## ATHLETICS OMNIBUS - DISTANCE RACES 800M - 10000M AND STEEPLE CHASE

## From the Athletics Omnibus of Richard Stander, South Africa

## 1. DISTANCE RACES ( $800 \mathbf{- 1 0 0 0 0 M}$ ) - THE CORRECT RUNNING TECHNIQUE

In distance running it is required from the athlete to run a distance that can vary from 800 m to a marathon, and longer. The objective in distance running is to run as a long distance as fast possible, and in doing so, run as economical as possible. Correct running technique leads to a faster and more economical race pace. The technique of an athlete should only be changed if his/her time can be improved or if injuries can be avoided.


### 1.1. THE DISTANCE RUNNER SHOULD AVOID:

- Insufficient drive and knee lift.
- Stamping the foot on the ground and landing on the heel.
- Trunk pitched forward or arched backward.
- Turning of the head and excessive lateral movement of the shoulders.
- Too high a movement of the arms and too far across the chest.
- Incomplete extension of the drive leg.
- Running zig-zag across the track, road or course.
- At the command 'set' raising the head, putting the chin high or too low, incomplete drive and leaning forward too abruptly.


### 1.2. THE DISTANCE RUNNER SHOULD AIM:

- To coincide the highest point of the recovery knee with the greatest extension of the driving leg.
- For an elastic 'ankle' action of the driving foot.
- To keep the trunk in a position similar to that of walking.
- To keep the head upright and look straight ahead.
- To move the arms parallel with the hips and only slightly across the body.
- For a complete action of the drive leg in a horizontal rather than a vertical direction.
- To 'run in a straight line' placing the feet one in front of the other.
- At the command "set" to move the body forward and at the pistol to drive forward with arm and legs.


### 1.3. THE HEAD

Must be kept still with the eyes looking at the ground approximately 10 m in front of the athlete. The mouth must be slightly open to improve inhaling and to avoid tensing of the neck and shoulder muscles.

### 1.4. THE SHOULDERS

Must not be pulled up in a tense manner and should therefore not appear square. A symptom is a burning sensation in the neck and shoulder muscles.


### 1.5. THE UPPER BODY

Must be maintained in a relaxed upright position on the hips while running at an even pace and leaning slightly forward when accelerating. The body will also lean forward when running uphill or
downhill in cross country or road races. If the athlete leans back, a braking action will occurs in the legs.

### 1.6. THE ARMS

Must be held at an angle of approximately $90^{\circ}$ and must be moved beneath the shoulders from the front to the rear. If the arm angles are too small, too much energy is used to maintain the angle and if the arm is held too low, the athlete's cadence (strides $/ \mathrm{min}$.) will be slowed down.

### 1.7. THE HANDS

Must be held in a relaxed manner and must be slightly open. If the hands form fists, unnecessary energy will be used.

### 1.8. THE LEADING LEG

The knee is lifted straight up until the thigh is just below the horizontal position. The lower leg should not be extended too much; otherwise the stride length will be too long. It also uses too much energy.

### 1.9. THE BACK LEG

Must be in an extended position before it leaves the ground, otherwise the stride length will be too short.

### 1.10. THE FOOT

Must make contact with the ground in such a way that the outside part of the foot drives the body to the front with the foot pointing forwards. If the foot is placed sideways the body will move away sideways instead of moving forward. (That's why the shoulders sway from side to side).

### 1.11. THE TOES

Must be used effectively and the athlete must learn to drive every stride with his toes, so as to increase stride length.

