The 10km Training Guide

A Note From the Author

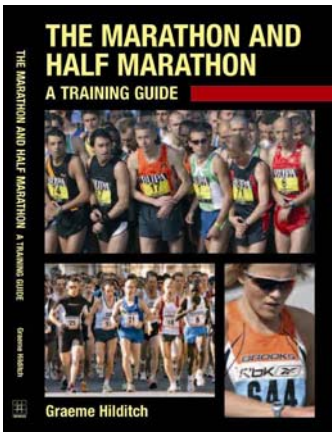
Dear runner,

I hope you enjoy reading the following guide and find that it helps you get the most out of your training.

With any luck, the information you'll read will help you to not only enjoy your training, but also ensure you finish the training plan injury free leaving you raring to go come race day.

However, please note that this guide is very much a brief overview and gives you a fraction of what you need to know to truly get the most out of training.

For more information about running I strongly suggest you buy my book "The Marathon and Half Marathon: A Training Guide," either through my website at www.fitFAQS.co.uk or at all good book shops.



Lastly, I please ask you to respect copyright laws and not reproduce any of this guide without first asking my permission. If you would like to reproduce it, or use extracts, please email me through my website and I will happily discuss the matter with you.

Once again, I hope you enjoy the training for your 10km run. Remember, if you really get the running bug and want to go up to the next level, please feel free to download the half marathon training guide and others from www.fitFAQS.co.uk.

For further information on running training, click on the image below to see me talk to Bizzibox about how best to prepare for running events.

bizzibox
let your business do the talking

Best Wishes

Graeme Hilditch

Congratulations

A 10Km race is the ideal challenge for anyone who is new to running and the perfect stepping stone of you later want to progress to a half marathon or even the whole 26.2 miles.

Not only will the training help you to get into shape (and lose a few pounds should you need to do so) you will hopefully enjoy your race preparations and you may even be inspired to run a half or even full marathon.

Depending on your goal, whether you just want to get round or aim to breaking a personal best, this guide will take you through every week of your training step by step, covering all the aspects of your preparation, from the running itself to nutrition to injuries you may experience.

As well as this guide, a number of resources can be found in book shops, the internet and even friends who can offer advice on the best ways to get you round the course.

As good as this may sound, a lot of the advice you will read and hear, often contradicts itself and leaves you wondering who is right and whose advice you should follow. This is a dilemma faced by runners every year and causes some to completely change their training schedules half way through, all because a friend suggested doing it differently.

The best advice I can give to counter this, is to remember one thing. You are an individual. Our own individuality makes a huge difference when it comes to approaching a 10Km road race.

Just because one person trains in a certain way, or eats a certain thing on the morning of a run, it does not necessarily mean that approach will suit you. You can read all the running and nutrition guides in the world, but in order to run distance events well, you need to listen to your body and do what suits you!

Everyone's body reacts differently to endurance training depending on sex, weight, time available to train and genetics to name a few. We are not all as suited to running long distances as Paula Radcliffe.

In this guide, as with all guides, it will offer general advice on the most popular ways to prepare your body for the race, but there is no need to necessarily follow it word for word.

If one piece of advice does not suit you, don't do it – easy as that.

It is strongly suggested that before you begin training, you have a check up with your GP. He / she will test your blood pressure and general health to make sure you have no underlying health conditions that could be aggravated by regular training. Even if you feel you are fit and healthy, it is worth getting a check up.

Getting Kitted Out

Clothes

Before you set out for your first training run, it is vital that you have the right clothes and trainers. As the months progress closer to colder winter days, you must ensure you have comfortable running trousers that do not rub and tops that can be removed easily if required.

Even though you may be cold at the start of a run, you soon heat up and can get prematurely fatigued if you heat up too much.

Running Trousers and shorts must be chosen carefully to make sure they fit well.

The last thing you want on a training run is a tight pair of running trousers/shorts rubbing in an embarrassing place. This can be prevented by investing in quality undergarments such as Nike Pro Compression pants or Cycling Shorts, but it's strongly recommended that you choose good quality trousers in the first place.

Socks also play an important part. Blisters are a runner's worst enemy, especially when you are breaking in new trainers. A good pair of running socks will reduce the incidences of blisters and take moisture away from your feet.

Other items you may consider are gloves, a hat, and a reflective strip for night running.

A Tip on buying clothes

Like nearly everything in life, more often than not, you get what you pay for.

When it comes to buying running clothes, I cannot stress the importance of spending that little bit extra, to ensure that the clothes you buy are comfortable and made specifically for runners.

You could spend hours traipsing up and down the high street or surfing the net for the best brands at the best prices, so to make life a little easier (and cheaper) fitFAQS.co.uk are here to help.

We have a page dedicated to running clothes and equipment, with exclusive discount codes and offers from some leading online companies such as Ellie Gray and Nike Store, to all runners looking for quality running kit.

So, when you're ready to go shopping, visit www.fitFAQS.co.uk for some great offers!

Running shoes

Your running shoes are perhaps the most important item of clothing. They must be comfortable and mould to your feet well.

It is certainly one area where you cannot afford to go for the cheap option, as cheap trainers are unlikely to have the durability to withstand your marathon training. You should be looking to spend anything upwards of £60 and it is likely that you'll need 2 pairs to see you up to race day.

Every year far too many people make the same mistake and fall for marketing gimics and chose their trainers on their colour over their functionality. I cannot stress the importance of choosing a quality pair of running shoes to see you through your training, so for more deatailed advice on how to choose the right running shoes, visit fitFAQS to give you a helping hand.

Whatever pair of running shoes you chose, before you buy them, It is advisable to have your running stride analysed, so that you can be advised which trainers best suit your running gait. You can have this done at the London marathon store in Covent Garden as well as at a number of good running stores across the UK.

Everyone's foot lands slightly differently when they run and if you have the wrong type of trainers for your specific running gait, it can lead to injuries such as shin splints (see injuries section) and sore knees. To give you a

Everyone's foot lands slightly differently when they run and if you have the wrong type of trainers for your specific running gait, it can lead to injuries such as shin splints (see injuries section) and sore knees. To learn more about this and find out where to get yourself a proper pair of running shoes, visit the running gait section of fitFAQS.

Once you have your running kit and an optional mp3 player, you are ready to begin your training - unless you first want to take a look at some great running gadgets that will not only help you chart your progress, but also make training a lot more fun.

Running Gadgets

These may not be as essential for training as your trainers, but I strongly recommend you consider buying one or two of the following.

You needn't spend very much but the following "toys" genuinely add great benefit to your training and make it far less tedious.

Heart Rate Monitor

Of all the gadgets, a heart rate monitor is arguably the gizmo that should be at the top of your shopping list.

