

# RaceWalking

## A Guide to Better Coaching

A

Racewalking Training Manual  
and  
Reference Guide

for Elementary  
and  
Secondary Schools

Teachers and Coaches .

KAF

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# **Racewalking**

**BASIC Guidelines  
for Training and Racing & Developing  
the Junior Athlete and Coach  
to State & National Level.**

**Technique , Technique , Technique**

**I will emphasize Basic guidelines here as most junior walkers  
throughout  
their development as athletes will have differing progression levels of  
ability , motivation and commitment .**

**Whilst the specifics of each component of training will depend  
totally on the levels of achievement already reached by an athlete,  
the general rule will relate directly to most developing athletes.**

**Those 6 major components are as follows:**

**Technique**

**Speed**

**Endurance**

**Mobility**

**Strength**

**Specific Endurance**

**These components combined, become the physical conditioning  
required for this event**

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# Racewalking

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## Foreword

Racewalking as an event has been much maligned over the years and yet is one of the hardest physical tests in the athletic arena .

It combines speed, strength and endurance along with technique that is judged subjectively by independent arbiters of the sport.

At the highest level, it can flow majestically with some of the fittest athletes in the world competing and racing on the edge of the envelope for distances covering 1500 meters up to 50,000 meters on road and track down to the junior athlete who are starting out in the sport, to master's athletes who have been competing for years.

It is a sport that is embraced by young and old respectively.

As an event, to the average person, Race walking is somewhat misunderstood. However , to the trained athlete , coach and advocate of the sport , it represents the basic premise of walking , to which every human desires and to which racewalking complies absolutely to the

Olympic ideal of “ Citius , Altius , Fortius ”. ( Faster , Higher , Stronger) .

What I have tried to do here within the following pages is to present a view from an athlete's perspective and a coach's view in regard to managing, conditioning and competing in the art of race walking from a junior athlete starting out in the sport to the hardened athlete competing at the highest level.

It is born out of 40 odd years of my own competing, training and racing as an athlete and a coach.

I trust that this can be a useful guide to those beginning in the sport and to a gentle reminder of the basic structure and requirements to those athletes with many years of experience.

“ The hardest part of any journey is the first step ”

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## **Definition of Racewalking : IAAF Rule 230**

**Racewalking** is a progression of steps so taken that the walker makes “contact” with the ground, so that no visible ( to the human eye) loss of contact occurs . The advancing leg shall be straightened ( ie . not bent at the knee ) from the moment of first contact with the ground until the vertical upright position .

**Note : The Double Support Phase** – the heel of the advancing foot strikes the ground , when the toe of the trailing foot has not yet left the ground. If this doesn’t occur in each stride , the athlete is not complying with the “contact” rule

## **Judging**

### **Judging : Internationally**

- (a) The appointed judges of Race Walking shall elect a Chief Judge, if one has not been appointed previously.
- (b) All the Judges shall act in an individual capacity and their judgments shall be based on observations made by the human eye.
- (c) In competitions held under Rule 1.1(a), all Judges shall be International Race Walking Judges. In competitions held under Rules 1.1(b), (c), (e)(ii), (f), (g) and (j), all Judges shall be either Area or International Race Walking Judges.
- (c) For road races, there should normally be a minimum of six to a maximum of nine Judges including the Chief Judge.
- (d) For track races, there should normally be six Judges including the Chief Judge.
- (f) In competitions held under Rule 1.1(a) not more than one Judge from any Country can officiate.

Note ( Rule 1.1 refers to International races IAAF )

“ To accomplish great things , we must dream as well as act ”

## **The Role of the Coach / Coaches Code of Ethics**

The coach's primary role is to facilitate the process of individual development through achievement of Athletic potential. This role accepts the athletes' long term interests as of greater importance than short term athletic considerations. To fulfill this role the coach must behave in an ethical manner. By becoming a member of the ( IAT & FCA), a coach agrees to be held accountable for any breach of the following points:

1. Coaches must respect the basic human rights, that is, the equal rights, of each athlete with no discrimination on the grounds of gender, race, color, language, religion, political or other opinion, national or social origin, association with a national minority, birth or other status.
2. Coaches must respect the dignity and recognize the contribution of each individual. This includes respecting the right for freedom from physical or sexual harassment and advances.
3. Coaches must ensure that practical environments are safe and appropriate. This appropriateness must take into consideration the age, maturity and skill level of the athlete. This is particularly important in the case of younger or less developed athletes.
4. Coaches must acknowledge and respect the Rules of Competition. This respect should extend to the spirit as well as to the letter of the rules, in both training and competition, to ensure fairness of competitive opportunity between all athletes.
5. Coaches must exhibit an active respect for officials, by accepting the role of the officials in providing judgment to ensure that competitions are conducted fairly and according to the established rules.
6. Coaches must accept final responsibility for the performance and conduct of the athletes they coach, while at the same time encouraging the independence and self determination of each athlete by their acceptance of responsibility for their own decisions, conduct and performance.
7. Coaches must assert a positive and active leadership role to prevent any use of prohibited drugs or other disallowed performance enhancing substances or practices. This leadership by coaches includes education of the athletes of the harmful effects of prohibited substances and practices.
8. The coach must acknowledge that all coaches have an equal right to desire the success of the athletes they coach - competing within the rules. Observations, recommendations and criticism should be directed to the appropriate person outside the view or hearing of the public domain.
9. Coaches must never solicit, either overtly or covertly, athletes who are receiving coaching to join their squad or change their coaching situation without first involving the current personal coach or coaches.

