

“Pre-competition Training for Hammer Throwers”
Legkaya Atletika, 12: 12-13, 1979
A. Bondarchuk

The main purpose of pre-competitive training is to facilitate realization in competition, of one's present level of sports form and of performances already attained in workouts.

The duration of the pre-competitive stage of training has not been delineated precisely in scientific literature up to this time. In practice, however, it usually doesn't exceed 5-10 days. In most cases such a duration not only is conducive to successful competitive performance, but also lays the groundwork for preserving a certain level of form and promotes a further increase in it (if such a goal is set by the athlete).

The competitive result alone may serve as a criterion for evaluating pre-competitive training, with the stipulation that it be compared with the best training achievements in a specific period of training. In competitive conditions results should be somewhat higher than in training conditions; or, in the worst case, be a duplication of it.

Competitive effectiveness depends upon many factors related to the training process: training load volume and intensity, alternation of workouts that differ in form and content, the number of 'passive' and "active" rest days, and the combination of means and methods applied over the course of the pre-competitive training stage. Individual characteristics play a key role here. Specifically, the individual reaction to the applied combination of training affects over the course of the pre-competitive stage of training. By suppressing or stimulating the activity of the athlete's body, these reactions influence competitive performances.

In applying a specific battery of training influences over the course of the pre-competitive training stage, we work out a "mosaic" of complicated conditioned-reflex interrelationships between the excitatory and inhibitive central nervous system processes. The presence of a positive or negative peaking at the moment of competition depends on it. To be sure, control of positive and negative interrelationships in sports activity is an extremely complex process, which requires a scrupulous approach to the selection of applied means and methods of training, alternation of workouts, and a specific relationship between volume and intensity. Controlling them means opening the way for consistent performance in competition of any scale.

During the last training days before competition, a thrower with an extremely excitable nervous system should sometimes not reduce training volumes, but even increase them somewhat. A high-volume, medium-intensity workout the day before competition has a favorable effect on such athletes.

Hence, when using the identical scheme of pre-competitive training, different athletes may achieve a different effect. In some cases there will be a significant increase in competitive performances vis-a-vis training; in others, however, competitive performances will be below that seen in training.

As an example, here are two variants of pre-competitive training of the author in the 1974 season.

Variant 1

1st day. Rest.

2nd day. AM. Hammer throwing: 30 throws. PM. Weight work: 5 tons.

3rd day. AM Hammer throwing: 30 throws. PM. Weights: 5 tons.

4th day. Throwing weights: 100 throws. Jumps: 50.

5th day. Rest.

6th day. AM. Hammer throwing: 30 throws.

7th day. Throwing weights: 100 throws. Jumps: 50.

8th day: Rest

9th day: Weights: 5 tons.

10th day: Competition

Variant 2

1st day. Rest.

2nd day. AM. Hammer throwing: 30 throws. PM. Weights: 5 tons.

3rd day. Throwing weights: 100 throws. Jumps: 50.

4th day. Rest.

5th day. AM. Hammer throwing: 30 throws. PM. Weights: 5 tons.

6th day. AM. Hammer throwing: 30 throws. PM. Weights: 5 tons.

7th day. Throwing weights: 100 throws. Jumps: 50.

8th day. Rest.

9th day. Weights: 5 tons.

10th day: Competition.

When the athlete felt good during workouts, the second training variant gave the greatest increase in competition (plus 5 meters as compared to the best training accomplishment). When the athlete felt poor, however, the first variant was more effective (plus 3-4 meters).

Use of the second variant in the first case - and the first variant in the second case - at separate moments was not only accompanied by an increase in competitive results vis-a-vis training, but sometimes there was a significant decrease of 2-3 meters.

An individual approach to formulating pre-competitive training in no way means that it is necessary for the athlete to always use the same principal scheme. As the positive experience of many athletes shows, it can be changed not only as the athlete gets older, but in accord with the training in a specific annual cycle. The number of workouts, their volume and intensity, etc, has a substantial effect.

Important elements of pre-competitive training are the following: observance of time schedules, creation of training situations that are similar to competition, observance of competitive throwing rules, use of standard implements, selection of specific tactical concepts, elaborated and tested during the training process.

Hence, competitive effectiveness depends heavily on an optimal correlation of volume and intensity of the training means applied during the final days, and especially the week of workouts prior to competition. To be sure, it is necessary that the athlete objectively assess his possibilities at a given interval of time, set before himself realistic goals, and possess a sufficiently high level of necessary motor qualities and the appropriate technical mastery for realization of his goals.

There are many directions to go in selecting principal schemes of pre-competitive training.

The first consists of a reduction of both training load volume and intensity; the

second, intensity decreases at the same time that volume increases; the third, training load volume and intensity remain the same; the fourth, volume is reduced while intensity is increased; the fifth, the number of workouts is decreased by means of increasing the number of passive rest days, but the volume and intensity in the remaining workouts remain as before. The possibility of other directions cannot be ruled out. In order to illustrate this thesis, we will present as examples the weekly training cycles of some of the top hammer throwers for the pre-competitive period. By analyzing these schedules and testing them during the course of the training process, athletes will be aided in finding their own variant of pre-competitive training.

The weekly training cycle of R. Klim in 1968 before setting a USSR record of 72.36 m:

April 21. Rest.

April 22. Hammer throwing: 25 throws, 5 of which were done for maximum distance (69-70 m).

April 23. Weight work: cleans, pulls, squats.

April 24. Rest.

April 25. Hammer throwing: 16 throws at half effort (63-67m). Throwing weight: 16 kg for 25 throws.

April 26. Rest.

April 27. Competition - 72.36.

Weekly training cycle of A. Bondarchuk in 1969 prior to setting a world record of 75.48:

October 5. Rest.

October 6. Hammer throwing: 30 throws, of which 6 were for maximum distance (72-74 m).

October 7. Weight work: snatch, clean, squat, trunk twists. Total volume: 10 tons.

October 8. Hammer: 30 throws, of which 6 were at 100% effort (7-73 m).

October 9. Rest.

October 10. Same as October 7.

October 11. Rest.

October 12. Competition - 75.48m.

The Weekly training cycle of A. Bondarchuk in 1972 prior to setting a USSR record of 75.88:

September 12. Throwing weights: 90 throws. In-place jumps: 50.

September 13. Rest.

September 14. AM. Hammer throwing: 30 throws, 5 of which were for maximum distance (71 - 72 m). PM. Weight work (10 tons) snatch, trunk twists, cleans, squats, forward trunk bends.

September 15. Throwing weights: 90 throws. In-place jumping: 60 jumps.

September 16. Rest.

September 17. Weight work (10 tons) : snatch, clean, trunk twists, squat.

September 8. Competition - 75.88.

Weekly training cycle of Olympic Champion Y. Sedykh.

July 20. Rest.

July 21. AM. Hammer throwing: 30 throws. PM. Weight work: 6 tons.

July 22. AM. Hammer throwing: 30 throws. PM. Weight work: 5 tons.

July 23. Rest.

July 24. AM. Hammer throwing: 30 throws. PM. Weight work: 6 tons.

July 25. AM. Hammer throwing: 30 throws. PM. Weight work: 5 tons.

July 26. Rest.

July 27. Qualifying trials.

July 28. Main competition.