Using a heart rate monitor for your training runs is extremely useful to help track your progress, keep you running at the right intensity and stop you from under or over training.

By keeping an eye on your heart rate, it is much easier to gauge if you are overworking or under working during a training run, plus its good fun.

For the best and most competitively priced models, I can highly recommend www.heartratemonitor.co.uk. Not only do they have a range of heart rate monitors to suit every budget but they stock a whole range of other running gadgets that will keep you company through your training.

By keeping an eye on your heart rate during your training, it is much easier to gauge if you are overworking or under working during a training run and over time you can see how much your running performance and fitness improves.

Depending on your budget, they can cost as little as £30 for one which just measures your heart rate, up to £200 which offers a number of statistics on your training performance.
If you do decide to get one, then to be able to use it effectively, you must first determine

your maximum heart rate (HRM or Max HR)). The easiest way to do this is to subtract your age from 220.

For example, if you are 50 then your theoretical maximum heart rate is 170 beats per minute.

This formula is a little inaccurate and due to individuality can vary greatly. You may find that during a hard run, your heart rate may exceed this figure. If this happens, adjust your maximum heart rate accordingly.

Training in tune with your heart rate is a fairly complicated subject and far beyond the scope of this training guide. Although you could easily surf the web and find out what your theorised heart rate should be during your training, the chances are that you will not get all the information necessary to heart rate train properly.

Therefore, as shameless as this plug is, I strongly recommend you buy my book which explains heart rate training in detail and ensures you get all the facts you need to get the most out of training.

In the meantime, if you want to know a bit more about heart rate training and where to buy one, visit www.fitFAQS.co.uk.

Distance and speed measuring devices

There are a number of distance measuring devices on the market and it is very much up to you and your budget which one you get or whether you feel you need one at all.

They are really useful to have on any training run, but particularly handy if you live "out in the sticks"

The Top 3 most popular devices are:

Nike Plus

Nike have teamed up with Apple and have come up with an ingenious invention. For just £20, you can buy a little pod which you can attach to your shoe and a small attachment which you click into the bottom of your iPod Nano.

The pod in your shoe transmits a whole load of data to your iPod including running pace, distance run and time elapsed. What's better, is that this information is audibly relayed to you every mile through your headphones, or every time you press the centre button on your Nano.

It's a great gadget for a relatively small amount of money and with the option of uploading

your runs to an online running community through iTunes, it is one of the most popular running gadgets available.

Pluses

Inexpensive,
Fun to use.
A "Powersong" can be set to give you a boost
Small and compact

Minuses

Inaccurate
A "Pod Pouch" must be bought if you don't own special Nike Trainers.
Prone to "software" freezing on the iPod.

So, fancy one? Then click here.

Running Pods

Both Polar and Suunto manufacture similar shoe pods, which work in a very similar way to the Nike Plus system, though they are more accurate and provide much more feedback.

They work by measuring the movement of the foot over 1,000 times per second in all 3 dimensions, they then translate all that data to pure forward motion. They are really smart gadgets are well worth considering investing in.

The pod transmits information such as running speed (in mph or kph), pace per mile (or Km), information on your splits and much more which you can then download onto your PC.

Running pods are more expensive than the Nike plus system but if you are a sucker for gadgets and love the aspect of looking at and logging your running data, they are certainly worth the investment.

Pluses

97% accurate, improved further by calibration
Fun to use
Download all running data to your PC

Minuses

Expensive
A little clumpy
Hungry on batteries

Click here to have a closer look.

GPS

Arguably the "Rolls Royce" of running gadgets, GPS devices gives the runner the same information that running pods do, with similar accuracy.

Not dissimilar to the Sat Nav system you get in a car, GPS devices monitor your running speed, average running speed and distance covered.

Most GPS systems fit onto your wrist like a watch and are a fantastic addition to your running kit – if you can afford it. With prices starting at £120 they are pricy – but great fun to use and give you a lot of feedback on your running performance.

Pluses

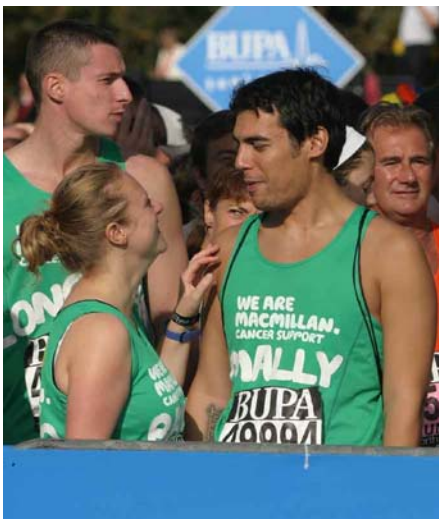
Highly accurate
Multi functional
Makes running more interesting
Easy to chart progress

Minuses

Expensive
Signal can be lost in wooded areas.

Tempted? Click here to have a closer look!

The Nitty Gritty of Training



So, you're kitted out and look the part, but looking like a runner is a far cry away from being a runner. Unfortunately, this is where the hard part begins – the training.

Whatever your race ambition, the training is tough. The physical and mental challenge of slipping on your running gear when it is raining cats and dogs with a gale force wind isn't easy, particularly in the British winter. However if you want to achieve your goal and finish the 10km distance in one piece, you must brave the elements and face the gruelling demands of training.

There are going to be times when you desperately want to throw in the towel but you must stay strong and ride the storm. Remember, once you cross that finishing line you will realise all that hard work was worth it, so stick with it.

What is your Goal?

When most people begin their training, they have some idea of a time which they would like to complete the race in. Naturally, if training goes well, goals can change but it is a good idea to have a target to aim for. To give you an idea, here is a "miles per minute" guide:

10Km time	Avg Mins per mile
1hrs 20mins	12:52
1hrs 15mins	12:04
1hrs 10mins	11:15
1hrs 05mins	10:27
1hrs 00min	9:39
55mins	8:51
50mins	8:02
45mins	7:14
40mins	6:26
35mins	5:37

Before you start using the training timetable (visit fitFAQS if you don't already have it) it is worth knowing what affect the certain types of training have on your body.

Contrary to popular belief, effective training does not simply involve running at one constant pace and upping the mileage every week or so.

Preparing for a Training Run

No matter what type of training run you have ahead of you, it is essential to prepare yourself both mentally and physically for the run.

Mental preparation

Firstly, have a think about the run. If it's going to be tough, such as your longest run yet, or a lung busting hill run, tell yourself it's not going to be easy and at times you'll want to stop, but make a promise to yourself that you'll give the training run your all.
Good mental preparation is essential for a good training run.

