

#### METHODS AND COMPONENTS OF MIDDLE DISTANCE TRAINING



This is a script summary from the video clip.

The middle distance runner must undertake a variety of training types in order to develop the necessary qualities such as speed, efficiency, aerobic capacity and lactic acid tolerance. The variety in venues and training environments is also a key component in keeping the runner mentally fresh, as the tough training schedules can be as mentally gruelling as they are physically.

In this clip we will detail different training methods and philosophies that may be used by the middle distance coach. It must be remembered, particularly at school level, that not all methods can be used simultaneously, and the coach will need to decide which is most suitable on the basis of the athletes he or she is working with.

#### **Long Runs / Endurance Training**

Six to eight weeks of long runs of up to 5km, performed 2-3 times a week will cause the circulatory system to improve, increasing blood flow to the muscles. An increase in blood flow means that more oxygen will travel to the body systems. The more oxygen that is available to the athlete, the greater will be the amount of work that can be produced aerobically, without incurring lactic acid build up.



However, leg speed can be negated by an excessive focus on only long runs. Including fartlek sessions into this period of training will assist in maintaining aerobic gains without damaging speed qualities. Long runs are a core component of all middle distance programs.

#### Tempo runs

Tempo Runs are timed runs totalling about 12min for school aged athletes. These are slower than race pace but faster than long slow runs. Tempo runs build anaerobic and aerobic endurance.

The cardiovascular system will not be as well trained compared to doing long runs only, but good results can be obtained using this training method.

Rather than maximum pace, these type of runs are conducted at a controlled pace, which is maintained by monitoring either heart rate or times recorded for the distances. At this sub-maximum pace, the athlete should be able to concentrate on rhythm and good running form.

#### **Fartlek**

The Fartlek can be a combination of jogging, sprinting, striding, uphill and downhill running. The tempo of the run is changed while a certain distance is covered. The Fartlek is usually time-based and the athlete will run continuously for a set time between 8-15 minutes, surging for periods ranging from 20 seconds to several minutes. This type of training covers every energy system. It also gives the athlete the freedom and change of pace during a run that is so vital to middle distance training.

#### **Interval training / Speed Endurance**

Interval training consists of running repeats of a certain distance such as 300, 200 & 100m and taking a 1 minute rest after each run. The runs are usually done a little faster than race pace. This method of training can be tailored to suit athletes of all ability levels, as the distance and recovery times can be set for the strongest and weakest runners in the squad. This type of training will develop speed endurance and anaerobic conditioning.



An alternative interval training involves 10 seconds at a high pace, followed by 20 seconds at race pace, followed by 30 seconds at jogging pace. Do this set 5 times and then have a 2 minute rest. Repeat entire process 2-3 times. This is a quick way to see big improvement in overall fitness.

#### **Repetition training**

Repetition training looks very similar to interval training, but is usually a longer distance, generally anywhere from 400m-1600m. The emphasis is on speed and setting a goal pace and developing anaerobic endurance. The rest between efforts may be longer but again this will depend on the aim of the session

#### **Sprinting / Speed Training**

It is vital to include speed in any middle distance training program, especially the 800m. The distance covered for each sprint may be anything from 60m to 200m. The percentage of effort should be kept at 80–90% and the recovery could be an easy walk back to the original starting point. A strong emphasis on technique should be maintained in all repetitions.

#### **Strength and Power conditioning**

Strength and Power conditioning is also important in middle distance running. These qualities can be developed by indirectly by running hills, Fartleck and long interval training. Core strength is vital in running so I'd recommend conducting a session once a week. Doing a google search for "pilates video" will give lots of results. One that I use is <a href="https://www.youtube.com/watch?v=2GEjVdP2YGk">https://www.youtube.com/watch?v=2GEjVdP2YGk</a>. Please watch this video first by yourself to determine its suitability for you and your child.

#### **Running Technique**

A component which is often overlooked in distance training is running technique which the runner can improve with specific drills and by trying to think about and maintain correct form even during intense efforts in training. For further information <a href="https://www.youtube.com/watch?v=wCVSv7UxB2E">https://www.youtube.com/watch?v=wCVSv7UxB2E</a>

Please watch this video first yourself and determine if it is appropriate for your child to view. Key concepts from this video have already been taught at running club, you may just need to remind them about posture.



#### **Pace Judgment**

Pace judgment is crucial to successful middle distance running, and can be developed by using a stop watch in training to help achieve consistent efforts. By regularly performing specific distances in set time periods, the athlete will develop an intrinsic sense of their speed and hence their competitive pace judgment will improve. At AHSS we are practicing the Humpty Dumpty rhyme in our head. We are aiming for a 180 pace per minute (that's 180 steps in 60 seconds.) It's important to work on rhythm and pace will come afterwards.

#### **Hill Training**

Hill training is an effective way of training for middle distance running, and has been used by almost every successful runner. Hills can play a vital part in preparation for middle distance running. The hill should be a gradual incline allowing for the athlete to maintain good technique

& rhythm. This is an intense form of training and should be included in the program only once a week.

#### **Summary**

Although many types of training have been outlined, a coach would seldom have the athlete performing all of these in a single training week. The selection of the different types of running session should be dependent on the training phase, level of the athlete and the proximity to competition races.

Also important when dealing with school level athletes, is to take into consideration other sports and activities in which they may be involved. This is essential when planning the training program to minimize the risk of injury and overtraining.

#### "Aim to develop rhythm and the speed will come, you can't force it."

Norm Osborne has been one of the great coaches in Australia for over 30 years, coaching athletes including Margaret Crowley, Rohan Robinson and Rick Mitchell.