How To Fly High With Plyometrics

10 seconds remain in the game and your team is down by 1 point. The championship is on the line and the coach has called your number. As you slice and dice your way up the court through the barrage of defenders, you know exactly what you're going to do and nobody is going to stop you.

Seconds tick off the clock as you take that last step, then suddenly your body explodes off the floor. One defender flies by as you continue to rise. Their biggest defender steps up but that's not enough. As you soar high in the air, you swing your arms way back behind your head and with all your might you jam that ball with a force that could be heard outside the arena. Before the big guy realizes he has just been "posterized", the buzzer sounds and your team is the new champion!

All basketball players, or athletes for that matter, dream of being in game winning situations and coming out victorious. It's part of the competitive burn inside each and every one of us. To become that go-to guy like Michael Jordan or Kobe Bryant you must train like a champion. You must master the fundamentals and you must practice, practice, practice!

But to practice is not enough. You must run your drills at game speed. You must train as if every play is the most important play. Focus on doing the best you can at that very moment. But more importantly, you must learn to have fun on the court. There are tons of things you can do to improve your game and your skills. For the purpose of this report we're going to focus on one skill everyone dreams about: **taking your vertical to new heights so that you can dunk with style!**

"But how?", you ask. Having great jumping abilities is not something you have to be born with. Like any other "skill", jumping out of the building is a "skill" that can be developed. The easiest way to add inches to your vertical is to combine a strength training program with a **plyometrics** training program.

What is Plyometrics?

Power

What is **plyometrics**? It's a way to greatly improve the **power** of any movement you make. We would define power as the **combination** of speed and strength.

When it comes to resistance movements like running, jumping or bench pressing, the person performing the fastest would be considered to have the most power. So, adding the factor of **time** to speed and strength gives us the power aspect.

Contraction

Plyometrics involves the **lengthening** (eccentric contraction) and **shortening** (concentric contraction) of the muscles.

Example of **eccentric contraction**: When your pectoral muscle stretches during the downward movement of a push-up exercise, it has gone through an eccentric contraction. It is also said to have been "loaded".

Example of **concentric contraction**: As you push yourself up to complete the push-up, your pectoral muscle now goes through a concentric contraction as it shortens.

Energy Boost

As your muscles stretch (eccentric), they build up **energy**. Some of that energy gets lost as heat but some is stored in the muscle. Then, as the muscle shortens during a concentric action, that energy is made available to the muscle as an **extra boost**.

Again, when we talk about **plyometrics**, the key factor here is **time**. How fast can we get the muscle to contract after it's been stretched (eccentric contraction)? The extra energy boost we mentioned will be **lost** if the muscle isn't contracted right after it's been stretched.

To achieve the greatest force, or power, you must contract the muscle (after it's been stretched) in the **shortest possible time**!

This whole process we've described is most often called the "**stretch shortening cycle**" and is the main aspect of plyometric training.

Plyometrics in nature is a high intensity work out, so low reps and focus on recovery time are keys to your success with **plyometrics**.

Sample Training Program

The first thing you must do when designing a plyometric program to develop your vertical jump or that of your players, is consult your coach, trainer and/or doctor. The second thing you must do is measure the following abilities:

- 1. **Standing jump-and-reach.** Standing on both feet, reach as high you can on a wall or goal post; mark that height. Then jump off both feet and reach as high on the wall as you can; again mark that height. Now record the difference between the two marks.
- 2. *Jump from box.* Do a depth jump by stepping off an 18inch box. After you land, quickly jump and reach as high as you can on the wall; record the height of that mark.
- 3. *Three-step vertical jump.* Take three steps and on the last step (this should be your preferred foot) jump up and reach as high as you can on the wall; mark that spot.
- 4. **One-repetition maximum squat.** Determine the maximum amount of weight you can lift one time doing a traditional squat. Standing with your back to the bar, which is resting on a rack at shoulder height, lift the bar to rest on your shoulders, bend your hips and knees until your thighs are parallel to the floor and return to the top.
- 5. *Five-repetition/five-second squat* (a) 60% of body weight. Perform squats with a barbell holding 60% of your body weight. Attempt to do 5 repetitions in 5 seconds.

Tests 1, 2 and 3 will show what your current vertical jumping ability is and also give you the information to measure your progress by. It'll also show if there's a difference when you jump from one foot as compared to two feet.

Tests 4 and 5 will show whether you have adequate strength to embark on a plyometric training program. For example, if you could only lift 75% of your body weight for your one-rep max and it took you 7.5 seconds to do 5 reps of your 60% body weight exercise, this would tell you that strength training is more a priority than taking on high-intensity plyometrics.

There are many other factors in creating a plyometric work-out that is perfect for you. Your age, experience, strength, athletic ability and history of injuries are all important factors. Not to mention when you are training; is it off-season, pre-season or during season. The following is just an example. You must decide what is best for you.