Physical preparation - Stretching

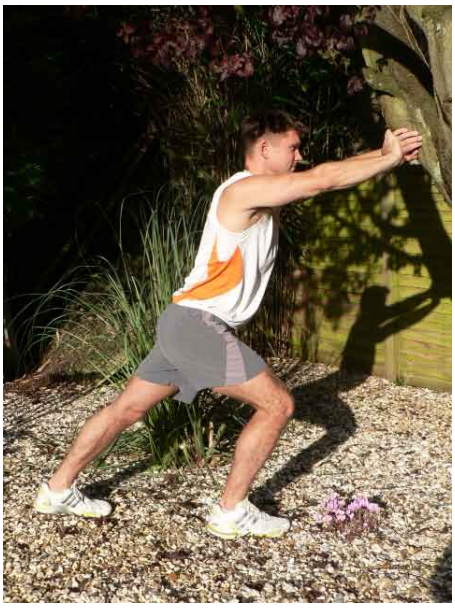
Secondly, is the important matter of stretching. It is vital that you stretch out all of the major muscles in your legs, so that the fibres are elongated and ready for the intense and prolonged muscular contractions which occur during a run.

The muscles that you should pay particular attention to are:

- The Calf muscles
- The Quadriceps (thighs)
- The Hamstrings
- The Adductors (groin)

To go into detail about stretching is beyond the scope of this guide.

However, my book contains in depth information about the different types of stretches and specific core strengthening exercises which you should become familiar with to help you remain injury free.



Here is a summary of some of the basic stretches for each muscle group:

The Calf

Situated at the back of the lower leg, the calf is easy to stretch.

- Find a wall, tree or fence and extend you of your legs backwards.
- Ensure your rear heel remains on the ground.
- Slowly lean forwards and you will feel the stretch on

the calf muscle
- Hold for about 10 seconds, then change legs.
- Repeat 2 or 3 times

The Quadriceps (Thighs)

Situated at the front the upper leg are your Quadriceps – four big muscles which help power you forwards during you run.

Stand upright and grab hold of the front of your running shoe, pulling your foot towards your bum.

You should feel a good stretch on the thighs but if not, tilt your pelvis skywards whilst keeping in the same position.

Hold for about 10 seconds, then change legs.

Repeat 2 or 3 times.

The Hamstrings

Situated at the back of the upper leg, the hamstrings are particularly vulnerable to muscle pulls and cramps, so a good stretch is essential.

Extend the leg you want to stretch a foot or so in front of you, keeping it straight.

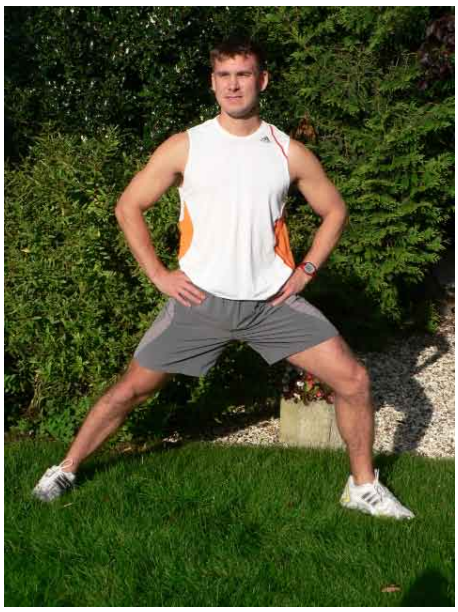
Gently place your hands on the other leg at about thigh level and slowly bend it from the knee, as though you were about to sit down on a chair.

Ensure you do not bend your back and keep it as straight as you can. You will begin to feel a stretch in the hamstring muscles as you lower yourself down.

Once you feel the stretch, hold it for 10-15 seconds then change legs.

If you want to get an extra stretch in the calf muscle, slowly lift your foot upwards.

The Adductors

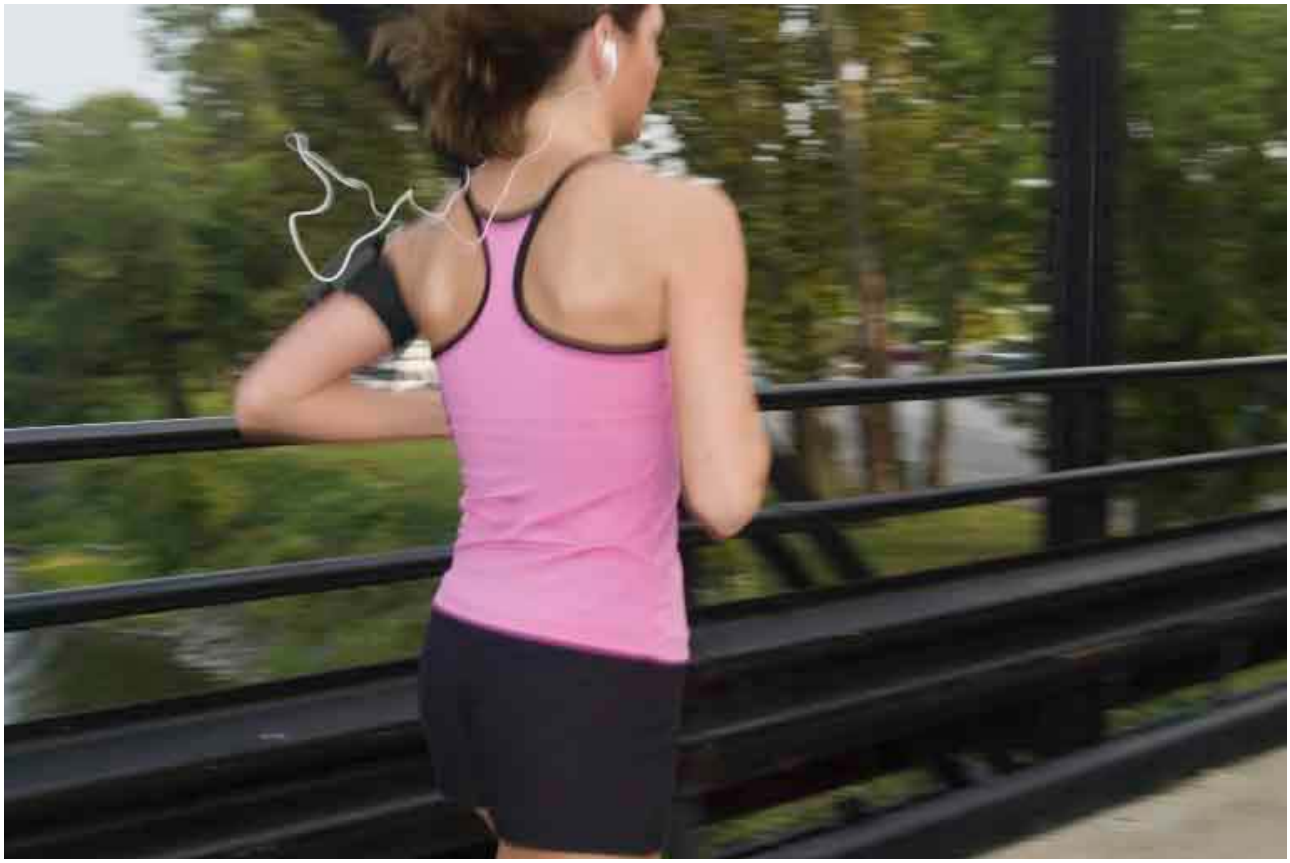


Situated on the inside of the leg, the adductors help to stabilise your running stride and like the hamstrings, are vulnerable to injury.