## 2. STEEPLE CHASE - THE CORRECT RUNNING TECHNIQUE

The running technique of a running athlete is applicable for the Steeple Chase Athlete as well. The following points must also be considered when preparing for a steeple chase event:

The athlete should keep his concentration during the race. After each hurdle the athlete should get back in his pace and rhythm as soon as possible.
To run over the hurdle at an even pace, a marker must be placed on the track a few strides in front of the hurdle prior to the race. In the race he must get his stride right before the mark, and concentrate from the mark to maintain an even pace across the hurdle. The athlete must approach the hurdle directly from the front to avoid the foot from slipping off the cross bar.
When approaching the hurdle no athletes must be between him and the steeple in order to be able to judge the distance to the bar.
The athlete should run like a hurdler over the hurdle without touching. However if the athlete is too tired to do so, his foot must make contact with the beam in such a way that the toes will hang over on the other side to enable him to drive away from the bar. In the driving process the athlete must look down with the chest bend forward to avoid driving upwards.


### 2.1. THE STEEPLE CHASER SHOULD AVOID:

- Prematurely straightening the lead leg.
- Picking up the take-off leg without completing the drive.
- Attacking the hurdle too closely; 'jumping' with a very high parabola.
- Raising the flexed leading leg too high.
- 'Pulling' the take-off leg through too high.
- Flexing the leading leg on landing.
- Leaning back on landing.
- Incomplete action of the driving leg on making contact with the ground.


### 2.2. THE STEEPLE CHASER SHOULD AIM TO:

- Carry the hip forward as the flexed leading leg is lifted.
- Pick up the take-off leg as a result of the drive rather than just 'pulling' it off the ground.
- Make the flight parabola low in order to shorten 'flight' time.
- Keep the leading leg extended as the thigh reaches the height of the hip.
- Move the back leg from behind to the front and not from down up.
- Keep the ankle firm on landing and make an active re-entry running.
- Keeps the trunk leaning forward slightly in order to 'run away' from the hurdle.
- Time the clearance so that the knee of the take-off leg is never in front of the hips when the athlete is directly over the hurdle.


## 3. TRAINING FOR DISTANCE RACERS

With the term training we understand the gradual increase of the physical and physiological demand on the body to achieve an optimal functional capacity from the body. In the process, muscles, heart, lungs and nervous system are developed by various training methods to;

- increase the body's resistance against the tiring factor,
- to improve the capacity of the body to recover and
- ensure adaptation to the continuous physical demands on the body.

By participating in the middle and long distances, the athlete's performance is limited by the following physiological factors:

- The maximum amount of oxygen that can be utilised by the athlete in a given period.
- The maximum oxygen debt an athlete can undergo also referred to as lactate tolerance.


## 4. TRAINING METHODS FOR DISTANCE RACERS

In the middle and long distances there are 3 components of physical fitness, which should be considered in planning a training program namely, endurance, strength and speed.

### 4.1. MUSCLE ENDURANCE (STAMINA)

The goals of these training methods are:

- The increase and development of the lung capacity to get oxygen faster in the blood.
- The increase of the stroke volume of the heart to carry oxygen more quickly to the muscles.
- The increase and development of the veins to carry oxygen faster to the muscle fibres.

The athlete must develop stamina base during the off season and pre-season.
Optimum development occurs at a pulse rate of between 120-180 beats per minute.
The following training methods develop muscle endurance:

### 4.1.1. LONG DISTANCE TRAINING (4KM - 40KM DEPENDING ON THE RACE, WHICH YOU PREPARE FOR).

Pay attention to:

1. Varying distances
2. Varying surroundings
3. An increase in distance as the season progresses, variation between longer, slower runs and shorter faster runs.

To avoid boredom, distances, surroundings, tempo, etc. must be varied continuously.

### 4.1.2. FARTLEK

The 'play with speed' training method is a very important method to develop muscle endurance and to a lesser extend speed endurance. A few examples are:

- 10x (1 min. @ 75\% / 1 min jog)
- 2x (3 min @ 70\%-jog 1 min / 2 min @ $80 \%$-jog. 1 min / 1 min @ $90 \%$-jog 1 min) rest 2 min
between sets
- $5 \mathrm{~min} @ 75 \% / 4 \mathrm{~min} @ 75 \% / 3 \mathrm{~min} @ 75 \%$ - jog rest between reps.