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Continued ...

10. The coach must acknowledge and recognize that all athletes have a right to pursue their athletic potential, including when an athlete's development would benefit from a change of coaching situation. The coach should ensure that, in these cases, any formation of a coaching partnership or transfer to another coach is actively explored with the athlete, whose decision is supported.
11. Coaches should hold recognized coaching qualifications. Coaches should respect that the gaining of coaching qualifications is an ongoing commitment, achieved through the upgrading of their knowledge by attendance of accredited courses and through practical coaching experience. Coaches also have a responsibility to share the knowledge and practical experience they gain.
12. Coaches must respect the image of the coach and the reputation of the Association and continuously maintain the highest standards of personal conduct, reflected in both the manner of appearance and behavior, so that they do not bring Coaching or the Association into disrepute.
13. Coaches must never smoke while coaching or in the presence of athletes, nor consume alcoholic beverages so soon before coaching that it affects their competence or that the smell of alcohol is on their breath.
14. Coaches must enter into full cooperation with all individuals and agencies that could play a role in the development of the athletes they coach. This includes working openly with other coaches, using the expertise of sports scientists and sports physicians and displaying an active support of their National Federation and the IAAF.

“ It's not whether you get knocked down , but it's whether you get back up ”

# Racewalking

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## **My Coaching Philosophy.....**

For a Coach to be absolutely functional , he must have the hearts and the minds of the athletes that he is responsible to , so that they may , in turn , have the respect and trust to believe that the coach is acting always in their interests.

First and foremost , he must be a great communicator and have the ability to relate to each athlete individually, to see to how and what each athlete needs and responds to on any given instruction and to apply teaching and coaching strategies accordingly , to those needs .

The Coach must have the foundation of good knowledge of the sports techniques , requirements and tactics .

A good Coach will always take a long term view to his athletes and will never compromise their abilities for short term gain. Along with this , comes the responsibility of standing beside your athlete at all times , sharing the ups and downs , the wins and losses , the hard and the good times .

A good Coach must be able to guide , lead , reflect , encourage and connect with the athletes with a consummate knowledge and understanding of the sport and a determination to help those athletes succeed in their chosen event . We are there for the athletes .. No other reason.

When an athlete starts in a sport , he / she is there having “ Fun.” When their abilities take them further and to higher competition , it becomes a serious business ...Just remember to have some FUN along the way ..

As every athlete in the world aspires to be the best , help them become the best that they can be ...Enjoying the ride as they go .

“ A Goal without a Plan is just a wish ”

## Racewalking

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The major components of racewalking that need to be developed are  
Technique , Specific endurance , Endurance , Speed , Mobility and  
Strength endurance

### **Technique :**

The Skill of Racewalking is defined and refined over many years of training and racing . Working on Technique should be first and foremost in any and all developing athletes . Everything else falls into place ( speed , strength and endurance ) once good technique has been established .

In order of importance , Technique is by far the most important component and has to be worked on constantly .

While the physical conditioning and preparation will enhance and improve the athlete's skill accordingly , sound technique will greatly enhance mechanical efficiency and energy conservation and will reduce the chances of disqualification .

Racewalking technique is an athlete's ability to adhere to the rules of racewalking while covering the most amount of ground in the least amount of time with the minimum amount of energy .

In other words , his efficiency . Each athletes own style is different but improvements to a few basic components can improve performance quite rapidly.

Whilst the specifics of each component of training for racewalking will depend totally on the levels of achievement already reached by an athlete , the general rule will relate directly to most developing athletes .

Significantly , most racewalkers do very little technical training having once established a basic technique . Consequently , the chance of faults becoming grooved is high as they are continually rehearsed , thousands of times .

This is of paramount importance for our Junior athletes who will experience the taste of success rather rapidly with increased training volumes and regular training .

Unfortunately , these immediate successes promote a sense of mastery , where technical faults and weaknesses will be ignored and hence very difficult to rectify later in an athlete's career.

“ If it has to be , then it's up to me ”



# Racewalking

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## **Three major problem areas confront many of our walkers :**

1. An obsession with mileage
2. Lack of Speed and special endurance training
3. A total lack of a systematic training program .
4. The neglect of constant referral to technique , technique , technique.

The “ distance bug ” is not solely confined to walkers but they occupy a large percentage of athletes who become obsessed with daily , weekly and yearly mileages at the expense of other training units .

Coaches and athletes alike must become more broad minded in their approach to a variance of training venues , distances and training sessions and become more technique conscious.

Walking is essentially a sustained speed event for even the 50klm race.

When you consider that elite 20klm walkers are walking sub – four minute kilometres and moving in excess of 14kph , a significant percentage of training time needs to be devoted to developing this specific speed endurance.

