

Plyometrics: It's For Everyone

by Mike Rangel

Noted plyometrics trainer Mike Rangel demonstrates some basic plyometric drills that volleyball players of all ages can use to bolster their games.



PHOTOS BY MIKE RANGEL

Just what exactly is plyometric training? Plyometrics or “shock method training” is the term now applied to exercises that have their roots in Russia, where they were first known simply as jump-training drills. Interest in this jump training increased in the early 1970’s as East European athletes emerged as powers on the world sport scene. The actual term “plyometrics” was first coined in 1975 by Fred Wilt, one on America’s more forward-thinking track and field coaches. Based on Latin origins, plyo + metrics is interpreted to mean “measurable increases”. These seemingly exotic exercises were thought to be responsible for the rapid competitiveness and growing superiority of Eastern Europeans in track and field events. Plyometrics rapidly became known to coaches and athletes as exercises or drills aimed at linking strength with speed of movement to produce power. Plyometric training became essential to athletes who jumped, lifted or threw. In Russia during the 1960’s and 1970’s, this “shock method” of training was responsible for the myth that only athletes that could squat 2.5 times their body weight could begin plyometrics. Rumors abounded of athletes who pulled tractors while running, ran uphill

wind sprints while holding large bags of flour, or athletes who could be seen in the woods jumping off 36-inch high wood stumps, landing on the ground and immediately jumping onto the next wood stump (while holding a 15 pound bag of sand in their arms). While these intense and demanding drills are considered plyometrics, so is something as simple as an 8- year-old girl playing “hopscotch” out on the sidewalk. Over the past seven years I have trained over 20,000 athletes (in groups of 12 – 120) representing 16 different sports and ranging in age from seven to 63. Every athlete I have trained has two things in common. First, they did the exact same low-impact PlayoCity plyometric workout. And secondly, every athlete saw a dramatic increase in their foot speed, quickness and jumping ability (an average increase of four to six inches). The following drills are time-tested and will allow every athlete an intense, yet safe entrance into the world of “shock training” now called plyometrics. These are some of the drills that were used to add 3-4 inches to AVP legend Karch Kiraly’s jump this past season.



DRILL 1 – KNEES TO CHEST

Start in a push-up position (first jump of each set only) on the grass. Explode up quickly jumping as high as you can on each jump and bring your knees up to your chest. All jumps should be done consecutively and in place.

Keys: Jump softly pretending each time you touch the ground that you are touching hot coals so you spend little time touching the ground as possible.

Reps: 2 sets of 10 jumps. 30 seconds of rest between each set.



DRILL 2 – ANKLE HOPS

Start by laying flat on your back (first jump of each set only). Explode up quickly and jump as high as you can on each jump. At the apex of each jump, do a pike motion utilizing the stomach so that your feet move 3-6 inches in front of your body on each jump before landing back on the ground for the next jump. All jumps should be done consecutively and in place.

Keys: Barely bend at the knees. Pretend you are jumping up and down on a pogo stick. Jumps should be done as quickly as possible.

Reps: 2 sets of 10 jumps. 30 seconds of rest between each set.



DRILL 3 – CONE HOPS/BOTTLE HOPS

Stand beside an 8-12" cone or bottle. Jump side to side (with feet together) over the cone as quickly as you can, bending the knees as little as possible.

Keys: Jump side to side barely bending the knees except when in the air over the bottle or cone. Jump softly so you can barely hear your feet touch the ground.

Reps: 2 sets of 10 jumps. 30 seconds of rest between each set.



DRILL 4 – CONE HOPS/BOTTLE HOPS WITH LOAD JUMP

Note: A load jump is a jump similar to skipping rope.

This is the same drill as the cone hops, except you jump up 2 to 3 inches in the air and come down and then jump to the other side of the bottle or cone. Repeat.

Keys: The load jump needs to be 2 to 3 inches high. Jump over the bottle or cone as soon as you touch the ground.

Reps: 2 sets of 20 jumps. 30 seconds of rest between each set—the load jump counts as a jump.



DRILL 5 – RUSSIAN FREEZES

Start in a half-squat position. Utilizing the arms, jump out for height and distance landing in the same position you started in. Hold the position for two seconds and then repeat the jump.

Keys: Use the same arm swing as you would when attacking a volleyball. When you freeze positions, pretend you are sitting on a bench or chair.

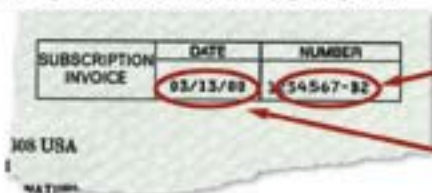
Reps: 2 sets of 6 jumps. 30 seconds of rest between each set.

Final notes: The following plyometric drills should be done twice a week during the off-season and once a week during the season with 48 hours of rest before competition. No equipment is needed except a plastic bottle or cone and a small area of grass. Athletes can add one set to each drill after 8 to 12 workouts.



About the Author: Mike Rangel has been studying and training athletes for over 20 years. As a men's volleyball player at Long Beach State, Rangel, through his own research and efforts, increased his own vertical jump from 36" to an unheard of 42" in a short six-month period. Seven years ago, Rangel founded Plyocity, a national chain of plyometric workout facilities where he has coached over 20,000 athletes in that span. Rangel has also helped his son Stephen, a sophomore outside hitter at Brigham Young University, increase his vertical to 43" and his vertec leap to 11'11". Rangel is the current exclusive plyometric trainer of AVP stars Karch Kiraly and Misty May. For more information on Plyocity or to order the complete PlyoCity Video Workout visit www.plyocity.com or e-mail Mike Rangel at: mrangel@plyocity.com.

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