Sample Work Out

Week #1

Monday, Wednesday, Friday: Weight Training Tuesday and Thursday: Plyometrics

- 1 x 10 two foot ankle jumps
- 2 x 20 side-to-side ankle jumps
- 2 x 20 hip-twist ankle jumps
- 2 x 10 rim jumps
- 2 x 20 alternating push-offs

Week #2

Tuesday, Wednesday (light), Friday: Weight Training Monday and Thursday: Plyometrics

- 3 x 10 front box jumps
- 2 x 10 rim jumps
- 3 x 10 two-foot ankle jumps
- 3 x 10 side-to-side ankle jumps
- 3 x 10 single leg push-offs

Week #3

Tuesday, Wednesday (light), Friday: Weight Training Monday and Thursday: Plyometrics

- 3 x 10 depth jumps (18 inch box)
- 3 x 10 side-to-side ankle jumps
- 3 x 10 standing jumps over barrier (18 to 24 inches)
- 3 x 10 single leg jumps over cone
- 3 x 10 rim jumps

Week #4

Tuesday, Wednesday (light), Friday: Weight Training Monday and Thursday: Plyometrics

- 3 x 10 depth jumps
- 3 x 10 standing jumps over barrier (18 to 24 inches)
- 3 x 10 alternating push-offs
- 3 x 10 lateral cone jumps (12 to 18 inches)
- 3 x 10 rim jumps

This is just a short example of what you can do. Notice that the first week weight training and plyometrics alternate, but in the weeks to follow there is at least two days between plyometric work-outs. It's very important to understand the importance of recovery time. As your training cycle (usually 8 to 12 weeks) progresses, your work-out becomes low-volume and high-intensity, so you should have more time between work-outs.

Exercises to Increase Your Vertical Jump

Two-foot ankle jump – Stand with your feet shoulder width apart and your body in a vertical position. Using only your ankles for momentum, jump repeatedly in place, making sure to extend the maximum range of your ankles with each jump.

Side-to-side ankle jump - Stand with your feet shoulder width apart and your body in a vertical position. Using both of your feet, jump from one side to the other (2 to 3 feet apart) using only your ankles. Keep your feet shoulder width apart and make sure to land on both feet simultaneously.

Hip-twist ankle jump - Stand with your feet shoulder-width apart and your upper body in a vertical position. Jump up and twist your hips, turning your legs to the left. Jump again, this time turning your hips back to the front. Now repeat to the right. All the time, your upper body does not turn, only your hip and legs.

Split squat jump – With your feet far apart, front to back, bend your front leg 90 degrees at your hip and 90 degrees at your knee. Jump up as high as you can hold the squat position, land in the same position and immediately jump again. Use your arms to help achieve maximum lift.

Standing jump-and-reach – Stand with your feet shoulder-width apart. Squat slightly then jump as high as you can, using your hands to reach for a target.

Standing jump over cone – Stand with your feet shoulder-width apart. Bending only at the hips, bring the knees up to jump over the cone. Keep your body and knees in a straight line.

Standing triple jump – Stand with your feet shoulder-width apart, about 3 to 6 meters from a sand pit. Push off with both feet and extend through the hips so that you land on one foot. Push off from that foot to land on the other foot, then jump from that foot extending your feet as far forward as possible and land with both feet in the pit.

Rim jump – Stand under the basket with your feet shoulder-width apart. Jump repeatedly, alternating hands as you reach for the rim or board. The key is minimal time on the ground. The jumps should be quick and at least as high as the one before.

Double leg jumps – Stand with your feet shoulder-width apart. Squat down and jump as far forward as you can. Quickly jump forward again. Use your arms to aid your jump. Do 3-5 jumps.

Single leg jump – Stand on one leg. Push off, jumping forward and landing on the same leg. Use a strong leg swing to increase jump length and strive for height. Quickly jump again and continue for 10 to 25 meters. Switch to the other leg.

Single leg push-off – Stand on the ground and place one foot on a box (6 to 12 inches high) with your heel close to the edge closest to you. Push off of the foot on top of the box to gain as much height as possible by extending through the entire leg and foot. When you land you'll be back in the starting position, then jump again. Swing your arms for height and balance.

Alternating push-off – Stand on the ground and place one foot on a box (6 to 12 inches high) with your heel close to the edge nearest to you. Push off of the foot on the box to gain as much height as possible by extending through the entire leg and foot. Land with the opposite your feet reversed. Jump again and reverse. Swing your arms for height and balance.

Lateral cone jumps – Stand with your feet shoulder-width apart at the end of a line of cones (3 to 5 lined up 2 to 3 feet apart). Jump with both feet over each of the cones. When you get to the last cone, jump it and land with your outside foot only. Quickly jump back over and continue in the reverse direction using both feet again. Then repeat again with your outside foot again. Focus on form and do not pause when changing directions.

Front box jump – Stand facing a box (12 to 42 inches) with your feet shoulder-width apart and your hands behind your head. Jump up and softly land with both of your feet on the box. Step back down and repeat.

Depth jumps – Stand on a box (about 12 inches) with your toes close to the front edge. Step out from the box and drop down, landing on both of your feet. Quickly spring back up, keeping the ground contact as minimal as possible.

Know Your Limits

Don't try to rush it! The right work-out will show you amazing results almost immediately. I use plyometrics in my work-out and even at 36 years old I can still "ball" with the young guys. Read and study plyometrics as well as weight training programs. Dr. Donald A. Chu has a book called "Jumping Into Plyometrics" that explains plyometrics as well as giving sport specific work-outs. Some other must reads are "High-Powered Plyometrics" by James C. Radcliffe and "Training for Speed, Agility, and Quickness" by Lee E. Brown. Adding plyometrics to your training program is guaranteed to help you take your game to a whole new level!

Speaking of taking your game to whole new level, Click Here!

We hope this report has been helpful to you and your team. We know that with this information you'll definitely play "above the rim"!

All the Best,

Matt & Dave

By the way, if you'd like to use your love of basketball as a way to earn extra income, email us at <u>mailto:thebestbizopp@aweber.com</u> for our Free Special Report, "The Best Biz Opportunity You Can Find: How To Live The Life You Deserve!"