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## **Posture / Body Position : The most essential attribute to establish**

Most faults in technique can be attributed to incorrect posture . Sound posture is the ability to hold a body lean of up to 3- 5degrees with no flexion at the hip joints .

Technically, when the support leg is directly under the body , a straight line should be able to be drawn through the shoulder , hip , knee and ankle joints .

Many walkers are unable to achieve this due to :

- a. The pelvis tilted forward which pulls the hips downwards ( known as Hollow-Back , Sway Back or Lordosis ) .
- b. Leaning from the hips with their backside stuck out ( this reduces hip rotation , shortens stride length and frequency )
- c. Leaning to one side or excessive lateral hip movement .
- d. Rounded shoulders will indirectly affect hip rotation as the elbow angle becomes reduced creating arm drive across and too close to the body .
- e. Any structural problems such as spinal curvature, uneven leg length , foot pronation , flat feet , etc etc . Any weakness however minor will affect technique .
- f. Many of these problems are strength related hence the need to develop strong back muscles , internal and external oblique muscles at the torso and the abdomen .

## **Hip Mobility**

Forward oscillation of the hips gives a significant increase in stride length – hence the need for excellent hip / joint mobility.

It allows the lowering of the recovery leg hip , which shortens the leg pendulum and speeds it up .It also ensures that the swinging foot remains close to the ground . Therefore , if a greater rotation of the hips can be achieved , stride length ( up to 10cm ) can be increased without increasing stride rate .

However , there is an optimum stride length . At full stride , the angle between the legs reaches 45- 50 degrees , but this will vary considerably from walker to walker.

An example of the gain of stride length by proper hip mobility :

A Walker takes 80 strides per minute and her stride length is 1.20mtres . The distance that she covers is  $80 \times 1.2\text{m} = 96 \text{ mtres / minute}$ .

If her hip mobility improves and increases her stride length by 10cm , then  $80 \times 1.3\text{m} = 104 \text{ mtres / min}$  .

This is an example only , but quite valid reasoning and if this improved hip mobility is accompanied by an improvement of forces from the ankle

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Plantar flexors and the shortening of the different racewalking phases and an increase in stride frequency , then an optimal combination of all of these factors will determine maximum speed.

Put quite simply , - the athlete who is capable of maintaining the fastest leg frequency and optimal stride length – all other factors being equal – WILL WIN .

$$\text{SPEED} = \text{SF} \times \text{SL} \text{ ( stride frequency } \times \text{ stride length )}$$

### **Arm Drive and Shoulder Action**

The shoulders and arm action work together to absorb angular momentum( rotation ) created by the legs and hips and transmit it to the trunk .

So the shoulders can absorb rotation , they should be kept low and the muscles surrounding , relaxed . A slight shoulder dip will be produced and it must be just sufficient so as to maintain the centre of gravity at a constant level. Too much dip produces excessive lateral sway of the hips .

The arms can be used rapidly if carried at approx 90degrees. – This action is the most efficient angle for fast , balanced , vigorous arm action . If the elbow angle reduces too much ( 80 -70 degrees) , then the shoulders will excessively roll or rotate . And the opposite applies – a low , pendulum –like arm swing will slow down leg speed.

The range of the arm swing commences with the hand just forward of the hip seam and the elbow in a recovery position to the back . The arm then swings forward , hand kept close to and just above the hip and reaches the end of the swing with the hand reaching just under chin height and to the centre of the body . The arms must swing in a pendulum like attitude , driving forward and not going below the hip or behind the hip as this is energy being forced backward .

A correct arm action fulfills three important functions :

1. Balances the whole body / racing action .
2. Maintains a horizontal forward hip action and rotation
3. Affects ground reaction and increases the rear legs driving force .

The need for a strong upper body and strength endurance of the arm action will ensure that a vigorous arm action is maintained throughout any race and is an essential component of any training program for racewalking.

There is also the term that I refer to as “Walking on your arms” . When an athlete tires in a race usually , there arm actions slows accordingly . However , if there is then a greater emphasis and focus only on arm drive ( speed) , the legs usually follow suit and the athlete can and will speed up .

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## Leg Drive & Feet Placement

The double support phase of a walkers stride occurs for only a fraction of a second .  
It should be the aim of every walker to reduce the time taken on this phase .

Contact occurs at the centre back of the heel first , with the toes as high as possible . This will ensure that the optimal stride length is attained.

A flexed knee on contact will greatly reduce jarring and will give a smoother , faster , more efficient rolling action . The rear leg / foot will be in a push-off position high on the toe .

To reduce a “propping ” effect , the heel is placed closer to the athletes projected centre of gravity . Also , to avoid any unnecessary vertical movements “ bouncing ” , the leg and the foot must not be dropped down short or jammed down to the track . The speed of the stride is directly related to the strength of the pushing force and to the direction of the rear foot . The major contribution to this force is made by the ankle plantar flexors during push-off..

