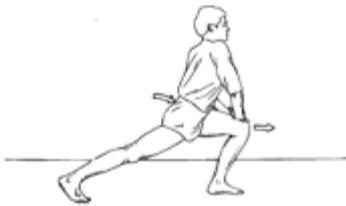


Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

Stretching

Exercises



1. Neck Flexion/Extension Stretch
(forward, then back)



2. Neck Lateral Flexion Stretch
(one side, then the other)



3. Latissimus Dorsi and Posterior Deltoid Stretch
(link hands, push elbows together)



4. Triceps Stretch
(pull elbow across and down)



5. Shoulder Rotator Stretch
(using towel, pull up with the top arm then down with the other)



6. Pectoral Stretch at 90° and 120°
(use a doorway or post)



7. Bicep Stretch
(hands apart)



8. Supraspinatus Stretch
(keep elbow parallel to ground)



9. Wrist Extensor Stretch
(tilt head to opposite side, keep elbow straight)



10. Thoracic Extension Stretch
(reach forward with arms, push chest towards floor, arch back down, backside behind knees)



11. Lateral Flexion Stretch
(one side, then the other, push pelvis across as you bend)



12. Lumbar Extension and Abdominal Stretch
(be gentle if sore)



13. Lumbar Flexion Stretch
(be gentle if sore)



14. Lumbar Rotation Stretch
(rotate legs one side, then the other side, draw in and brace stomach muscles at the same time, breathe)



15. Hamstring Stretch
(straighten leg)
i. with foot pointed
ii. with foot pulled back towards the knee



16. Hip Flexor Stretch
(commence with knee slightly bent, then push knee straight as tension allows, push chest towards foot)



17. Adductor Stretch
(push down with elbows on knees very gently, keep back straight)



18. Gluteal Stretch
(pull knee and lower leg towards opposite shoulder)



19. Gluteal and Lumbar Rotation Stretch



20. Quadriceps Stretch
(keep pelvis on floor)



21. Quadriceps Stretch



22. Adductor Stretch
(keep foot pointing forward, lunge sideways on bent knee, keep back straight)



23. Hip Flexor Stretch
(keep back straight, tuck bottom under, lunge forward on front leg)



24. Tensor Fascia Stretch
(continue to push bottom forward, whilst pushing hip to the side)



25. Gastrocnemius Stretch
(keep knee straight and heel down, feet facing forward)

Practice or Pre-game Drills (optional) 5-10 min each

For Major B and Major C players - The following two drills can be used for both the Major B and C players. Each drill will focus on different fitness components. Though both will incorporate speed and stamina, Drill A will focus on **strength and agility** & Drill B on **coordination and balance**.

Split the team into two areas for the drills so there is plenty of room. The Major B players may want to make the drill a race between the split team, creating a competitive component.

Alternate drills between practice and game days. For example, do Drill A as part of practice, and Drill B before a game, after the Dynamic Warm Up.

Drill A (360 Cone Relay)

3 cones - spread apart in a vertical line. 6 players line up single file a few feet before the first cone. **Player 1** runs to the 1st cone, places his right hand on top of cone while circling it clockwise – then runs to 2nd cone placing left hand on cone while circling counter clockwise - then runs to 3rd cone – does 2 squat jumps (refer to Fig 12 of Dynamic Warm up) then does a Bear crawl back to the starting line. **Player 2** starts doing jumping jacks when Player 1 starts relay and when Player 1 reaches the last cone Player 2 begins relay...then the next player begins jumping jacks and so on. If using drill as race – the first team that finishes wins the relay.

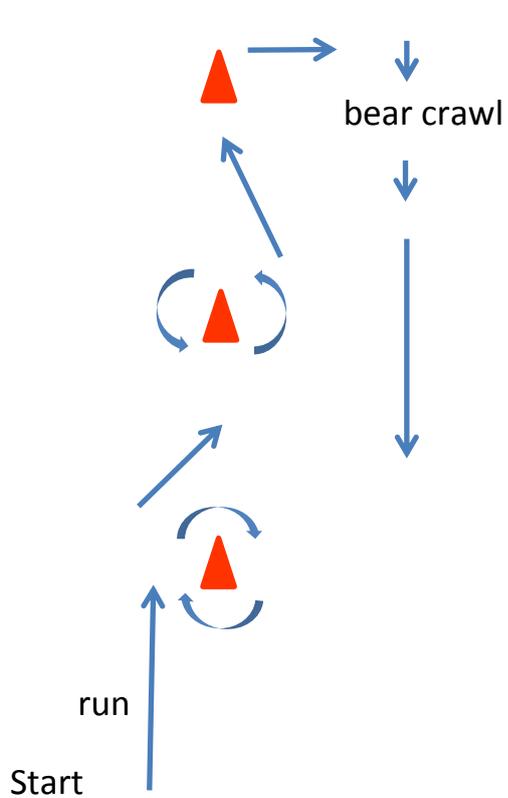
Drill B (H Formation Relay)

7 cones – spread apart to form the shape of the letter H. 6 players line up single file a few feet before the first cone. **Player 1** hops onto right foot while tossing a ball from his left hand to his right hand – then hops onto left foot while tossing the ball from right hand to left hand. He continues hopping and tossing until he reaches 2nd cone where he places the ball on top of it. He then runs to and around 3rd cone – then to cone 4 (centre of H formation) and on around the other cones until he finishes the H formation and then returns to starting line. **Player 2** begins the relay when Player 1 reaches the 2nd cone...then the next player begins relay when Player 2 reaches the 2nd cone and so on. If using drill as race – the first team that finishes wins the relay.

