

Types of Training by Julian Hopkins (Former Nat Event Coach)

Talking to many walkers I get the impression that many of them have a very small repertoire of training sessions. They repeat certain sessions a number of times each week and frequently repeat a week's training over and over again. Of course there will always be some duplication of sessions even during a week but I believe that many walkers train in a way which is far too repetitive. This can stifle a walker's progress because it produces a stereotyped reaction to training. Training sessions must be varied in an interesting and purposeful manner. Some sessions must be a real challenge to the walker if he is to develop his physical abilities and will- power to the full. Other sessions, will of necessity, present less of a challenge to allow for the recovery of the body. For the present, I am not so much interested in how the intensity and duration of sessions can be varied - although this is very important - but in the actual type of training undertaken. Coaches and physiologists have argued for years about the advantages of one system of training over another. We have had fartlek, interval training, LSD (long slow distance), repetition training etc. This is not the place to examine the physiological effects of each of these types of training. Suffice to say that although they all improve the ability of the body to absorb and use oxygen, each one (probably) has special advantageous effects of its own. It seems unwise, at the present state of knowledge, to use one or at the most two training systems to the exclusion of all others. Using a number of systems also helps to keep the walker mentally fresh, an important factor. If we examine endurance training, we can see that it can be sub-divided as follows:- Now let us look a little more closely at each of these training methods.

1. **DURATION METHOD** This is continuous, even pace walking usually lasting at least one hour and sometimes up to five hours. The emphasis is on the duration of the session but the walking must be fast enough to train the body's oxygen uptake effectively. This means a speed of about 85-90% of race pace for the distance being covered. For example, a 1hr 40 min 20 km. walker would cover this distance in 1hr 50 min - 1hr 55min. This type of training is frequently used and is very effective in providing a good background of general endurance for all walkers. Its disadvantage lies in the fact that it is easy to walk too slowly in such prolonged training. Unless the pulse rate is kept around 140-160 beats per minute, the body is not being forced to adapt at the best rate. So it is a good idea for walkers to train together if this ensures that the pace remains high enough. Moderately hilly courses are also useful in raising the work load from time to time. It does not need much of a hill to raise the pulse rate considerably.

2. **COMPETITION METHOD** This is very similar to the duration method except that the speed is now race pace or very close to it. Consequently, the distances covered will usually be below racing distance. This method includes time trials and training 'races'. In the latter, walkers may be handicapped on a time basis in an attempt to approach competition conditions. For advanced walkers, 3 and 5 km races can be included here because they are usually undertaken as training races to improve speed. This training method is excellent practice for races but, by its very nature, will be used sparingly.

3. **CHANGEABLE METHOD** Again this is continuous walking but now the pace is varied in a pre determined way. As an example, a walker could vary the pace every kilometre, walking one in 5 minutes, the next in 6 minutes and so on for 20 km. The stretches of fast and slow walking need not be of equal length. The above session could be improved eventually to 3 km in 15 minutes, 1km in 6 minutes etc. for 20 km. A track is the most convenient place to do this type of training but a road circuit might prove to be a more viable proposition for many walkers. This type of training is not easy due to the constant change of rhythm but it is excellent for producing pace judgement and endurance at race pace (specific endurance).

4. **FARTLEK METHOD** Fartlek is a Swedish - word meaning 'speed—play'. It is a type of training made popular in the 1930's by Forsta Holmer in which runners took to the fields, paths and woods and ran as they pleased. They varied the pace according to the terrain, the gradient and how they felt at the time. Obviously walkers can carry out similar session on the road varying the pace at will. Experienced walkers can use this type of training to good effect especially for recovery from demanding sessions on the track. For the less experienced, this type of training can often degenerate into a lot of slow walking punctuated by a few short accelerations. Such walkers usually need more planned training, until they become more disciplined.

5. **REPETITION METHOD** Together with the duration method, this is the most frequently employed training method in walking today. Basically, a fraction of the racing distance is repeated a number of times with a period allowing almost complete recovery between each repetition. The speed of the repetition is usually about race pace. A variety of distances can be used in repetition training but usually they fall between 800 and 5000m. The lower limit is set by the fact that to train the body's oxygen uptake, the work period should be at least 3-4 minutes. As an example, consider a 20km walker with a best of 97 min. who plans to improve to 95 min. He needs a speed of 4.45 per kilometre to achieve his target. He could attempt session like 5 x 2 km in about 9:30 with 4 minute recoveries or 3 x 3km in about 14:15 with 6 minute recoveries. Provided this recovery allows the next repetition to be completed at the target speed it is long enough. This is a demanding training method but excellent for producing specific endurance and pace judgement. A track is the best place for repetition training but a road circuit of known length could be used.

6. **INTERVAL METHOD** Many walkers talk about doing 'interval training' but in fact this method is rarely used in race walking today. Interval training really consists of intensive work periods of 30 - 90 seconds followed by short recoveries of not more than 90 seconds. In the work periods the pulse rate should reach to within about ten beats of maximum and should return to about 120 beats per minute in the 90 seconds of recovery. At these high speeds a great deal of energy for motion comes from the production of lactic acid in the muscles. This produces fatigue and discomfort. The short recoveries do not allow much of the lactic acid to be removed either. Although it plays an essential part in middle distance runners' training, interval training is inappropriate for race walking because the production of lactic acids for energy is of little importance in all but the very shortest races. If a walker wants to work on his speed, he should walk very quickly over short distances (say between 200 and 800 m) but have long recoveries so that fatigue does not interfere with his speed. This of course is not interval training.