

**BIGGER
FASTER
STRONGER**

PLYOMETRICS

**YOUR
TOTAL
PROGRAM**

By Dr. Greg Shepard

Plyometrics are a little intimidating to some coaches. It is a new training regimen to most football, basketball and baseball coaches. Plyometrics have been used by the Europeans, Russians, and track athletes for years. What are they? Do they have merit? What is involved? These are common questions.

As we become more sophisticated and scientific in our total training program, we learn that plyometrics can have great value. An athlete who works super hard in the weight room doing squats, heavy benches and dead lifts while neglecting all other forms of training is not going to reach his potential. Plyometrics can add the icing on the cake in the speed, jumping and explosive-ness department. For the lineman who is 6'4", 270 pounds and benches 450, squats 600, VJ's 24 and runs only 5.0, something is missing. Plyometrics can move the VJ to 30 and improve the 40 to a respectable 4.7. For the running back who runs 4.6 and has average lateral movement, plyometrics can make the difference between good and great.

Frank Costello, in his book "Bounding To The Top," states, "The athlete stores kinetic energy while descending and converts it to potential energy for the concentric contraction required to respond immediately. The myostatic or stretch reflex, makes this reaction possible." Stefan Fernholm shown here states, "Plyometrics have played a major role in getting my 40 yard dash down to 4.25 and my vertical jump to 39 inches at a bodyweight of 270 pounds."

Simply put, plyometric training involves maximum explosive contractions as quickly as possible. Your feet spend as little contact time as possible with the ground or floor. When you jump up, do so with maximum effort. When you bound for height or distance, it's all out. **YOU ARE GOING TO TEACH YOUR BODY HOW TO USE IT'S STRENGTH. YOU ARE GOING TO BECOME EXPLOSIVE!**

How often do I do plyometrics: 2 times per week.

How long does a workout take: About 15 minutes.

How do I begin: With 25 contacts per workout.

The word contact is like a rep in weights. A beginner might do 6 all out vertical jumps, 6 all out standing long jumps, 6 side hops and 7 medicine ball throws. A very advanced athlete like Stefan might have 100 contacts per workout and include bounding and depth jumping. It should be noted that depth jumping is an advanced plyometric. Only very strong athletes with less than 10% bodyfat should attempt the illustrated depth jump of Stefan. For a lineman type athlete, depth jumping can cause severe stress to the knee joints.

There are many different kinds of drills or exercises that can be done. One legged vertical jumps, explosive push-ups, straight legged hops, one legged bounding, etc. The critical coaching point is the number of contacts involved during workouts.

It is important to test the vertical jump and standing long jump twice a month. Record each best effort. As athletes improve, this will give positive feedback about all their hard work in the total program. I strongly recommend our AccuVert to measure the vertical jump. It's simple, easy to use and very accurate. The thing I like about it is the fact that kids can easily measure themselves.

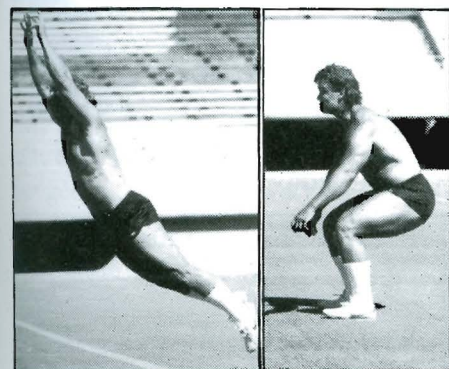
For further information on plyometrics, I recommend the following: Frank Costello's book featured on page 88, our plyometric video featuring Stefan (see pages 12 and 13) or attend/sponsor a speed and plyometric clinic with Stefan or Sam Varner (see pages 73-74).



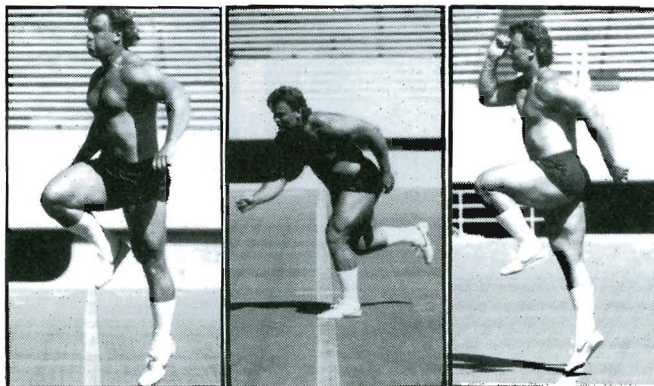
**JUMPING
OVER HURDLES**



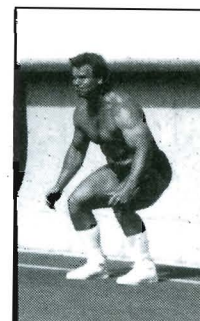
SIDE HOPS



STANDING LONG JUMPS



BOUNDING FOR SPEED, HEIGHT OR DISTANCE



**ADVANCED
DEPTH JUMPING 89**