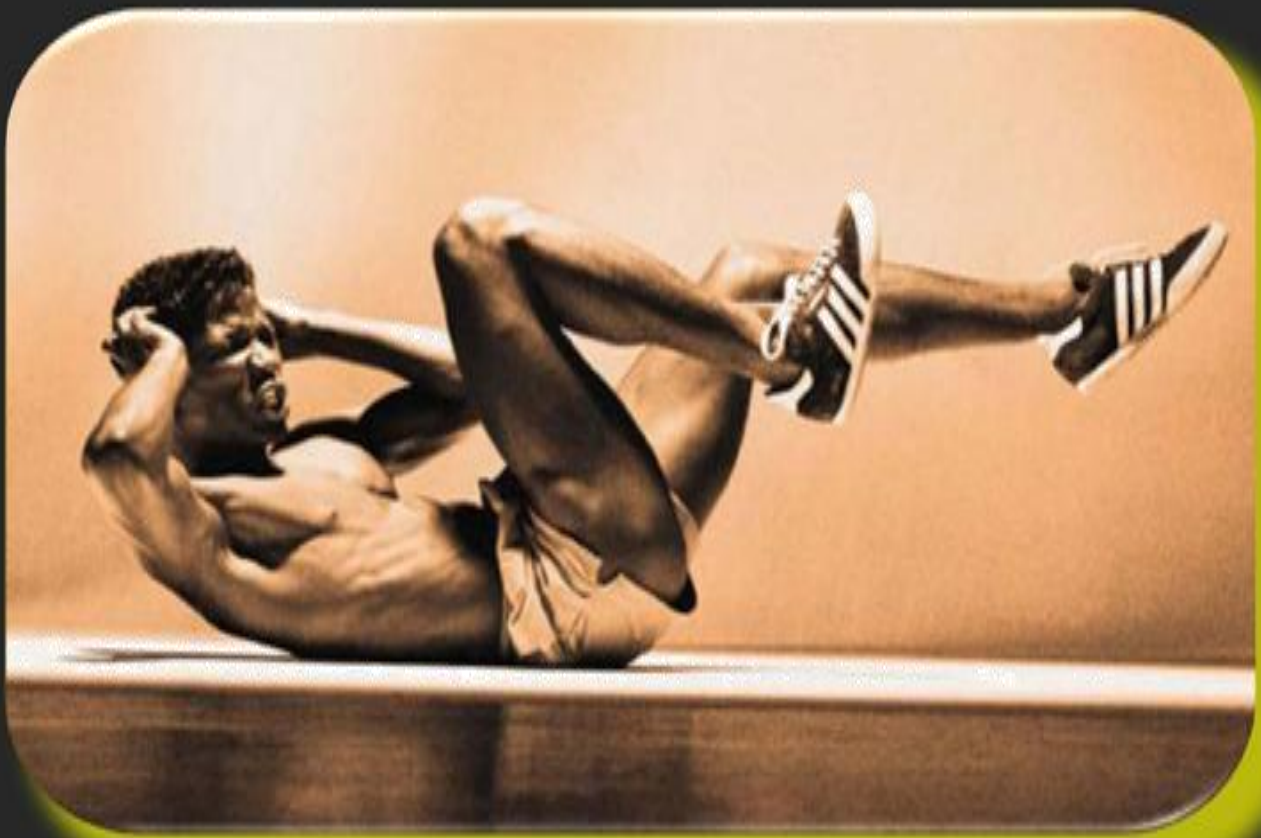


# Body Weight Basketball Training

*By: Jacob Hiller*



Below is a simple program comprised of elements of strength, quickness and sport specific movement patterns.

The exercises can be done anywhere, and don't require equipment.

If the exercises are too hard, use a reduced range of motion in order to work up to the full ability.

Read your copy of The Jump Manual to compliment your understanding of scientific training for explosive and well rounded athletes.