### 4.1.3. INTERVAL RUNS

- Ran over distances between $100 \mathrm{~m}-400 \mathrm{~m}$
- Running tempo is slower than $80 \%$
- Many repetitions must be done
- Quantity rather than quality
- Rest phase is relatively short
- Rest is never in the form of walk
- The effect of the training is in the rest
- Pulse rate vary between 120 - 180 beats per min. during reps.
- The pulse rate must never drop to normal during the rest phase. Start again when the pulse rate is 120 beats / min.

An example for an athlete capable of running 800 m in 2:00 min

- $3 \times(3 \times 400 \mathrm{~m} @ 64 \mathrm{sec}$. With 1 min jog rest between reps) 1 lap walking between sets
- $9 \times 300 \mathrm{~m} @ 50 \mathrm{sec}$. - jog rest 1 min . between reps
- $15 \times 200 \mathrm{~m} @ 33 \mathrm{sec}$. - jog rest 45 sec . Between reps

Other examples for interval running

## Break down interval runs e.g.:

- $2 \times(500 \mathrm{~m}, 400 \mathrm{~m}, 300 \mathrm{~m}, 200 \mathrm{~m}) @ 75 \%$ - jog back - rest 5 min . between sets - for 1500m athletes


## Build up interval runs e.g.:

- $2 \times(150 \mathrm{~m}, 200 \mathrm{~m}, 300 \mathrm{~m}, 400 \mathrm{~m}) @ 75 \%$ - jog back - rest 5 min . between sets - for 800 m athletes


## Pyramid interval runs e.g.:

- $3 \times(300 \mathrm{~m}, 400 \mathrm{~m}, 500 \mathrm{~m}, 400 \mathrm{~m}, 300 \mathrm{~m}) @ 75 \%$ - jog back - rest 5 min . between sets for 3000 m athletes


## BACK TO BACK RUNNING

- Run 5 min . @ $70 \%$ - rest 2 min . - run back on the same route and finish where you started within 5 min .

An example for an athlete capable of running 3000 m in 10:00 min.

- $3 \times(3 \mathrm{~min}$. back to back - rest 2 min .) rest 5 min . between sets.


## TERRACE RUNNING

Uneven grass surfaces, e.g. golf courts, are used where the tempo is determined by the 'waves' of the surface. $500 \mathrm{~m}-1000 \mathrm{~m}$ courses are measured out and must be run uphill and downhill at a pace that varies between $50 \%-75 \%$.
An example for an athlete that is preparing for a 4 km cross-country competition.

- $3 \times(2 \mathrm{~km}$ terrace @ $70 \%$ - take time - the athlete must try to run each repetition in the same time) rest 2 min. between reps.


## POLISH CROSS COUNTRY

A track of $1 \mathrm{~km}-8 \mathrm{~km}$ is marked out. An example of a 5 km course:
1 km @ 75\%; 30 push ups; 1 km jog; 30 sit-ups; 200m @ 90\%; 30 star jumps; 800m @ $75 \%$; 50m walk on hands and feet; jog 1 km .

An example of a 3 km course: 1. 800 m fast pace; 2. star jumps -400 m steady recovery pace; 3.30 sit ups -1000 m steady pace; 4.30 push-ups -400 m fast pace; 5.30 chinnies 400 m steady recovery pace.


## PAARLAUF

Athlete A starts to run around the track. He passes the baton to athlete $B$ who waits at the 200 m . A runs short cut across the track to the start line, to receive the baton from B again. B again runs to the 200 m to receive the baton from $A$, etc. The coach determine how many repetitions, and speed. The tempo determines the amount of repetitions. The tempo also determines the rest period (short cut) of the receiver.