Face forwards and extend one leg to the side with your foot angling 45 degrees away from you. The other leg must remain straight and the foot pointing forwards.

Slowly shift your weight to the side of the bent leg and you will begin to feel a stretch on the inside of the straight leg.

Ensure your hips are facing forwards at all times. Hold the stretch for 10-15 secs



The Small Matter of Training

There are a number of variations that can be added to a training programme which not only add variety to your runs, but also make your cardiovascular system adapt better.

In the training programmes, you will come across a number of terms which indicate how quickly and what kind of training session you should be performing. Below is a summary of what they mean.

Easy Jog

Generally regarded to be a "recovery" or gentle paced jog, an easy jog is performed at a gentle pace and no real attention needs to be paid to time or running pace. Just go for a comfortable jog and stay relaxed without worrying about checking how fast you are running every 5 minutes.

Steady run

A steady run is just that. A pace that is quicker than an easy jog but one you still feel

comfortable with and one which you could just about hold a conversation with someone – or even yourself!

During a steady run, you should be aiming to keep your heart at about 65 – 75% of your maximum heart rate.

The actual speed of your steady run is very dependent on your running ability and can vary enormously, therefore the way people treat steady paced runs is very individual. All you really need to remember is that it is a little quicker than an idle jog, but you should certainly not be aiming to collapse in a heap afterwards.

Tempo run

A Tempo based run is run at a pace which is step up from a steady pace. A general guide to the intensity that you should be aiming for during a tempo run is at a heart rate of around 80-85% of HRM.

You should be running at just below your anaerobic threshold, so you'll have to concentrate whilst running. At this pace, talking is just about possible but you should only be able to manage short sentences before needing to take a breath.

The length of time that you are able to maintain a tempo paced run varies depending on your fitness level. Beginners may initially find that a two mile tempo run is tough going, but a good runner may be able to maintain tempo pace for a good ten miles. As your fitness levels improve, you will find that tempo runs gradually become easier to maintain for longer periods as your anaerobic threshold increases. The great thing about tempo runs is that they are highly effective at preparing your body to be able to tolerate a faster paced run.

The last thing about tempo runs, is that the definition of a tempo run varies from "expert to expert". Do not let the phrase "tempo run" or "tempo pace" confuse you.

All you need to remember is that running at a pace of 80-85% of Max heart rate and at a speed which you can only talk in very short sentences is an essential part of training and helps to prepare your heart, lungs and legs for the demands of the 26.2 mile course.

Hill running

Even though most 10k races are fairly flat, adding hill runs to your training can pay big dividends to your performance.
Hill running can be performed by either running up a steep hill and back down again over a number of repetitions, or running at a steady pace on a hilly route.

Running up hills helps to increase not only the strength in your legs, but also your heart. By overloading your heart and making it work harder than it would on a flat surface, it causes an adaptation process in your cardiovascular system and brings on your fitness in leaps and bounds.

It must be stressed however that these training sessions are hard work and your heart rate may get as high as 95% of maximum. Do not continue if you feel faint or light headed.

The number of repetitions or distance of these runs varies according to your fitness level and progression in the training programme.

Fartlek

This oddly named form of training is a Swedish word translated as “speed play.” As the name implies, it involves including a variation of speeds in your runs. Like the hill training, this helps to adapt the body to a larger stress than steady state running.

Over time, Fartlek training will not only improve your running pace, but also lower your heart rate over steady paced runs by improving its efficiency, thereby making your long runs more economical.

There are many ways in which to perform Fartlek training, but the important thing to do is vary it.

As your fitness improves, introduce variations into your Fartlek sessions. This can be done by:

- Increasing the circuit distance by a few miles
- Increasing your running or recovery pace
- Increasing the time of the quick run by a minute
- Decreasing the time of your recovery
- Incorporating some small hills into the run

Variation is the key. To keep the body adapting, keep changing your sessions slightly ensuring they never get easy. If you don't find these sessions hard, you must up the intensity. Keep a close eye on your heart rate and notice that as your fitness improves how much quicker your heart rate drops after the fast runs.

Like the hill training, these sessions are hard. Your heart rate should be reaching 85-90% of max HR. They are incredibly effective at improving your fitness levels, but be careful not to overdo it!

Cross Training

Many people like to combine different forms of training into their race preparations. This is a very good idea as it breaks up the monotony of running, adds variation and reduces the stress on joints caused by repetitive training runs. It is very much up to you what forms of cross training you incorporate into your program, but popular types include:

- Cycling
- Rowing
- Swimming
- Elliptical cross trainer

If you do choose to cross train, make

sure you still make your cardio vascular system work hard by monitoring your heart rate. Depending on the form of exercise you choose, your heart rate may not necessarily reach as high as it does when running even though you may feel that you are exercising at the same intensity. As long as you are breathing fairly heavily and working up a sweat, you are training at a sufficient intensity.

Training Programme for Beginners

If this is your first 10Km event, or you feel that you want a realistic training programme to get you around the course in one piece, then this is the program for you.

If you haven't done so already, please click here to be diverted to the fitFAQS download page and download the beginners training programme.

If training goes well and you would like to push yourself further, by all means "dip" into the intermediate programme and incorporate a training run from there into your schedule.

These programmes, as mentioned previously, are a rough guide and do not have to be adhered to religiously, so if you fancy doing a hill training session rather than a Fartlek, then do it. As long as you overload your body, you are helping to adapt it to the stresses of a 6 (10km) mile run. However, I must add that taking a trip to your local for a few drinks instead of doing a 5 mile run, is pushing the "adaptability" of the program a little far! Save the drink for the evening after the run as a reward – it'll taste that much better! (See alcohol consumption in Nutrition section)

Depending on a number of factors such as natural ability, body weight and time available to train, everyone will adapt very differently to the following programme, so if you are finding the training too easy or too hard, feel free to adapt the suggested training run to one which suits you better.