<b>Day 1</b>	<b>Depth Jumps</b> 3 x 10	<b>Lunge Jumps</b> 3 x 8	<b>Rim Jumps</b> 4 x 8	<b>Zig Zags</b> Side to side 3 x 30	<b>Sprints</b> 5 x 40yds
<b>Day 2</b>	<b>Stretch &amp; Recover</b>	<b>Core</b>	<b>HIIT</b>		
<b>Day 3</b>	<b>Off Day</b>				
<b>Day 4</b>	<b>Single Leg DeadLift</b> 3 x 15	<b>Pistol Squats</b> 3 x 10	<b>Single leg Calf Raise</b> 3 x 15	<b>Glute Ham Raise</b> 3 x 10	
<b>Day 5</b>	<b>Stretch &amp; Recover</b>				
<b>Day 6</b>	<b>Stretch &amp; Recover</b>	<b>Core</b>	<b>HIIT</b>		
<b>Day 7</b>	<b>Off Day</b>				

<b>Day 8</b>	<b>Depth Jumps</b> 3 x 10	<b>Chair Rockets</b> 4 x 8	<b>Lunge Jumps</b> 3 x 8	<b>Zig Zags Over &amp; back</b> 3 x 30	<b>Sprints</b> 5 x 40yds
<b>Day 9</b>	<b>Stretch &amp; Recover</b>	<b>Core</b>	<b>HIIT</b>		
<b>Day 10</b>	<b>Off Day</b>				
<b>Day 11</b>	<b>Single Leg DeadLift</b> 3 x 15 each leg	<b>Bulgarian split squats</b> 3 x 10 each leg	<b>Single leg Calf Raise</b> 3 x 15 each leg	<b>Glute Ham Raise</b> 3 x 10	
<b>Day 12</b>	<b>Stretch &amp; Recover</b>				
<b>Day 13</b>	<b>Stretch &amp; Recover</b>	<b>Core</b>	<b>HIIT</b>		
<b>Day 14</b>	<b>Off Day</b>				

## Depth Jumps

3 x 10.

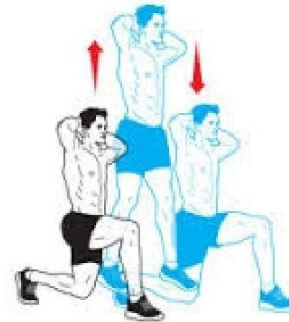
Step off a raised platform (8 to 12 inches) and land on the balls of your feet. Immediately explode up with as little ground contact time as possible.



## Lunge Jumps

3 x 8 Left and right = 1 rep

Starting in the lunge position, explode into the air, changing position while elevated so you land in the opposite lunge position. Do not let your knee hit the ground.

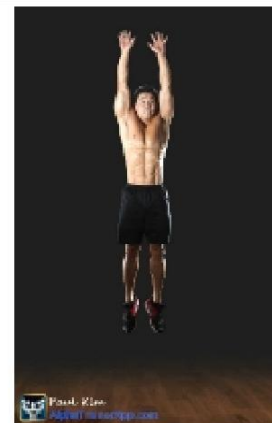


## Rim Jumps double & single leg

4 x 8

Standing flat footed, jump as high as you can, straight up. As soon as you land, jump again and repeat until 8 reps are finished. This exercise is plyometric so there is no pause between jumps.

Do set 4 on one leg, 8 reps per leg.



## Zig Zags aka Line hops

5 x 30 reps or 30 seconds.

Side to side version -

Standing on one side of a line. Hop over and back as fast as possible. Each over and back is 1 rep. Move forward as you hop.

Over & back version -

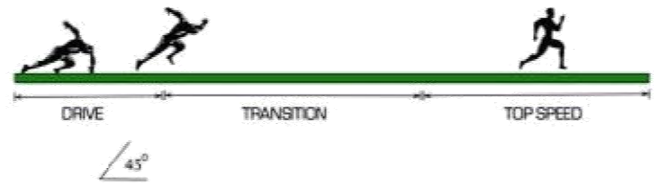
Face the line and hop over and back, staying stationary. Each over & back is 1 rep.



## Sprints

5 x 40 yds after thorough warm up.

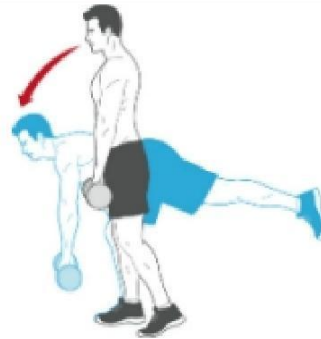
Measure 40 yards and mark the start & finish. Accelerate as fast as possible and maintain top speed through the finish.