Example: $4 \times(3 \times 200 \mathrm{~m})$ - rest 3min. between sets

### 4.2. SPEED ENDURANCE

- Speed endurance training must only be done after proper basis of muscle endurance is developed. The more stamina training is done, the more effective the speed endurance training will be.
- The emphasis in this training moves from basic fitness to specific (competition) fitness.
- More quality work is done with fewer repetitions, at a faster pace ( $80 \%-100 \%$ ) with relative longer rest periods between repetitions.
- The energy for these exercises are not supplied by normal oxygen intake, but by the energy stored in the muscles itself. For this reason the body takes much longer to recover after a strenuous training session. Normally 48 hours (2 days). The days in between training of lower intensities (50\%-75\%) must be done.
- Rest must now be build into the training program much more frequently, to prevent overtraining.
- Through this training method the following are achieved:
- Reaction time of the muscles are sharper
- Local muscle endurance and speed endurance are improved
- Metabolism in the muscle is improved.
- To teach the body to develop an oxygen debt faster.
- General speed is improved


## TRAINING METHODS TO DEVELOP SPEED ENDURANCE:

All the training methods discussed under muscle endurance can also be used for speed endurance, except intervals. The tempo changes from $50 \%-75 \%$ to $80 \%-95 \%$. However, the rules above must be applied to avoid overtraining.

### 4.2.1. TEMPO RUNS

Tempo runs are done in the place of intervals when the intensity of training is stepped up. Tempo runs differ from Intervals training as follows:

- Ran over distances between $50 \mathrm{~m}-3000 \mathrm{~m}$
- Running tempo is faster than $80 \%$
- Less repetitions as in the case of Intervals must be done
- Emphasis on quality rather than quantity
- Rest phase is relatively longer than in intervals
- Rest is in the form of walk. With intervals, rest is in the form of jogging.
- The effect of the training is in the actual running. During interval training it is during rest.
- Pulse rate during repetitions is 180 beats per minute and faster
- The pulse rate must drop to 120 beats per minute during the rest phase. Start again when the pulse rate is 120 beats per min.

An example for an athlete capable of running 800 m in 2:00 min

- $3 \times(3 \times 300 \mathrm{~m}$ @ 42 sec. with 3 min walk rest between reps) 2 laps walking between sets
- 6x 200m @ 27 sec . - walk rest 2 min . between reps
- $2 \times 600 \mathrm{~m}$ @ 1 min . 25 sec . - walk rest 6 min . between reps

Other examples of tempo runs are:
BREAK DOWN TEMPO RUNS e.g.:

- ( $1200 \mathrm{~m}, 800 \mathrm{~m}, 400 \mathrm{~m}, 300 \mathrm{~m}, 200 \mathrm{~m})$ @ $90 \%$ - rest 3 min . between reps - for 3000 m athlete


## BUILD UP TEMPO RUNS e.g.:

- (150m, 200m, 300m, 400m, 500m) @ 90\% - walk back - for 1500 m athletes

PYRAMID TEMPO RUNS e.g.:

- $400 \mathrm{~m}, 600 \mathrm{~m}, 800 \mathrm{~m}, 1000 \mathrm{~m}, 800 \mathrm{~m}, 600 \mathrm{~m}, 400 \mathrm{~m}) @ 90 \%$ - rest 4 min . between reps - for 5000m athlete


## COMBINATION TEMPO RUNS

- e.g. for a 2 min .00 sec .800 m runner: 600 m in 45 sec . rest 1 min . and sprint 200 m .


## STEP DOWN 200'S

- Each successive 200 m is one second faster. Walk or jog between. When you can do 27-$26-25-24$, you can run faster than 2 min . 00 sec . over 800 m .


## PACE DEVELOPMENT

- Pace development must be done during the pre season and more often during the season. Examples of pace running are:

800m in 2 min. 00 sec.

- $5 \times 300 \mathrm{~m}$ in $43-45 \mathrm{sec}$. - rest 2 min. between reps

5000 m in 15 min .00 sec.