The leg should remain braced throughout the majority of the driving phase , however the leg should not be braced until the front heel makes contact with the ground as this greatly reduces the speed of the recovery leg . During the recovery , the knee is bent at up to 90degrees to allow for a rapid recovery as it sweeps forward . The foot is kept low to the ground as this is happening . It is imperative that the leg is not straightened early during the latter stages of the forward swing to heel impact . A powerful hip rotation / action would prevent this from occurring .

Foot placement is critical and small changes can make a considerable difference to speed and stride length .

Heel contact takes place along a straight line . The body weight is transferred via the outer border of the foot ending at the big toe .As the foot rolls off the ground , it should swing forward as low as possible. Ideally , if an athlete were to imprint his stride , it would align itself along a centre line marginally to the left and right of that line with the big toe inline .

The use of X-Over technique is absolutely critical in ensuring that the lead leg lands in a straightened position , that the hips are rotated sufficiently and that there is sufficient rear leg drive along with the maximum stride length . Use of this technique in an over accentuated style will lead an athlete to utilizing all of these techniques when racing reducing the possibility of disqualification for contact ..

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## **Technique Summary for the Novice athlete**

Start by street walking and speed up . The arms will have a natural tendency to rise to a normal swinging action .

1. Look to the horizon ( end of the track ). This will give the right body lean ( about 3-5 degrees ) .  
Looking to the sky or ground will result in a shortened or “chopped ” stride
2. Shoulders down , arm drive at 90 degrees and forward to the centre of the body .  
The hands to travel not behind the hips or below . Hands in a soft clenched fist .
3. Hip rotation ( swinging forward ) to extend the stride length and ensure a straightened leg on contact . X-over work will help here . Sitting low on the hips to ensure a low centre of gravity .
4. Pushing off of the rear leg to “heal and toe ” contact with toe high , bringing the foot through low and fast underneath the body . And repeat

## **SPEED TRAINING**

As in distance running , speed is relative and the program of a novice walker should be tempered with this concept. In regard to the advanced walker , training for speed needs to be considered under three main types :

### **A. Specific event Speed :-**

The maximum speed which can be maintained over the full racing distance .

### **B. Part event Speed :-**

The maximum speed over a distance less than the race distance .

### **C. Maximum Speed :-**

The fastest speed over short distances , say 300- 400 metres , which the walker can maintain without “lifting” or loss of contact .

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## **SPECIFIC EVENT SPEED**

The development of this speed is the object of all training because it :

- Co-ordinates the efforts of all other work
- It rehearses the body and mind for actual racing
- And it develops the skill of pace judgment .

A typical session would include race pace work over the majority of the event distance . This type of work must be carefully incorporated into the program as it is physically and mentally very exhausting .

It is best “ blocked ” into to , three or more weekly cycles , followed by two or more weeks of less intensive work to allow full adaptation and avoid staleness and to prevent the risk of injury .

## **PART EVENT SPEED**

This speed is more closely related to 10kkm and 20kkm races , and less closely to the 50kkm event. This type of training entails efforts of between 1 to 5 kkm .The speed will be aimed at race pace or slightly faster than the main race distance . An example of a typical unit of work for an elite female athlete

Would be : 1-2 sets of 4-5 x 1000m at 4.20 pace with a work to rest ratio of 1:1.25 or 1:1.5 .. Or 1 x3000m , 2x 2000m , 3 x 1000m of similar pace and rest intervals .

It is imperative that with this type of training that recovery times are closely monitored . The pace of the workout will remain relatively constant throughout the block of the cycle of work ., having once established the desired target times . The best training effect will be achieved by gradually reducing recovery times and by carefully monitoring the volume of work performed.

Note .. Always , as a coach , be prepared to reduce a training module if the athlete is not coping with the volume of work or intensity . There is always tomorrow.

Again , because this type of training is monotonous and physically demanding , it cannot be employed week in , week out and is best “ blocked “ into the program. Improvements through this regime of training are relatively rapid . It provides : -

- An adequate reserve of speed for 10 and 20kkm racing
- A more adequate speed reserve for 50kkm racing
- And a potential for the development of special event speed.

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## **MAXIMUM SPEED**

This speed is not closely related to performance in the 10, 20 , and 50km events . However, sessions involving maximal speed over a distance of 200 m to 400m should be included in the program from time to time . The benefits are :-

- That it shocks the system out of the same regular pace and possibly facilitates a better race pace rhythm
- That it provides a quick indication of Technical breakdown
- That it provides an excellent speed endurance and aerobic workout , if the recovery between repetitions is kept to a minimum .
- That it will provide the necessary confidence if a “Final Sprint “ is required .

## **THE RELATIONSHIP OF SPEED TO ENDURANCE**

The ability to perform at a constantly high speed over a given distance can only be achieved after developing a high level of general endurance and conditioning. The speed of this type of training is of critical importance .

As aerobic and strength factors improve , so must the speed of each endurance workout . The “overload factor” .

Relaxed , easy paced walks must be carefully blended with medium to fast paced walks . Too often , walkers become obsessed with slow mileage at the expense of faster more intensive tempo work..

“ If you can’t do it in training , then how do you expect to do it in a race ? ”

Note : The obsession with training every day to maintain a mileage diary for daily workouts is one that should be avoided . “JUNK miles” are exactly that . To go training when there is no desired outcome or the body is fatigued and really needs recovery rather than work is useless.