(Refer to diagrams on page 9 for set up and direction)

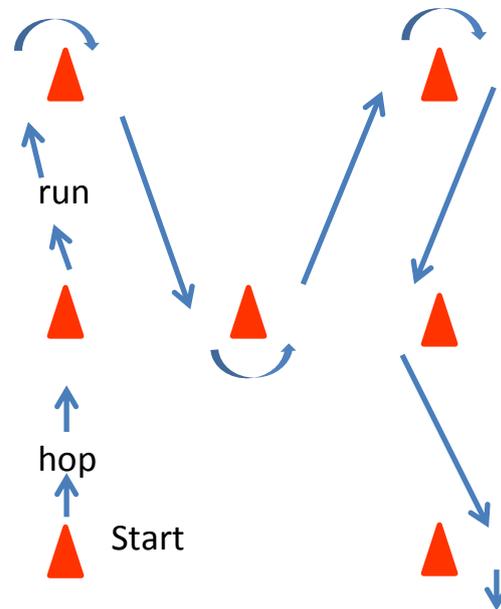
Drill A (360 Relay)

2 squat jumps



- player # 1
2
3
4
5
6

Drill B (H Relay)



- player # 1
2
3
4
5
6

Do a second formation for each drill (side by side) for other half of team.

Bear crawl



Drills for Major A players

The following 2 drills can be done at the same time (set up in two areas) with 6 players doing one & 6 doing the other, or if you are doing just one of the drills – do the same in each area.

Although both drills incorporate speed, stamina, agility, coordination & balance, this drill has a little more strength incorporated in the form of burpees and push-ups.

Drill # C

6 cones (cones A) – spaced apart and lined up horizontally on one side of field and 6 cones (cones B) lined up identically on other side of field (or designated space).

6 players (at cones A) do lateral runs (right foot leading) across field to cone B & do 5 burpees – then they do lateral runs back (left foot leading) to cone A and do 5 more burpees – then (starting with right foot) they do scissor runs to cone B – do 5 burpees – then do scissor runs (starting with left foot) back to cone A and do 5 more burpees.

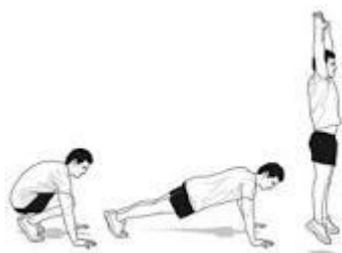
Drill # D

6 cones (cones A) – spaced apart and lined up horizontally on one side of field, 6 cones (cones B) lined up identically half way across field & 6 cones (cones C) lined up identically on other side of field (or designated area)

6 players (at cones A) run to cone B, back to cone A, then to cone C where they do 5 push-ups – then they run back to cone A, then to cone B, back to cone A, then to cone C where they do 5 skater hops – Repeat the same sequence – cone runs & push ups then cone runs and skater hops.

(Refer to diagrams on page 11 for set up and direction)

Burpee



Drill C Formation

cone B



cone A



player #1

#2

#3

#4

#5

#6

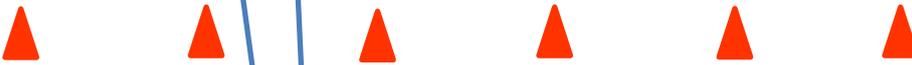


Drill D Formation

cone C



cone B



cone A



player #1

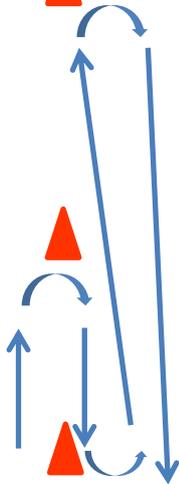
#2

#3

#4

#5

#6



Hydration, Nutrition & Rest

Below are some basic guidelines and tips to educate your players:

Hydration

Athletes need more than 8 cups of fluid a day. Without enough fluid, mild dehydration (low energy, sluggishness, headaches) or possibly severe dehydration (increased body temp, less sweat, disorientation) can occur.

Fluid recommendations are as follows:

16 ounces – 2 hrs before a game

8-16 ounces 15 min prior to game

5-10 ounces every 15-20 min during game

Drink as much as possible within 15 min of end of game

Nutrition

Carbohydrates are essential for endurance.

Complex carbs with a low glycemic index (GI) are recommended before a game as they enter the bloodstream more slowly and help sustain energy. Most fruit, vegetables and beans have a low GI.

Keep easy carb snacks with a higher GI (like raisins, bananas & juice) on hand during and after exercise, because they enter the bloodstream quicker for refueling.

Daily Sleep recommendations

Ages 7-9 9.5-10.75 hrs

Ages 10-13 9 – 10.5 hrs

Strength and Power for Baseball players

The striking action in baseball swings is initiated by the large muscles of the legs and hips. **Hip** thrusts (using **adductors and abductors**) transfer weight from the rear leg to the front leg and this force is transferred from the lower body in the torquing action of the **obliques**. This thrust and rotation lead to the striking action, shoulder rotation and arm swing. The chest (**pectoralis major**) upper back (**latissimus dorsi**) and shoulders (**deltoids**) facilitate shoulder rotation and arm swing. The **triceps** muscles contract in the arm extension producing the force in batting and backhand drives. Strong **neck muscles** stabilize the head which is essential for maintaining eye focus on a speeding ball.

Incorporating a fitness routine for your players that develops all the major muscles of the body is as important as your sport specific training.