In the early stages, if you are new to running it is best to take it easy and slowly let your body adapt to the training. If you push yourself too hard, injuries are likely to crop up and affect your progress.

To ensure you give yourself the best possible start, think about starting light training sessions as soon as possible. Just a 20 minute session of walking and light jogging, slowly begins to prepare you joints, muscles and heart for harder sessions in the months to come. Gradually increase these sessions in duration and intensity as your fitness levels increase, but take care not to overdo it!

The fitFAQS training timetable has been designed to be started 10 weeks before the big day,

but it is strongly suggested you begin training at least 15 weeks before the race

It is taking into account that you have followed the advice in the previous paragraph and built up a general level of running fitness and are able to run about 4-5 miles.

Remember, come race day when the gun is fired for the start of the race, try to avoid going off too fast. It is so easy to get carried away with the atmosphere and the adrenaline rush of the event, but stick with the pace you have been training at to avoid feeling exhausted by the half way stage – it's a 10km not a sprint!

Intermediate Training Programme

If you are a seasoned runner and already in pretty good shape, then this is probably the programme for you. If you have not done so already, please click here to be diverted to the fitFAQS download page.

It is likely that you will have a specific time you would like to finish in mind, so use the table earlier in the guide to work out how fast you should be running each mile in. During your steady pace runs, time how long it take you to complete each mile either using a pedometer; or even driving the route beforehand and using landmarks to mark each mile.

As with the beginner's program, the timetable is not the Gospel, so do not feel you have to follow it religiously. Use it as a guide as to the distances and intensity of training you should be doing in the weeks leading up to Race Day.

If you would rather do a Hill session than Fartlek, then fine. If you just feel exhausted or have a slight niggle and can't bear the thought of going for a gentle 6 miler, maybe you could consider going for a swim or even put your feet up. If you would rather go to the pub than do an 18 mile run – don't push it, this schedule is not THAT generous!

Nutrition

The nutritional aspect of running training is often underestimated by many runners, regardless of ability.

The fuel you use to supply your body with the energy to run is no different than filling your car with fuel – Diesel doesn't let an unleaded engine go very far.

Every year entrants make the same mistake with their fluid intake, bad timing of carbohydrate consumption and worst of all copying what a friend eats.

It is so important that you find out early on in your training what foods agree with you and which foods don't; so that you know right from the start which foods you can tolerate. A perfect example of this is pasta.

Generally regarded as a runner's "best friend," many people use pasta as their preferred source of carbohydrate to fuel their runs. This is a good idea in principal, but for those individuals who have a wheat intolerance; pasta could cause major discomfort and embarrassment on a long run.

Therefore, if certain foods cause you bloating or give you a sensitive stomach ignore what other people are eating and accept that some foods are off the menu.

How Much Fuel?

The energy used whilst on a run varies enormously depending on speed, distance, gender, muscle density etc. It is impossible to give accurate information without knowing a great deal about an individual, but to give you an idea, according to leading sports scientists Wilmore and Costill:

A 13 stone male running at 7.5mph will burn approx 14 calories a minute and a 10 stone woman running at the same pace will burn approx 11 calories a minute.

Which Fuel?

If you have ever considered following a restricted carbohydrate eating plan such as Atkins, now is not the right time.

Carbohydrate, protein and fat are known as the Macro nutrients and are all responsible for supplying the body with energy. The proportion of each food group used to fuel the body varies according to what activities the body is performing.

The energy content of each macro nutrient is as follows:

Carbohydrates	4 kcals / gram
Protein	4 kcals / gram
Fat	9 kcals / gram

As a general rule, the higher intensity you exercise at, the higher percentage of carbohydrates is used. Therefore, during the higher intensity Fartlek training, your body will call upon a very high percentage of carbohydrates to meet the energy demands. During longer, lower intensity runs your fat stores are called upon more. This however, does not mean that you stop burning carbohydrates; you simply burn a slightly lower percentage.

Carbohydrates explained

As mentioned, carbohydrates, such as potatoes, pasta, rice, oats, cous cous and breads are the most important fuel during your runs, but many people are left confused as to exactly why that is. After all, seeing that we all have an abundance of body fat with over double the energy per gram, why doesn't the body use that?

The answer is down to the way the body converts the energy of each substance.

Carbohydrates are biologically fairly simple structures and can be used at "short notice" to supply the body with energy. This is the reason why it is the preferred energy source during high intensity exercise such as running. Fat on the other hand, is a lot more complex and harder to break down, and as a result, it is not as readily available.

When you eat carbohydrate, the body secretes a hormone known as insulin (the hormone diabetic's lack, or cannot utilise). The insulin then attempts to store away the carbohydrate in the liver and muscles, so that the amount of sugar in our blood (blood sugar) does not reach a dangerously high level. The carbohydrate is then stored away in a form known as glycogen.

As soon as you begin a run and the demand for energy increases, the body calls upon the glucose in the blood to supply its muscles with energy. With the help of hormones, the body is able to maintain a constant blood sugar balance, by calling upon the stored glycogen in the liver and muscles to "refill" the blood with glucose.
The problem runners' face is that there is limited space available in our liver and muscles to store glycogen (carbohydrates). The amount of storage space varies from person to person, but we are able to store around 500 grams – 2000 kcals. In contrast, the fat energy we store exceeds a whopping 70,000 kcals.

The beauty of competing in a 10km run is that provided you have eaten sufficient amounts of carbohydrate before the race, your body has sufficient glycogen stores to see you through the 10km. During a full marathon, it is when our glycogen runs out that runner's hit the dreaded "wall." When there is no more glycogen left to maintain constant blood sugar levels, the body loses energy and symptoms of fatigue and heavy limbs sets in. The body is still able to supply energy through fat and protein stores, but it cannot be utilised as quickly as carbohydrates.

When blood sugar levels drop too low, it can become dangerous. More severe symptoms of disorientation, hallucinations and faintness are a result of the brain being deprived of its

favoured fuel – glucose. Sadly, this state of "hypoglycaemia" happens every year in races, usually because runners do not follow the advice given to them.

How much Carbohydrate?

During training, your diet should consist predominantly of carbohydrates. The question many people have is how much should I eat and when should I eat them?

Seeing that carbohydrates are used heavily during training, it is important that they are replaced immediately after a run, so that there is enough glycogen to supply the body with energy for the next training session. In the 2 hours after training, an enzyme known as glycogenase is secreted by the body to encourage the storage of carbohydrate. This is the ideal time to restock on glycogen. A sports drink is ideal in the immediate instance, then a meal rich in carbohydrate is important.