Sleep and rest are a training component that is usually overlooked , but will contribute to a better performance , more so than hard training . Ordinarily , we allow an overnight recovery to then be able to back up and continue training . It may at times be better to have a longer rest than just an overnight sleep to produce an optimal training effect the next day .

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## CIRCUIT TRAINING / WEIGHT TRAINING

To augment the training program , weights and circuit training should be implemented on a regular basis.

The building of “Core Strength “ in racewalking is absolutely critical as Racewalking is 3 times more physically demanding than running ..

Circuit training initiated at least once a week is extremely beneficial for conditioning the heart and lungs and the overall capacity of the body to tolerate stress.

As a Walkers strength component of racewalking is paramount for good performance ,it must cover Aerobic Conditioning , Maximum Strength , Strength Endurance and Speed Endurance.

In the initial stages , general conditioning of the body serves as the foundation to work on in improving the ability of the body to improve performance.

Thus the three areas :

1. General Conditioning
2. Aerobic Conditioning ( circuit training etc )
3. Strength endurance

Flexibility should be worked on before and after all workouts .

Once a body is strong and conditioned then points 2 and 3 should be utilized each at least once a week., preferably with a full day between each component . General conditioning will apply for at least 3-4 months in Phase 1 and Phase 2 . Heavy work should not continue into Phase 3 but Circuits and Hill work can .

Remembering that all WORK IS ACCUMULATIVE . It all contributes to the whole end result.

The aerobic fitness component utilizing only body weight resistance or in some cases very low weight dumbbells or ankle and wrist weights bringing up the heart rate and breathing rate and holding that for minimum of 20 minutes will give a training effect which will relate directly to a race code.

As the body becomes more conditioned to these loads and strength endurance levels become more apparent , thus the circuit can be increased in length.

Given that you have access to a gymnasium , plan your circuit around whatever equipment is available.

Try not to put too many exercises on the same muscle group together , but work alternatively on different muscle groups.

Alternatively , most of these exercises could be performed on the track :



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Circuit Training Continued ...

Eg: -

Skipping .....	1 min
Bench Press.....	30 secs
Crunches.....	30 reps
Leg Extension .....	15 reps
D/Bell Arm Swings ( walking mode .....	30 secs
Hip Flexor.....	15 reps
Step Ups D/Bell.....	1min ( 30secs each side)
Dips.....	10 reps
Push Ups.....	15 reps
D/Bell Floor to Ceiling .....	30 reps
D/Bell Curls .....	30 reps
Flutter kicks.....	30 reps each leg
Sit Ups.....	20 reps
Lat Pull down .....	15 reps
Pulley Chins .....	15 reps

Take 20 seconds between each exercise and repeat each set 3-5 times dependant on the athlete and their coping ability/ fitness.

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Cont..

If a runner loses form or technique toward the end of a race , there are no penalties ...Just get across the line as best you can .. However , if a walker cannot hold his form ( technique ) together , he is a sure to be DQ'd toward the end of a race .

Young walkers should concentrate on “body weight” exercises and dumbbell training and at a suitable age , then learn how to perform lifts correctly and employ stage and circuit training as a general conditioner and basis for weight training .

There are a variety of circuits available that will enhance all-round strength , strength endurance and aerobic capacity. One is limited only by one's imagination .

The possibilities are endless , however there are a few exercises that should not be done by walkers . eg : - Calf raises , Back hyperextension , Squats , Seated Leg Press , to name a few as they all lead to tightening of opposing muscle groups to that required for racewalking .

Some examples of exercises that you can , as a coach extend to your athletes are as follows :-

Push Ups ... , Sit Ups ... , Leg Flutter Kicks ... , Leg X-Overs ... , Crunches ... , Dumbbells Floor to Ceiling ... , Dumbbells Overhead ... , Dumbbells Swings ... , Dumbbell Curls ... , Wall Sits ... , Skipping ... , Single leg, partner squats ... , Running on the spot ( High Knees) ... , Shuttle Runs ... , Chin Ups ... , Hip Flexor legs to chest ... , Punching Bag work etc etc .

These exercises can be done in sets of reps or timed , dependant on the exercise. Usually 3 sets of 12 exercises are sufficient ..

When your athlete can gravitate toward some weight machines . then try these ..

Bench Press ... , Pulley Chins ... , Lat Pull Downs ... , Leg Extension ... , Upright Rowing ... , Rowing Machine ... , Tricep Curls ... , etc, etc

These exercises are usually done as sets of repetitions ..

Warm-ups can include ...Laps of a Track , Stationary Bike , Treadmill , Skipping , etc along with Stretching before and after all workouts .

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## Weight Training

### General Conditioning for Senior Walkers

Here again , access to a Gymnasium is essential .

Object : To improve the overall strength components throughout the body.

Before strength endurance and maximum strengths can be achieved the total conditioning of the body to accept a given workload must be first achieved. A strong “ animal” must have a base to work from.

Here again is an example of a general conditioning program , based on 3 sets of 10 of a comfortable working weight determined by the athlete and the coach .