- $7 \times 1000 \mathrm{~m}$ in 2 min . 50-2 min. 55 - rest 4 min . between reps

Marathon in 3 hours

- $2 \times 10 \mathrm{~km}$ in 40-41 min - rest 10 min between reps


## TIME TRAILS

Time trails must be done on a regular basis to monitor the progress of the training program. The existing program must be adapted according to the result of the time trail. Examples of time trails are:
$1 \times 600 \mathrm{~m}$ for an 800 m race
$1 \times 800 \mathrm{~m}$ for 1200 m race
$1 \times 1200 \mathrm{~m}$ for a 1500 m race
$1 \times 3000 \mathrm{~m}$ for a 5000 m race
$1 \times 15 \mathrm{~km}$ for a half-marathon
$1 \times 32 \mathrm{~km}$ for a marathon, etc.

### 4.3. SPEED TRAINING

Only the shorter middle distance races ( $800-1500 \mathrm{~m}$ ) have a need to develop pure speed. The longer races must concentrate on speed endurance. A few examples of speed work are given below:

## 50M DOWN HILL SPRINTING X 5

- The slope must not be more than $6^{\circ}$.


## FLYING 50'S

- The athlete takes a flying start, and the time is taken between two beacons when the athlete is full speed.
- 30 m execration -50 m sprint $\times 5$


### 4.4. STRENGTH TRAINING

Unlike popular belief, strength training form an important part of the distances racer's training programme. For specific training methods for distance racers, refer to the chapter on Strength Training.

## 5. TRAINING PROGRAMMES

The conditioning philosophy for distance racers is as follows:

- For all the approaches above the following is applicable:
- Use an over distance approach.
- First quantity, then quality.
- Build a foundation of endurance and then develop speed gradually. This will prevent injury.
- For the first month of training you will do no speed work and you will not time anything.
- The volume of work must be gradually increased over weeks.
- As the season progresses, you will do less work but faster work.
- Workouts will generally be a hard day followed by an easy day, with a lightening up of work two days before competition or time trail.
- Your schedule is flexible. You may change the daily routine because of weather, body condition, or emotional outlook.
- You should completely recover from one workout to the next. If you are not completely recovered, do less work, or rest.
- You should never run when you are ill or have an injury.
- If your training schedule is limited, you may telescope this schedule into two-week periods instead of month periods.
- Your workouts must be fun or rewarding, preferably both.


## 6. TRAINING SESSIONS

6.1. All training sessions should always start of with warm-up session and stretching exercises.
6.2. After all training sessions a cool down and stretching session should follow.
6.3. Refer to the chapter on mobility for event specific warm -up and stretching exercises.

## 7. TRAINING PROGRAMMES FOR 800 M - MARATHON

800M LONG TERM TRAINING PLAN

|  | PHASE |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SEPTEMBER - APRIL | CONDITIONING |  | PREPARATION |  | COMPETITION |  |
| TRAINING METHODS | 1 | 2 | 1 | 2 | 1 | 2 |
| MUSCLE ENDURANCE (STAMINA) | $75 \%$ | $60 \%$ | $50 \%$ | $50 \%$ | $25 \%$ | $20 \%$ |
| SPEED ENDURANCE | $0 \%$ | $10 \%$ | $10 \%$ | $15 \%$ | $25 \%$ | $35 \%$ |
| STRENGTH | $20 \%$ | $20 \%$ | $25 \%$ | $25 \%$ | $25 \%$ | $15 \%$ |
| SPEED | $0 \%$ | $0 \%$ | $5 \%$ | $5 \%$ | $10 \%$ | $10 \%$ |
| ACTIVE REST | $5 \%$ | $10 \%$ | $10 \%$ | 15 | $15 \%$ | $20 \%$ |

## EXAMPLE OF A 800M TRAINING PROGRAMME

CONDITIONING PHASE 1

## CONDITIONING

M. ENDURANCE EXERCISE
$5 \times 1$ min. @ 75\% / 1 min. jog)
$6 \times 200 \mathrm{~m} / 75 \% / 11 / 2 \mathrm{~min} \mathrm{jog}$ rest
(400m, 300m, 200m,) @
75\% - jog rest
1 km polish fartlek
$5 \times$ paarlauf
STRENGTH