## Single Leg Dead Lift

3 x 15 each leg.

Standing on one leg, rotate to a position where your upper body and non weight bearing leg are parallel to the ground. Hold for a few seconds. Raise back to a standing position.



## Pistol Squat

3 x 10 each leg.

From a standing (1 leg) position, squat down extending your free leg out in front. Keep your butt and free leg off the floor. Hold a few seconds, raise back up.



## Single Leg Calf raise

3 x 15 each leg.

Standing on raised platform on one leg, lower your body slowly until your heel is well below the rest of your foot. Hold a few seconds. Raise up as far as you can onto the ball of your foot.



## Glute Ham Raise

3 x 10

Kneel onto a pad on your knees with someone holding your ankles in place. With torso straight, lower yourself slowly until you are just above the ground. Pause and return to the upright position. If needed, you can use your arms to assist as you get closer to the ground. Strength should improve until you no longer need assistance from your arms.



## Chair Rockets

4 x 8

Place one foot on a chair or bench with the other foot on the ground. Explode up, pushing off with the chair leg (not the ground leg). While in the air, rotate so you land with the opposite foot on the chair. Immediately explode up again, rotating in the air back to the original position. Each right & left leg jump is 1 rep.



## Bulgarian split squats

3 x 10 each leg

Stand with one foot behind you on a bench. Squat down on your front leg, keeping your knee behind your toes. As you squat, your back knee will come down to the floor. Do not put weight on the back knee. Raise back up to the standing position. Keep your back straight throughout the exercise.



# Stretching

## **Miracle Static Stretches.**

When a muscle contracts or shortens, the antagonist muscle lengthens. If the antagonist muscle fails to lengthen properly this causes what I call “interference.”

When you execute a vertical jump there are several muscle groups that you don’t want to activate, AND the following static stretches will help those muscles to relax.

Static stretches have received a bad rep lately in forums but static stretches have many positive uses, including improving range of motion, tissue quality, muscle length, and blood flow.

These stretches help to extend the range of motion of the “triple extension” movement that is a key to being athletic and jumping higher.

They also help to free up the muscles that contract during long sessions in the classroom or the office.

Always perform stretching after warming up so the muscles and tissues are prepared to be lengthened. A warm up should have the body slightly perspiring.

### **Psoas stretch**

**Stretching the psoas lessens resistance during hip extension (a vertical jump movement).**

**Assume the lunge position**

- Tighten the back glute
- Drive your hips forward
- Lean back and twist
- Create the hip angle you seen in this picture.
- Hold the position for 20 seconds.
- You will feel the pull through your groin and over the front of your hip.



## **Anterior tibialis stretch**

Stretching the anterior tibialis lessens resistance when you drive flex your calf.

- 
- Sit on your heels.
- 
- Lean slightly back
- 
- Feel the stretch through your shins.
- 
- Hold for 20 seconds



## **Abdominal stretch**

This stretch facilitates spinal retro flexion (bending backwards) as well as stretching the psoas and activating the glutes.

Start from lying on the ground.

Place your palms above your head.

Contract your body into position.

Hold for 15 seconds



## **The Core**

At the center of every athletic movement you perform are the core muscles. If they're weak, you are losing a lot of power output, especially when you jump.

Your body should be like a full basketball transferring power through it, not like a flat basketball.

You can train your core every day if you wish. You can also add any of your own core exercises to this training program.



## **Core Static Holds aka Planks**

4 sets of at least 1 minute per side (front, left, right). 1 set is equivalent to a hold from the front and each side. Start in front, and switch directly to next position after 1 minute is over. If you cannot do 1 minute find your max and subtract 10 seconds. Each week add 15 seconds per side to this exercise.



## **HIIT – High Intensity Interval Training**

Elite Level Conditioning... You must have it or your game fades down the stretch like a peel and stick tattoo and so does your teams chances of winning.

The problem with most endurance type conditioning like Jogging is this...

### **Basketball is not a purely aerobic sport.**

Basketball players are constantly changing from aerobic, to anaerobic, and the creatine phosphate systems. This means players must develop not only their heart and ability to use oxygen, but also the energy systems of the muscles to recover and sustain high intensity movements.

### **I learned this the hard way.**

I prepared for my freshman year of college basketball by running cross country.