Warm Up .....	Treadmill / Cycle
/ Skipping 5 minutes	
Stretching .....	( preferably pre
race stretching )	
Bench Press.....	3 x10
Leg Extension .....	3 x 10
Lat Pulley.....	3 x 10
Hip Flexor.....	3 x 10
Pulley Chins.....	3 x 10
Flat Flys D/bell.....	3 x 10
Sit Ups with / without D/bell Twists.....	3 x 10
Upright Rowing .....	3 x 10
Arm Curls.....	3 x 10
D/Bell swings .....	3 x10
D/bell Floor to Ceiling.....	3 x10
D/bell Step Ups.....	Etc etc .....3 x10

Finish with Stretching / Bike /Treadmill 5 minutes warm down.

Try to stay away from Leg press , Squats , Back Hyperextension , Calf Raises ,  
etc.

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## Preparation / Phasing

Racewalking is an endurance event .

The principal international racing distances for Juniors (U20 ) are 10kkm for men and 5kkm for women . Training is therefore aimed at increasing cardiovascular capacity both aerobically and anaerobically.

Also required is the development of upper body strength , flexibility of shoulders , torso , hips and legs for efficiency and range of motion . The final objective and possibly the most important is that of efficient technique .

For most Sub – Juniors , there should be an incremental increase in distances raced as the athlete gets older and progressively stronger . eg . U12 – 2kkm , U14 – 3kkm , U16 – 5kkm , U18 – 10kkm , U20 – 10kkm . These distances should not be advanced at each age level thus allowing the athlete to grow and develop into the sport progressively .

Because strength and endurance levels increase with age over a period of time , it is much wiser for Juniors to stay within these race distance limitations unless that athlete is exceptional and has the opportunity to be a part of a senior international team . A Junior should concentration racing within his age group.

There is plenty of time to pit yourself amongst the best in the world when you are fitter , faster and stronger . The psychological impact of a number of losses at senior level for a Junior could be devastating.

Periodisation is a word used to explain the division of the training year to meet short and long term objectives .

It is usually broken up into 3-4 phases where each phase represents a block of time allocated to a particular work load or period .

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## **Phase 1 :**

Preparation phase where basic conditioning is established . Possible long slow mileage with one hard race distance session per week . There is no accent on racing throughout this period at all . Technique , flexibility , mobility drills are to be emphasized throughout . Strength work and good general conditioning are required to toughen the body .

Track work , fartlek sessions and hill work are a good way to vary speed sessions. When getting back to the track for the first time after a break , start slowly emphasizing technique as differing surfaces tend to induce “ shin soreness”.

Track work and the degree of speed and distance and recovery between reps should be monitored closely .It should also be centered around race distances rather than over-distance . eg : race goal 5,000m – 10,000m.

## **Phase : 2**

Same as phase 1 except the long slow mileage is reduced along with reduced weight training . Continue conditioning training ( circuits ) and increase specific race distance training .

## **Phase 3 :**

Transition to Speed . Brings the introduction of speed work once or twice a week for two weeks , then leading up to eg. Championships . Racing is important to establish “ race legs “ , but without emphasis on results . Maintaining good mileage is important as long as it is of quality work .

## **Phase 4 :**

Race period .Its time to lighten back mileage but maintain one good rhythm session per day .

Speed work can be done at 80 -100% , ensuring that all sessions are monitored and adjusted according to fatigue factors.

Try to finish each session feeling “toey “ . Never do another session just because you feel good . Save it for the race.

## **Phase 5 : Recovery**

Usually a 4-6 week block where of active rest / recovery . Keep away from races.

“ There is always room at the top ”

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# Racewalking

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## Speed Training for Walkers

Track Work, Fartlek Sessions and Hill work are a good way to vary speed sessions.

When getting back to the track for the first time for a long time , start slowly , emphasizing technique as the different surface can induce “ shin soreness”.

Track work and the degree and the degree of speed and distance and recovery between reps should be monitored closely.

It should also be centred around race distance rather than over-distance. Eg . race distance 500m / 10000m .

Typical Track Sessions can be of straight repetition sets eg . 8 x 400m with 2 minute recovery or a Pyramid set ( 200, 400, 800, 400, 200 ) x 3 etc.

With all Track sessions a suitable warm up should be introduced covering 3-5 laps with drills / skills reinforced along the way .

A typical Track session will cover 3,600m of Speed work for a Junior athlete along with approx . 2000m of recovery between sets .

With a warm up and Warm down , you could assume that the athlete has covered approx 8-9 klm in a session.

More than sufficient for a Junior athlete ( age 15-18).

Pyramid type sessions are quite beneficial as it easy to step up the length of each rep as an athlete is adapting and improving with a given workload..

Accordingly , recovery rates can be altered to enhance a training effect on the same workout .

Speed factors on a long workout should not be paramount , but the focus should be on good technique at around or below race pace.

It helps to document each workout and use this information as a referral for future workouts .

Ensure that each athlete has a diary and fills it out daily ..