REST
MONTH: SEPTEMBER


|  | jog) |
| :--- | :--- |
|  | $6 \times 200 \mathrm{~m} / 75 \% / 11 / 2 \mathrm{~min}$ jog <br> rest |
|  | $(400 \mathrm{~m}, 300 \mathrm{~m}, 200 \mathrm{~m}) ~ @$, <br> $75 \%-$ jog rest |
|  | 1 km polish fartlek |
|  | $5 \times$ paarlauf |
| STRENGTH | Hills 8x 100m/75\%/2 min |
|  | Tyres 10x 100m/75\%/2 min |
| REST |  |






,




$\checkmark \checkmark$


COMPETITION PHASE 2 (GOAL 2MIN,00) CONDITIONING M. ENDURANCE EXERCISE

MONTH: MARCH
$5 \times(1 \mathrm{~min} . @ 75 \% / 1 \mathrm{~min}$. jog)
(400m, 300m, 200m,) @ $75 \%$ - jog rest 1 km polish fartlek
S. ENDURANCE $6 \times$ paarlauf @ 95\% step down 200m x 4 (27,26,25,24)
600 m pace $/ 200 \mathrm{~m}$ sprint 200m, 300m, 400m @ 95\% $3 \times 300 \mathrm{~m}$ @ 43 sec . - full rest hills $6 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ tyres $8 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ COMPETITION REST

## 3000M LONG TERM TRAINING PLAN

| SEPTEMBER - APRIL <br> TRAINING METHODS | PHASE |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONDITIONING |  | PREPARATION |  | COMPETITION |  |
|  | 1 | 2 | 1 | 2 | 1 | 2 |
| MUSCLE ENDURANCE (STAMINA) | $75 \%$ | $60 \%$ | $50 \%$ | $50 \%$ | $40 \%$ | $35 \%$ |
| SPEED ENDURANCE | $0 \%$ | $10 \%$ | $15 \%$ | $20 \%$ | $30 \%$ | $30 \%$ |
| STRENGTH | $20 \%$ | $20 \%$ | $25 \%$ | $20 \%$ | $15 \%$ | $15 \%$ |
| SPEED | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| ACTIVE REST | $5 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $15 \%$ | $20 \%$ |

EXAMPLE OF A 3000M TRAINING PROGRAMME

| CONDITIONING PHASE 1 |  | MONTH: SEPTEMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | $4 \times$ (3 min. @ 75\% / 3 min. jog) | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
|  | 6x 400m/ $75 \% / 11 / 2 \mathrm{~min}$ jog rest |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
|  | $1000 \mathrm{~m}, 800 \mathrm{~m}, 400 \mathrm{~m} @ 75 \% \text { - }$ jog rest |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | 3 km polish fartlek |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |
|  | $\begin{aligned} & 300 \mathrm{~m}, 400 \mathrm{~m}, 500 \mathrm{~m}, 400 \mathrm{~m}, \\ & 300 \mathrm{~m} @ 75 \% \\ & \hline \end{aligned}$ |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |
| STRENGTH | hills 10x 100m/75\%/ 2 min | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | tyres $12 \times 100 \mathrm{~m} / 75 \% / 2 \mathrm{~min}$ |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| REST |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |


| COMPETITION PHASE 2 (GOAL 9 MIN,30) |  | MONTH: MARCH |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | 4x (3 min. @ 75\%/ 1min. jog) |  | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |
|  | $\begin{aligned} & \text { (1000m, 800m, 400m,)@ } 75 \% \\ & \text { - jog rest) } \end{aligned}$ |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
|  | 3 km polish fartlek |  |  |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  |  |  |  |
| S. ENDURANCE | 3 min. back to back @ 80\% / rest 3 min |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { step down } 600 \mathrm{~m} \times 4(1 \mathrm{~m} 54, \\ & 1 \mathrm{~m} 53,1 \mathrm{~m} 52,1 \mathrm{~m} 51) \\ & \hline \end{aligned}$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | 600 m pace / 200 m sprint |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
|  | 200m, 300m, 400m @ 95\% |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| PACE RUNNING | $3 \times 300 \mathrm{~m}$ @ 43 sec. - full rest |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
| STRENGTH | hills $6 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | tyres $8 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| COMPETITION |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |
| REST |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |

CROSS COUNTRY LONG TERM TRAINING PLAN - 8 KM

| APRIL - SEPTEMBER TRAINING METHODS | PHASE |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONDITIONING |  | PREPARATION |  | COMPETITION |  |
|  | 1 | 2 | 1 | 2 | 1 | 2 |
| MUSCLE ENDURANCE (STAMINA) | $75 \%$ | $60 \%$ | $50 \%$ | $50 \%$ | $40 \%$ | $35 \%$ |
| SPEED ENDURANCE | $0 \%$ | $10 \%$ | $15 \%$ | $20 \%$ | $30 \%$ | $30 \%$ |
| STRENGTH | $20 \%$ | $20 \%$ | $25 \%$ | $20 \%$ | $15 \%$ | $15 \%$ |
| SPEED | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| ACTIVE REST | $5 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $15 \%$ | $20 \%$ |

EXAMPLE OF A CROSS COUNTRY TRAINING PROGRAMME

| CONDITIONING PHASE 1 |  | MONTH: APRIL |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | $4 \times$ (3 min. @ 75\% / 3 min. jog) | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
|  | 6 km medium pace running |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
|  | 8 km casual running |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |
|  | 3 km polish fartlek |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
|  | $2 \times 2 \mathrm{~km}$ terrace running @ $75 \%$ |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |
| STRENGTH | hills $10 \times 100 \mathrm{~m} / 75 \% / 2 \mathrm{~min}$ | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | tyres $12 \times 100 \mathrm{~m} / 75 \% / 2 \mathrm{~min}$ |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| REST |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |


| COMPETITION PHASE 2:PACE 3MIN 10/KM |  | MONTH: AUGUST |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | 4x (3 min. @ 75\% / 1 min. jog) |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
|  | 10 km casual running |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |
|  | 3 km polish fartlek |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
| S. ENDURANCE | 3 min. back to back @ 80\% / rest 3 min | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $2 \times 2 \mathrm{~km}$ terrace running fast pace - rest 5min. |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | step down 1000m x 4 (3min. 40, 3 min . 30, 3 min . 20, 3 min . 10) |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | 6km fast running |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| PACE RUNNING | $4 \times 1000 \mathrm{~m}$ @ 3min. 05 - full rest | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| STRENGTH | hills $12 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | tyres $15 \times 100 \mathrm{~m} / 90 \% / 2 \mathrm{~min}$ |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| COMPETITION |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |
| REST |  |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |

MARATHON LONG TERM TRAINING PLAN - 3 HOURS 00

| APRIL - MARCH | PHASE |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONDITIONING |  | PREPARATION |  | COMPETITION |  |
|  | 1 | 2 | 1 | 2 | 1 | 2 |
| MUSCLE ENDURANCE (STAMINA) | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ | $50 \%$ | $40 \%$ |
| SPEED ENDURANCE | $0 \%$ | $5 \%$ | $10 \%$ | $20 \%$ | $20 \%$ | $25 \%$ |
| STRENGTH | $15 \%$ | $15 \%$ | $20 \%$ | $20 \%$ | $15 \%$ | $15 \%$ |
| SPEED | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| ACTIVE REST | $5 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $15 \%$ | $20 \%$ |