The question of how much is again hard to answer, due to our individuality. However, one of the worlds leading sports nutritionists, Dr Michael Colgan, devised the following table to estimate the daily carbohydrate (in grams) requirements of athletes:

Bodyweight	Training Hours	
KG	1	2
50	150	300
60	200	400
70	250	500
80	300	600
90	350	700
100	400	800

How to prevent Hypoglycaemia

Hypoglycaemia occurs when blood sugar levels drop too low. There are a variety of levels of hypoglycaemia the worst of which you are unlikely to experience during your 10km, but in order to enjoy race, it is best to give your body the best chance to keep your blood sugar levels constant and ensure you have sufficient sugar in your blood stream.

The following guidelines should not just be adhered for the race itself, but also during your longer distance training runs.

Pre-run meal

In the days leading up to a distance run, you need to consume plenty of carbohydrates to ensure your glycogen stores are sufficiently full.

There is no need to eat a huge bowl of pasta before your run, as it is the days leading up to it that are important. After all, you're not going to be eating a bowl of rice at 7am on race day! Depending on the time of your run, leave at least 2 – 3 hours before your big last meal.

Snacking on lights foods such as fruit is fine, as they are easily digested. If your stomach contains large amounts of food as you set off, it can lead to stitches, as your stomach and muscles compete against each other for blood.

Carbohydrates on the run

During the 10k race itself, it is not vital that you take on carbs such as energy gels but it may be an idea to take one with you on race day just in case. There are a number of ways to ingest glucose whilst running, but there is no best way. You have to find out what suits you and your delicate stomach by experimenting. Here are a few common methods used:

Carbo gels
Lucozade manufacture a "gel" specifically designed for runners. Each gel contains 30g of glucose and should be eaten every 45mins. They have an odd texture, but work well, as long as your stomach can tolerate them. They are best washed down with water.

Carb drinks
All "sports" drinks contain sugar, at about 7- 10% glucose solution (known as isotonic) and can be used to keep blood sugar levels constant. (See "hydration" section).

Sweets
Some people like to eat sugary sweets such as jelly babies on their distance runs. The problem with this is that small bits of the sweet (such as a head or leg) can detach away and stick in the throat triggering a cough.

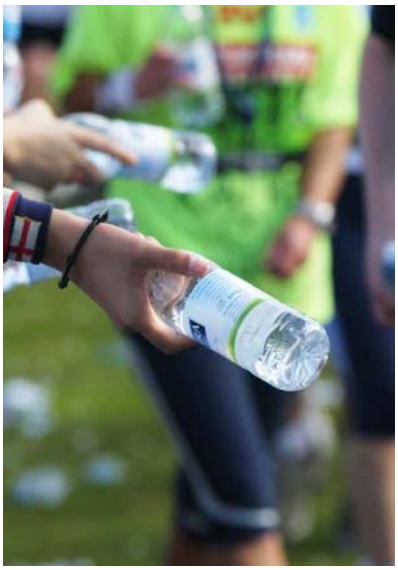
Dextrose tablets
These are simply compacted sugar tablets that melt in the mouth and are absorbed quickly into the bloodstream.

Whichever way you decide to take on glucose, it is vital that you stick to it on all your long runs especially on the day itself. So if you are used to eating dextrose tablets for your

training runs, use them on race day and do not be tempted by the carbo gels. Your stomach may not appreciate them and toilets are not always close to hand! Every year runners try something different during the race and more often than not it disagrees with them - **do not fall into the same trap!**

Hydration and Electrolytes

Seeing that the human body is made up of around 60% water, it is essential that you keep your body well hydrated during your training and the race itself, especially if it is a hot day.



As you exercise, your body heats up just as the engine in a car heats up during a journey. To stop overheating, water is drawn for blood plasma and secreted from pores in the skin, as sweat, to cool the body down.

However, as the water content of blood decreases, it changes from a free flowing watery substance into a thicker more "treacle" like substance. This makes it harder for blood to flow through the arteries and veins quickly enough to supply the muscles with the right nutrients to sustain the same level of exercise.

To meet the demands, the heart is forced to pump faster resulting in an increase in heart rate. This ultimately leads to feelings of fatigue and premature exhaustion.

Just a 1% decrease in hydration, will cause around a 5% decrease in performance. A water loss of just 12% of a person's body weight can lead to death.

Electrolytes

To hydrate the body effectively during exercise, it is important that you take on more than just water. As mentioned in the last section, consuming glucose on training runs will prevent blood sugar levels dropping too low. An "isotonic" sports drink will not only contain 7-10% glucose, but minerals such as Sodium and Potassium, known as electrolytes.

When we sweat, as you can tell by the taste, we lose salts from the body. This loss over a short run is not generally a problem as the body has hormonal regulators to balance the salts in our cells to keep them normal. During longer runs, salt loss from the body can lead to a potentially life threatening condition known as "Hyponatremia."

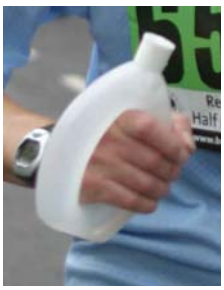
Hyponatremia occurs when sodium levels drop too low leading to symptoms of confusion, weakness, disorientation, even seizures.

Luckily, cases of Hyponatremia are rare especailly in 10km races, but they do happen. There is no need to go overboard on salt consumption in the lead up to the race, as we all consume too much salt in our diets anyway, but it is certainly not a good idea to completely avoid salty foods.

During training runs, particularly on hot days, make sure your fluid replacement drink contains both sodium and glucose. If possible, try to plant drinks on your planned route, such as by a tree, so that you don't have to carry heavy bottles with you.

Once again, it is important that you practice drinking the sports drinks during your training. This is not only to get used to drinking on the run, but also to make sure your system is not intolerant to the drinks. Avoid drinking them all in one go. Sip regularly and if possible, wash the drink down with water too.

Drinking on the run



During training runs, you must practice drinking whilst on the run. You will have to do it for the race itself, so it is vital you get used to drinking whilst breathing heavily. It is obviously not practical to carry around a large bottle of water, but there are a number of ways to organise your intake of fluid.

There are a number good running stores where you buy special water

bottles that fit snugly in your hand.

Although they are small, they are ideal for shorter runs where the need for lots of fluid is not so necessary. Special "bottle belts" can also be purchased, to strap around your waist. This offers the opportunity to carry more fluid, but also has the added problem of carrying extra weight, making your burn more energy unnecessarily.

One of the best ways to organise your fluid intake on long runs, as previously mentioned, is to place fluid at various points around your planned route. This way, it negates the need to carry excess weight and you can run efficiently, without a bottle of water in one hand making you feel unbalanced.