“ I couldn't wait for success , so I went ahead without it ”

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# Racewalking

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## FARTLEK SESSIONS

Fartlek Sessions can be done once or twice a week while training is restricted to the roads . A good way of doing this is to walk from light pole to light pole maintaining good rhythm and then short sharp burst between poles lengthening the distance as you feel . Always give the athlete a few kilometres to warm-up initially .

Secondly , you could use a stopwatch ( on Road or Track ) and with a solid walk of say , 5 minutes , then time consecutive reps at set intervals allowing a good 5 minute recovery walk at the end.

Hill Work involving timing a set distance on a course that will give sustained climbing is also very good once a week. This strengthens heart and lungs and legs and could be used as a good indicator of form . Ensure that the athlete has a good warm-up before setting up the course .

Speed work , once initiated through the transition period really never has to be flat out .

Leave that to racing as many athletes leave their best performances on the training track.

Leave a session with a feeling of accomplishment rather than exhaustion . It will make it easier to do the next session.

All work should be focused on  
Stride Frequency , Stride Length , Hip Mobility , Arm And Shoulder Drive , Body  
Position , Posture

In other words . Technique , Technique , Technique .

“ What does not destroy me , makes me stronger ”

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# Racewalking

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## Racing

The race period is usually done over a 4 week period culminating in a major championship. The lead up races are essential to establish a “race-pace” and also to get the mind , legs and body into race mode.

Most of the training in this period is devoted to maintenance and sharpening up mode . It can still combine circuit training , fartlek , track sessions and the occasional specific speed distance session , however , there should be no accent on overload training sessions

## Flexibility and Mobility Exercises

Given that a warm up and stretching exercises have been done , an additional 4-5 laps of mobile flexibility ensures proper preparation for racing .  
These exercises can also be initiated throughout longer , slower training .

Imagine , walking down a straight line and walking with the left foot crossing over that line to the right and visa - versa with the right foot . This X-Over action does a number of things . Firstly , it ensures that the athlete lands on a straightened leg .

It is virtually impossible to land on a bent leg while doing this .

Secondly , it ensures that the hip rotation is over extended increasing hip mobility accordingly .

It also helps in pushing off of the back leg by virtue of this action increasing rear leg drive and stride length while also reinforcing dual phase contact .It is a great exercise for all young athletes and should be continued throughout an athlete’s career.

While this is being undertaken , the arms can be held in different positions and can markedly alter stride length and hip mobility as it overworks the legs and hips concurrently.

Some of these are as follows:

1. Holding arms close across the chest .
2. Holding arms outstretched forward in front of you .
3. Arms crossed and held behind the back
4. Arms stretched out to the side at shoulder height
5. Swinging the arms across the body holding onto the hands in opposite rhythm to the leg stride
6. Arm rotations each side of the body forward and back
7. Shoulders rotating backward
8. Overstriding
9. Walking in figure 8’s . Very tight circles overusing hip rotation and movement on each side.



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## Stretching Exercises

These are to be initiated after a couple of warm-up laps , jogging or walking . Hold every stretch for up to 10 seconds .

Do not bounce the stretch as ( ballistic ) stretching can lead to muscle injury .

These are only a few basic stretching exercises that can be undertaken .

1. Feet apart , pointing forward , side bends .
2. Feet apart pointing forward , flat back stretch
3. Feet apart , toes forward . full squat position
4. Feet apart , toes forward , side lunge
5. Feet apart , toes forward , pushing hips forward , arch back
6. Neck rotations around side to side ( not back )
7. Hands clasped above the head , stretched back and down to the sides
8. Trunk rotation , turn hips . Stretched down flat back
9. Trunk rotation to the side hands clasped above the head
10. Feet apart facing forward, lunge and push hips
11. Feet apart facing forward, lunge and straighten legs with head down to knees , both legs straight
12. Sitting with legs apart , stretch down head to knee to each leg
13. Groin stretch , feet together , push knees toward ground
14. Sitting down legs apart , push chest to ground
15. P.N.F.Hamstring stretches
16. Lying on back , bring knees to chest
17. Lying on back , bring foot and knee parallel to chest
18. Lying on back , bring knee up and across to opposite shoulder
19. Lying on side , pull foot back and push away ,still holding onto foot.
20. Standing up , swing knee to opposite shoulder and hands swing in opposite direction.

There are a few here and obviously many , many more that can be used ..

“ The race is not always to the swift , but to those that keep on going ”

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# Racewalking

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## Common Injuries

One of the most common injuries that racewalkers encounter is “shin splints”, however, in walkers it occurs on the outside of the tibia ( anterior tibialis syndrome ). This is a tightness and an aggravation of the tendon leading to the anterior tibialis muscle developed from pushing the heel to the ground and raising the lead foot on landing . It is compounded by tight calves and needs massage of the calves and stretching with light work.

Speed work induced tight hamstrings can lead to soreness of the attachment right in under the buttocks . Again , massage and rest with stretching once the soreness factor has decreased , the answer .

In the case of an athlete having a “lordotic ” back there appears to be a greater increase of numbers of athletes with sore lower back issues . This compounds with a reduced stride length quite common . The tilt of the pelvis from under needs to be worked on with posture and a great deal of stretching of the lower back needs to be undertaken .

