

WEIGHT TRAINING FOR THE

POLE VAULTER

by

CHUCK COKER

(Chuck Coker, head track coach at Occidental College, Los Angeles, is an avid exponent of weight-training. He believes that background weight training for building maximum muscular power and strength is the quickest, surest way of achieving physical efficiency in athletics and sports. His methods and teachings produced such men as Bob Gutowski, Al Cantello and many others.)

The use of weights for the development of the pole vaulter is very essential if he wishes to speed up his progress in this complex event. There are about 38 complete muscle movements and coordinations involved in executing a good vault. Therefore, it doesn't seem possible that a man can have all the strength, stamina, and coordination without additional supplementary physical conditioning.

Vaulters for years have climbed ropes, worked on horizontal bars, done push-ups, chins, sit-ups, leg raises, etc. All of these are excellent and should still be continued. We have found from experience, however, that a pole vaulter can improve much faster through weight training. In this article we shall not endeavor to go into pole vaulting techniques because space does not permit such a long article. Therefore, we shall confine our suggestions to the various areas of the body that are so directly involved in conditioning one's self for this event. It is safe to say that no part of the body can be overlooked in training. Bob Gutowski, Occidental College, did 12'#" during his senior year in high school. With the help of weights did 15'9 3/4" in college.

The important muscle groups involved in vaulting are first the hands, arms, and shoulders. The recommended exercises are as follows:

1. Wrist Curls--5 set of 10 to 15 reps for hand and wrist strength.
2. Two Hand Press--5 sets of 5 reps--done rapidly with a narrow grip.
3. Two Arm Curls--2 to 3 sets of 10 reps.
4. Bench Press--2 sets of 10 reps--narrow grip hands together.
5. Bent Arm Pullovers--2 sets of 10 reps--do on a bench and lower weight to the floor.

The next important area of the body is the mid-section or abdominal muscles. These muscles should be in excellent condition and they are extra important because they bring the hips, knees, legs and feet into the proper position by contracting very powerfully during the swing of the vault. The recommended exercises in this group are:

In Season
Training Program for the Mile & 880 yd. Run

Mile Program

- Mon. -- 8, 440's run in the following manner--start out slightly slower than race pace and continue to run faster on each following lap; i.e. 66, 65, 64, 63, 62, 61, 60, 59. As you get in better shape you should have a drop down to 53 or 54 seconds on the last one. At first a 440 interval; later when you are in better shape a 220 interval.
- Tues. -- 20, 220's run as follows: 1st 10 at about 32 seconds; next 5, 220's at 30 seconds; the last 5 at 28 seconds. If you are not ready to go at this pace move your times up but run the same pattern. "220 interval in between each 220"
- Wed. -- 3, 880's run as follows: Each following 880 should be faster than the preceding one (this is very important). You walk a 440 in between each one allowing about a five minute interval. The last 880 should be faster than your race pace.
Alternate workout for Wed.: 1100 yds at race pace followed by a 650 faster than race pace... 3, 330's -- run as follows: 3/4 speed, 7/8 speed, and all out on the last one.
- Thur. -- 30 minutes of easy jogging and running; concentrate on relaxation and arm swing, and ankle push.
- Fri. -- Rest
- Sat. -- Competition
- Sun. -- 1½ to 2 hours of walking paced fairly even or easy jogging.

880 Program

- Mon. -- 6, 440's -- run in the following manner: concentrate on a one second interval drop on each following 440. At first do a 440 interval jog in between each one. Then cut this down to a 220.
- Tues. -- 4, 330's -- run in the same manner as above.
- Wed. -- 3, 660's -- run in the same manner with at least a one second drop on each one. A 440 interval walk in between.
Alternate program for Wed.: 10, 220's run on progressive drop system; i.e.: 29, 28, 27, 26, 25, 24, 23, 22. --Start at 33 or 34 seconds.
- Thurs. -- 30 minutes easy jogging and relaxed running.
- Fri. -- Rest Sat. -- competition Sun. -- Walk for 1½ to 2 hours.

Note: -- Sit-ups should be done every day as well as push-ups. Increase the number you can do as the season goes on.

Training Program for Distance Running

- Mon. 20, 220's -- 110 yd jog in between. Concentrate on hip roll and ankle push; also develop a relaxed arm swing.
- 1st 7 at $\frac{3}{4}$ speed; 2d 7 at $\frac{7}{8}$ speed; next 6 at $\frac{9}{10}$ speed; last one all out.
- After 20 minutes of easy jogging and walking, do 50 sit-ups and 50 push-ups.
- Tues. --40, 110's run at $\frac{3}{4}$ to $\frac{7}{8}$ speed. Run the turns and shuffle the 110 yds on the straight away.
- 15 minutes later do 50 push-ups and 50 sit-ups.
- Wed. --40, 220's -- 110 yd. walk in between each 220.
- The first 30 are run at $\frac{3}{4}$ speed and in the last 10 you try for a time interval drop; i.e. 36, 35, 34, 33, 32, 30, 29, 28, etc!
- Thur. --Fartlek -- at least 5 miles.
- Fri. --Rest. Rest. Rest.
- Sat. --Competition.
- Sun. --Loosen up easily -- walk for $1\frac{1}{2}$ hours. Concentrate on ankle push.

Note: Keep a notebook of your workouts and note the conditions--warm, windy, cold, etc. Also record your times and distances. In all your running concentrate on ankle push, hip roll, arm swing. Learn to run relaxed without tension. When you are finishing the last part of every workout learn to make the transition from your running form into a sprint, which will require a more vigorous arm swing, more lean, increased ankle push.

An additional exercise that you can do to develop stamina and mental toughness is as follows: On Tuesday and Thursday, run in place at between 100 and 120 counts per minute for five minutes. Immediately at the completion of the exercise after taking one breath only, see how long you can hold your breath. Keep a record in your notebook of the time. This exercise will develop mental toughness.