Alcohol

During your training, it is unrealistic to expect you to drink only water and sports drinks. You must have a social life to not only keep you sane, but also to drop into conversation that you are "in training" for a 10km. This will not only earn you a lot of respect but surprisingly jealousy as well – enjoy it!

During evenings out with friends, do not feel guilty in replacing your glass of Lucozade sport with a glass of full bodied Shiraz from Eastern Australia. Alcohol is not completely "out of bounds," as long as it is consumed in small amounts every now and again.

The ideal time to enjoy a glass of your favourite tipple is in the evening after a hard training run. Ensure you have hydrated yourself well after the run and you'll find your favourite drink will taste all the better knowing that you thoroughly deserve it.

As alcohol is a diuretic, it will make you need to go to the bathroom more regularly that just drinking water. This is due to the alcohol inhibiting the actions of a hormone in the body which regulates water balance.

It is because of alcohol's diuretic effect that makes it unwise to train the morning after you have had a few drinks. Even if you feel fine, your cells may not be well hydrated and your running performance may well be impaired. It can also be dangerous to exercise if you are already dehydrated.

Nutritional Supplements

Vitamin supplements have come under fire in the press, questioning their safety and efficacy.

Although the multitude of vitamin pills are used safely every day, every now again people can become ill by taking too much of a particular pill, or consuming one whilst on other medication. It is because of this, that I would take caution if you decide to use supplements as part of your training. If in doubt, consult your doctor.

The extra processes your body goes through during your training, necessitates the need the extra nutrients and vitamins. These can generally be consumed by eating a healthy balanced diet. If you feel you would like to take any supplements, there is little risk is taking a good multivitamin tablet and extra vitamin C.

Vitamin C plays a number of roles in the body such as regenerating tissue and helping iron absorbency, but the main reason to take it is to keep your immune system in check. After a training run, your immune system is depressed slightly for a few hours. It is during this time that you are likely to pick up a cold. By supplementing with vitamin C, you can give your immune system a boost and protect against bugs.

It is advisable to check with your doctor before you take supplements.

Running Injuries

Training for a 10k is an arduous task for your body, especailly if you are new to running. In the following months, your feet will hit the streets 100's of thousands of times, placing great stress on your ankles, knees and hips as well as the muscles attached to them.

Every year nearly every runner experiences some form of running injury. It is unfortunately something you have to accept as part of your training. There are ways to help you reduce your chances of picking up an injury, but sometimes no matter what precautions you take, an injury crops up and you just have to "ride the storm."

This section will offer advice on the best ways in which to avoid injury, as well as highlight a number of the most popular complaints and how to diagnose and treat them. However, please realise that the following information is just scratching the surface. For you to be able to manage your injuries effectively, it is strongly advised that you buy "The Marathon and Half Marathon: A Training guide," which gives you far more detail about injury detection and prevention.

Injury Prevention

As with all the advice in this leaflet, individuality plays a big role in the way our body tolerates the training. A lucky few can do all the training and the race, completely unscathed. The rest of us, have to endure minor niggles throughout our training.

Stretching is something that many runners ignore and dismiss it as a "waste of time." For some supple runners this may be the case, but for the majority it is always a good idea to stretch out the major leg muscles before and after a run.

Before a run, ensure your legs are already warm and lightly stretch out the major leg muscles, especially the calves. This is to elongate the muscle fibres and put them in the most effective state to contract properly. If muscle fibres are shortened, they are more likely to tear!

After a run, stretch out the same major muscles every now and again for a few hours after the session. This is to make sure the muscles don't bunch up and shorten. This reduces the chances of the muscles tearing.

Another way to reduce your chances of injury is to make sure your trainers are suitable for your running gait. You can get your running stride analysed at the London marathon store in Covent Garden, or by Adidas. By ensuring your trainers match your running gait, less pressure is placed on certain muscles in the lower leg, which are often a site of injury.

Bags of peas are very useful for the majority of niggles. Ice is the best cure for any sore muscles and can stop a minor injury turning into a big one. If you feel a twinge anywhere, head straight for the freezer and apply a bag of frozen peas over the area and leave for 10-15 minutes. Do this two or three times times a day. This will reduce inflammation and speed your recovery time.

If you do have an injury that you feel is more than just a twinge and won't go away, it is so important you get it looked at by a professional. Every year, runners try to soldier on through an injury, only to make it 10 times worse and eventually making it impossible to run.
There are a number of specialists you can seek help from, but it is always best to get a recommendation from someone you know. For many injuries, treatment needn't cost an arm and a leg, but the advice you will receive may mean the difference between racing or having to pull out.

Remember, if something hurts it is hurting for a reason. The body is trying to tell you something. Nip the injury in the bud, even if it means taking a couple of weeks off training. The fitness you lose in 2 weeks is insignificant to the damage you can cause by running on an injury.

Common injuries

Although there are dozens of injuries you could pick up during training, there are some which crop up more often than others. Below is a list of common injuries, their, causes, how to diagnose them and how to treat them.

Shin Splints

The term "Shin Splints" is the general name given to pain in the lower leg. It is perhaps the most common infliction experienced by runners, so it is advisable to be aware of the symptoms so that you can catch the condition early.
The trouble with "Shin Splints" is that there are a number

of different types, so diagnosing them yourself can be tricky. It is advisable, as with any injury, to use this guide to shed light on an injury and then seek professional advice to get an official diagnosis.

The most common reasons for contracting shin splints include:

- A sudden increase in running mileage
- A change of running surface
- Incorrect running shoes
- Over pronation

Achilles Tendon Injury

The Achilles tendon, the largest tendon in the body, originates from the calf muscle and attaches itself to the back of the heel.

Tenderness in the Achilles can arise for a number of different reasons and at different levels of discomfort. Pain can arise from a change in running surface or intensity or biomechanical reasons.

The pain usually presents itself as a feeling of "stiffness," on the tendon or where it attaches to the heel, with symptoms often worse in the morning.

If your Achilles starts to feel a little tender, it is best to let it rest and not risk running on it. Apply ice on the affected area and take it easy for a few days. If pain persists, catch the injury early and seek professional advice.

As always, prevention is better than cure. To reduce your chances of damaging your Achilles tendon, keep your calf muscles well stretched and make sure your trainers are right for you.

Runner's nipple

Although "runner's nipple" is not an injury that will stop you being able to race and unlikley to expeirience during a 10km, it is certainly one that can be very sore and even induce bleeding.
The cause is simply due to the nipple rubbing on the running top. The easiest way to avoid this is to put plasters over the nipples.

Black toenails

Due to the constant pounding your feet and toes receive during your training, pressure can build under the toe nail and cause it to go black. You know you are into serious running when this happens as it generally occurs when you start doing the longer distances. Do not be alarmed, if you look down and a toe or two have started turning a little darker than usual or if it eventually comes off. It is something that all runners will experience and very little can be done to avoid it.