Foot issues are rare , however , in the case of sore feet , care and selection should be taken in choosing the right shoes for your feet .

There are a multitude of shoes available in the marketplace , some with straight last and some with curved and slightly curved last soles . As the foot predominantly wears the shoe on the heel , ball and toe , the shoe must be flexible but firm , an even thickness throughout the sole and light enough to not create its own issues with extra weight being brought through with each stride .

Make sure that the shoe fits the foot , not the other way round.

Upper body issues and core strength are usually caused through a lack of upper body strength .. Most athletes legs are well conditioned and trained and as marathon runners are usually legs and lungs men , Walkers need a strong upper body to maintain momentum and technique throughout a race .

“ Winning is not everything , but the effort to win is ”.

# Racewalking

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## Notes for a Coach :

Always ensure that the athlete is well informed regarding training and expected outcomes . Empower your athlete with not only what you want done , but why . Give them an understanding of the sport . Who knows , at the end their career , they may end wanting to be a coach .

Monitor your athlete's diet ensuring that they have an adequate intake of a “ balanced mix ” of carbohydrate a, protein and vegetables . Regular blood tests will show deficiencies in Iron for example.

Allow flexibility on all training sessions , monitoring and checking verbally just how each individual athlete is coping with the session . There are many factors that influence a young athletes attitude and training demeanor ..eg. School work / exams , other recreational activities , family issues , peer pressures etc etc ..

Be aware and adjust those sessions accordingly . They have a long career as an athlete and need our full support as coaches .

When travelling to competitions , use a checklist that the athlete can go through to ensure that they have not overlooked anything in their race gear , travel requirements . The onus is on them , however , they do need to be reminded ....often.

Use a diary , both for athletes and coaches , as this reinforces the need for planning and preparation and review .

Remember : “ Those who fail to Plan , usually Plan to Fail ”

Gain an understanding of the Human Body and its muscular makeup. If you have not been an athlete , then find the time to understand the biomechanics of racewalking and the muscles that work and how they work . This will ensure some empathy with the athlete when trying to understand any niggles or minor injuries that an athlete may encounter.

Get to know your athlete , eg ... how many brothers and sisters they have , their birthdates , celebrate their birthdays , find out what else makes up the person that you are coaching . Remember that these are extraordinary people with an extraordinary talent .

I firmly believe that if you give even 5 % input into a child's development , you will receive a 95 % return .. Just because you have shown them that you really care .. They need to know that they are special .

Make training “FUN ”, especially for the young athlete , developing in their sport. That's why they are there in the first place .

## Racewalking

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Probably the most important piece of information that I can pass on to you is to always give POSITIVE FEEDBACK to your athletes .

Athletes can always see through “lip service” , so be genuine , identify problem areas and discuss these frankly with your athlete and always , always finish with a positive note .

A small note on altitude training that I have recently experienced . First of all , the adjustment takes about a week before hard training can be undertaken and , most importantly , Re- hydration is paramount as living at altitude already dehydrates the body . Training hard at altitude compounds it more so than sea level training , so care should be taken to ensure that athletes “over” hydrate at all times at altitude .

The old adage of “ PRIOR PREPARATION PREVENTS POOR PERFORMANCE “ holds true anywhere . Think about where you are training , what sort of terrain , how many athletes , workload , weather , drinks , recovery etc etc . Allow for every possible contingency.

A First Aid certificate may be advantageous for a coach as a “duty of care” for your athletes .

Sleep is absolutely critical in the growing and developing athlete . Most adolescents require up to 10 hours sleep per day and when you mix that with academic requirements , social activities , family commitments , studies and training , it doesn't leave a lot of time for recovery .

Ensure that your athletes maintain a balance of all .We are , after all coaching an event that extraordinary young people have an extraordinary ability with.

No Guts ! ... No Glory !!!

# Racewalking

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## **Recommended Race Distances for each age group**

Open Men 10, 15, 20, 30, 50 klm

Open Women 5, 10, 15, 20klm

U20 Men 3, 5, 10 klm....20klm ???

U20 Women 3, 5, 10klm

U18 Men 3, 5, 10 klm

U18 Women 3, 5, 10 klm

U16 Men 3, 5 klm

U16 women 3, 5 klm

U14 Men 1500, 3 klm

U14 Women 1500, 3 klm

U12 Boys 1, 2 klm

U12 Girls 1, 2 klm

U10 Boys 1, 1.5 klm

U10 Girls 1 klm

These race distances are recognized as the best distances for young athletes as they grow and develop allowing a natural progression as they mature into the sport ..

It is only rarely that an athlete would or should step up to a higher age bracket or distance and that would be dependant on being an exceptional athlete .

Masters athletes are a different structure altogether ..

“ A Winner never Quits Cos A Quitter never Wins ”

# Racewalking

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A bit from the Author :

First of all this document is a compilation of a group of works including my own that has contributed to the racewalking community over many ,many years . Some that I do not know the origins of .

I trust that I have done these words justice and thank those that have contributed .

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“ Do a little more each day than you think you possibly can ”