I thought I would be in great shape, but was surprised when not only my vertical leap was FLAT, but I also got winded. This was simply because basketball requires a different set of endurance and metabolic training, as well as training explosiveness separately.

At the level of sport specificity we also need to make sure the movements are 'grooved' and efficient specifically. So a good conditioning program will focus on sport specific movements even when working endurance.

So in order to raise your aerobic conditioning, metabolic and muscular endurance, AND explosiveness....

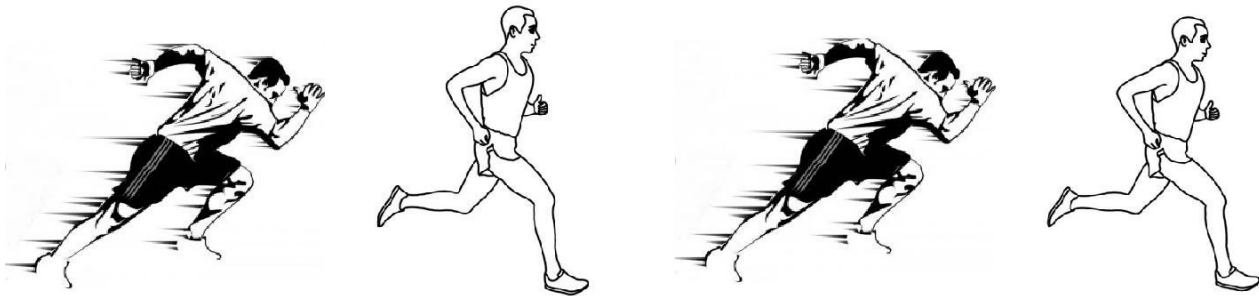
The formula is simple... ***Intense phase... Active Rest phase... repeat... then train your explosiveness and strength separately.***

Any intense activity can be used for the high intensity phase as long as it gets you working at or above 85% of your aerobic capacity.

Examples... ***Sprint 20 seconds... jog 40 seconds... repeat 8 times.***

***Jump for 20 seconds... jog in place for 30 seconds... repeat 8 times.***

Adjust the times and repeats for your current fitness level. (You want to be working at about 85% of max intensity. If you are slowing down during the intense phase, you're going too hard.)



[Link to Elite Game Conditioning drill video](#)

This drill can be done with or without a Basketball. If a ball is used, another player will need to rebound for the player performing the drill. They can then switch off and repeat the drill. As conditioning improves the drill can be repeated any number of times. Always stress proper Basketball fundamentals, form, posture etc...as fatigue sets in.

## **Intense phase...**

Sprint length of the court and perform layup.

Quickly move to and perform Jump shot at top of key, Left baseline, right baseline. Move to the post, set pick, roll to basket, jump for rebound.

Sprint length of the court to Free throw line.

In a solid defensive stance, slide to right side line and back. Break to the rim and jump for rebound.

Return to Free throw line. In defensive stance, slide to left sideline and back. Break to the rim and jump for rebound.

## **Recovery Phase...**

Slow jog (walk if necessary) entire length of court.

Slow back peddle (walk if necessary) entire length of court.

## **Testing your vertical**

It's a good idea to test your vertical at least once a week if not more often. Always test when you are well rested (after a day off) and are warmed up and loose.

Testing often will give you and your athletes a better gauge of progress and a better feel for if your athletes are over trained.

Standing flat footed measure how high you can reach up with one arm. This is your reach.

Now measure the highest point you can touch while jumping, using a standing and 3 or 5 step running approach. Take the best out of about 5 jumps. Always accelerate into the takeoff.

Subtract your reach from your best jump and the difference is your current vertical.



## **It's also a good idea to test your Broad jump.**

Stand on both feet just behind a line. Jump as far out forward as you can. You must land on both feet without falling for the jump to count. Measure from the line to where the back of your heel landed. This is your standing broad jump.



## ***Conclusion***

Use this simple program to build strength, increase quickness, and improve the movement efficiency of your athletes.

Use the condition portion to improve the sport specific stamina of your athletes.

Test your athletes frequently to measure progress, and assess whether they need more recovery. An athlete who is consistently moving slower, jumping lower, and is weaker is not getting the proper recovery to make athletic gains.

And most importantly have fun. Sport should be fun.

To your success,

Jacob Hiller