A lot more information on injuries can be found in the injury section at www.fitFAQS.co.uk.

In the meantime, if you have a niggle and are looking for any form of support or taping for that dodgy knee or ankle, physioroom is a great place to buy any taping or strapping that you need.

Just click on the image below and take a look at some great treatments to get you back on the road again.

Staying Motivated

Once the novelty of undertaking a very specific training regime has worn off, there are going to be times when you wonder what an earth you have undertaken. As the mileage begins to creep up and the weather begins to turn nasty, training can quickly change from being an enjoyable experience to one that you dread.

The highs and lows throughout your training are all part of the "endurance running" experience and it is important to know that at some stage the pressure of training will feel like its getting the better of you. All it takes is the alarm clock going off at six am, a grey rainy day, the prospect of a six mile run and a minor niggle in your knee to make you wonder whether you want to continue with your training.
Lulls in motivation are not uncommon but quitting the challenge is always an option you will live to regret. If the demands of training are getting on top of you, try following a few of the following tips to get you back on track.

Remember the reason you are running

Whether you are runningto acheive a certain time or just aiming to get round, the chances are that you will be running for a charity. Spare a thought for the invaluable use the money you raise could help your chosen charity. By dropping out, just because the going gets tough, you will be depriving your charity of much needed funds. Remember that even though the training is tough, at least you have the physical ability to be able to run – many people don't.

Find Inspiration

We all have an inspiration figure we look up to and not necessarily in the running world. When the going gets tough, look at your inspirational figure or read their book. What would they do in your situation? How would they deal with a lull in motivation?
Whether your inspiration is Lance Armstrong, Margaret Thatcher or Rodger Banister, think about what they would say to you to keep you going. Would they tell you to quit?

See what you've already achieved

Dips in motivation tend to arise once the mileage begins to creep up and you can easily begin to feel daunted by the training that presently faces you and the training that lies ahead. When times gets tough, try looking at what you have already achieved and how far you have come since training began. Chances are that you will look back and be pleasantly surprised at what you have already achieved. Think about what a shame it would be to throw it all in weeks before the end.

The consequences of quitting

It goes without saying that sometimes it may be necessary to pull out of a race through injury, but at other times when the going gets tough, the prospect of quitting seems like the most logical idea. However, have you thought about the consequences that quitting will have? You will not only let down your charity, but you will have to live with the decision that you had a chance to complete an endurance event, but decided to drop out. Lance Armstrong, the legendary American Cyclist has perhaps the best opinion on quitting. He was quoted as saying, "Pain is temporary, quitting is forever." Think about it on your next long run.

Running Forums

Joining a running forum on the internet is a great way to share your motivation issues with fellow runners. Some may even be competing in the same event as you and be in exactly the same state of mind. You will find comfort in the knowledge that you are not alone and that many other runners are going through the same experience. By using other runners as a "sounding board" it will help to get your worries off your chest and help you get back your motivation. An example of a runner's forum can be found at www.runnersworld.co.uk

Put it all in perspective

Although it may not seem like it at times, the weeks you spend training will be over before you know it. In years to come, you will have forgotten about the hours and miles you put into your legs to prepare for the race but the resounding memory of crossing the finishing line will stay with you forever. When you feel overwhelmed by the training demands, remind yourself that on the grand scheme of things a few weeks left of training is nothing compared to the lifetime memories you will have finishing an endurance event.

FAQ's

I thought salt made you feel thirsty, so why is it used in the sports drinks to hydrate?

In large quantities salt does make you thirsty, but in smaller amounts it actually aids absorption, therefore hydrating you quicker.

A friend has told me that as I will be running long distances, it is worth getting some iron tablets. Which ones should I get?

Iron is a vital mineral in helping the body to transport oxygen around the body. Without it, the blood would not be able to supply the muscles with sufficient oxygen to be able to work effectively.

A lack of iron in the blood (anaemia) is not that uncommon, especially in women, even in those not training for a 10km race. However, the need for iron supplementation is not always necessary. A well balanced diet should provide you with enough iron to meet the demands of training. If you supplement your diet with extra iron when you already have sufficient stores, it can create a perfect breeding ground for bacteria, making you more susceptible to pick up infections.

If you do feel uncharacteristically fatigued and lethargic, have a look under your eyelids and note their colour. If they are pale, it may be worth seeing your doctor to check your iron levels.

Iron can be found in all meat products, especially red meat, along with green leafy vegetables, pulses and apricots. Vegetarians should keep a look out for signs of anaemia, as iron in plant foods is not as easily absorbed as it is in meat.

If I have an injury, who should I see to treat it?

There are a number of injury specialists who can help you with any problems that may creep up. Sports Therapists, Physiotherapists and podiatrists are all commonly used to help rehabilitate running injuries. It is best to seek help from someone who has been recommended to you, so that you know they have been effective with someone else.

Podiatrists are perhaps the best people to see if you have a biomechanical problem, as they are qualified to fit you with orthotics. However, any good physiotherapist or sports therapist will refer you to one if they feel you need orthotics insoles to rebalance your running stride.

What should I eat and drink on the morning of the race?

Due to our individuality, there is no simple answer to this. You have to eat what suits you. It is essential that you practice your pre race meal in your training, so you are familiar with what works for you.

A common meal is porridge or muesli, followed by a piece of fruit. This meal is easily digestible and will raise your blood sugar levels in the morning. Try it out first to make sure your stomach does not have a reaction to it and never change your regular meal on race day.

Try not to leave you meal too late. Leave at least 2 hours for the meal to be digested, or you will end up with a stitch.

As far as fluids are concerned, once again stick with what you have rehearsed. If you usually have a coffee or tea then fine, but it is important that you hydrate yourself before the race. A sports drink with occasional sips of water in the hours leading to the start is fine, but do not keep drinking lots of fluid if you are already hydrated. If you are passing water that is straw colour or clear, you are hydrated and do not need to keep drinking. Many runners over hydrate and begin the run with a full bladder – not the perfect start!

If you are interested in a more comprehensive training guide, with more detailed information on all the aspects covered in this guide, it is strongly advised that you buy "The Marathon and Half Marathon: A Training Guide" by Graeme Hilditch, which is available from all good book shops both on the high street and online.

Disclaimer

"The contents of this guide are to help readers prepare for 10km races safely and effectively. It should not be used as a substitute for proper medical advice. If you are in any doubt about whether you are able to tolerate training, always seek proper medical advice.

The author cannot be held responsible for illness arising out of the failure to seek medical advice from a doctor"