EXAMPLE OF A MARATHON TRAINING PROGRAMME

| CONDITIONING PHASE 1 |  | MONTH: APRIL 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | 5km casual jogging | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
|  | 10km casual jogging |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | 15 km casual running |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |
|  | 20km casual running |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
| STRENGTH | hills $10 \times 300 \mathrm{~m} / 75 \% / 2 \mathrm{~min}$ rest |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | 10km hilly road medium pace | $\checkmark$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |
| RACE 15KM |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |
| REST |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |


| PREPARATION PHASE 1 |  | MONTH: AUGUST 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDITIONING | EXERCISE | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| M. ENDURANCE | 10km casual jogging |  |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
|  | 15 km casual jogging |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |
|  | 20 km casual running |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |
|  | 30km casual running |  | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |
| S. ENDURANCE | $\begin{aligned} & 5 \min @ 75 \% / 4 \min @ 75 \% ~ / \\ & 3 \text { min @ } 75 \% \text { - rest } 2 \text { min. } \end{aligned}$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| STRENGTH | hills $10 \times 300 \mathrm{~m} / 75 \% / 2 \mathrm{~min}$ rest | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |
|  | 10km hilly road medium pace |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |  |
| RACE 10KM |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |
| RACE 21,1KM |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |
| REST |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |


8. RULES

### 8.1. GENERAL RULES FOR DISTANCE RACES

8.1.1. In all events, competitors must wear clothing, which is clean, designed and worn so as not to be objectionable. It must not be transparent even when wet.
8.1.2. The direction of walking and running on a track is left hand inside.
8.1.3. The start line is curved so that all athletes start the same distance from the finish.
8.1.4. At the start, the athlete must remain motionless from the command 'on your marks' until you're the starter fires the gun. Otherwise, a false start will be made.
8.1.5. The athlete will be warned after one false start and disqualified after two.
8.1.6. Interference of any sort, with other athletes also constitutes a false start.
8.1.7. At the finish the athletes are placed in the order in which any part of their trunks, reaches the finishing line. (Not the head, neck, arms or feet)
8.1.8. Hand timing is acceptable, provided 3 official timekeepers timed the winner.
8.1.9. For track events, 5000 m and longer, the refreshment table will be open for 5 minutes at 20minute intervals.
8.1.10. In events of more than 20 km , refreshments will be provided every 5 km . For all events longer than 10 km sponging/drinking water stations may also be provided at suitable intervals.
8.1.11. In events longer than 20km, a competitor may leave the road or track with the permission, and under supervision of a judge.

### 8.2. SPECIFIC RULES FOR DISTANCE RACES

### 8.2.1. 800M

In the 800 m , the first bend only, may be run in lanes and the start is staggered accordingly.

### 8.2.2. STEEPLE CHASE

- Runners are not allowed to run around, or underneath the hurdle.
- The athlete can go over the hurdle any way they like providing there is no interference with other athlete.


### 8.2.3. CROSS COUNTRY

- The course will be confined, as far as possible to open country, fields, heath land, and grasslands. Roads should be kept to a minimum.
- Any form of hindrances or obstructions must be avoided for the first 1500 m of the course.
- An athlete may not run outside the official course.
- The course shall be marked out in such a way, that the athlete in the lead need not have any doubts about it or search for it.
- A course must never have a narrower running surface than $2 m$.
- Obstructions considered dangerous must be clearly marked with a ribbon or flag.
- Drinking/sponging stations shall be provided at suitable intervals of approximately 23 km .


## eXAMPLE OF A COURSE LAYOUT TO ACCOMMODATE ALL THE DISTANCES



### 8.2.4. ROAD RACES

- There is no restrictions on the number of times that a runner may be offered refreshments during a road race, or what the nature of the refreshment shall be provided that:
- Illegal stimulants in terms of the IAAF ruling are not used.
- The domestic rules of the race organisers are not transgress.
- Seconds do not create traffic hazard along the road.
- Seconding is not conducted directly from a vehicle (including two-wheeled) whether stationary or moving.
- A second may not run alongside an athlete for a distance exceeding 100 m on either side of an official water point.


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