Congratulations.

You have just committed to perhaps the most rewarding challenge <u>you are ever</u> likely to face.

Running a marathon is an experience you will never forget and will earn you "bragging" points for years to come. Not only will you be raising money for charity but you will go through a number of uplifting emotions both in your training and in the race itself that you will always remember.

Unfortunately, you can't turn up to the start line without having put some miles in those legs. In the months leading up to the marathon you need to adapt your body to endure the demands of running 26.2 miles. You will have the joy of running in beautiful sunshine, horizontal rainfall and maybe even snow, but the training can be hugely enjoyable and give you a real sense of achievement.

This leaflet is a step by step guide, covering all the aspects of your marathon training from the running itself to nutrition and injuries you may experience.

In addition to this guide, a number of resources can be found in bookshops, on 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 we 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 marathon.

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 the marathon well, you need to listen to your body and do what suits you!

Everyone's body reacts differently to marathon training depending on sex, weight, time available to train and genetics to name a few. We are not all as adept at distance running as Paula Radcliffe!

In this guide, as with all guides, we offer general advice on the most popular ways to prepare your body for the marathon, 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 – it's as easy as that!

We strongly recommend that before you begin training, you have a check up with your GP. They 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.

The Training

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 through cold winter days, you must ensure you have comfortable **running trousers** that do not rub, and **tops** that can be removed easily if and when 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.

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 incidence 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.

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.

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. Everyone's foot lands slightly differently when they run. If you have the wrong type of trainers, it can lead to injuries such as shin splints (see injuries section) and sore knees.

Once you have your running kit and an optional mp3 player, you are ready to begin your training.

Heart Rate Monitor

Although it is not an essential accessory, using a heart rate monitor for your training runs can be very useful. By keeping an eye on your heart rate, it is much easier to gauge if you are overworking or underworking during a training run. 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. 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.

So, once your max heart rate is determined, it is possible to perform your training runs in a specific heart rate band. Refer to the "Training plan" section for more information and heart rate training bands.

Pedometer

Pedometers are not vital if you know the mile markers on your running route, but a good idea to have as this gives you an idea on how far you have run. They are relatively inexpensive and some models have a panic alarm feature which may offer peace of mind to some of the female runners.

When most people begin their training, they have some idea as to a time which they would like to complete the marathon. Naturally, if training goes well goals 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:

Marathon time		Average minutes per mile
3hrs 00mins	-	6:52
3hrs 15mins -	-	7:26
3hrs 30mins	-	8:00
4hrs 00mins	-	9:09
4hrs 15mins	-	9:43
4hrs 30mins	-	10:17
5hrs 00mins	-	11:26
5hrs 15mins	-	12:00
5hrs 30mins	-	12:35
6hrs 00mins	-	13:43

Before you look at the training timetable on the following pages, it is worth knowing what affect the certain types of training have on your body.

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

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.

Steady run

A steady run is just that. A pace that you feel comfortable with and one which you can hold a conversation with someone – or even yourself! During a steady run, you should be aiming to keep your heart rate at about 60 – 70% of your maximum heart rate.

Hill running

Even though most marathon courses are fairly flat, adding hill runs to your training can pay big dividends to your performance. Hill running can be performed by either by 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 you 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.

An example of a beginner’s Fartlek training session may take place over a 3 or 4 mile route. After a 5- 10 minute steady run, significantly increase your pace for 2 minutes reaching around 85 – 90% max HR. Then drop your pace, even walk if you like, for the next 8 minutes. Keep repeating this until you have completed the circuit.

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 over do it!

Cross Training

Many people like to combine different forms of training into their marathon preparation. 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 a the same intensity. This is all because of a number of reasons such as gravity, so do not worry if your heart rate does not reach the same level. 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 marathon, 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 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 26.2 mile run. However, I must add that taking a trip to your local for a few drinks instead of doing an 8 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.

Many training programmes for the marathon generally draw up a 16 week training schedule. Whereas this approach may be suitable for already conditioned runners, to expect an individual new to running to tackle a marathon in just 16 weeks is quite some ask. Just 4 months of training leaves little allowance for injuries or illness.

To ensure you give yourself the best possible start, think about starting light training sessions as soon as possible. Just a 30 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 attached timetable can be started at the beginning of January, 16 weeks before the big day. 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 5 miles. If you can't – don't worry do what you can!

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 marathon 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.

It is likely that you will have a specific time you would like to finish in mind, so use the table on page 6 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.

By doing this, you will know if your planned finish time is realistic. For example, if you plan to finish in 4hrs and half way through your training plan you are struggling to run a half marathon at a 9:30 per mile pace, is unlikely that you will be able to reach your goal. Keep your goals realistic because if you set yourself a too high a target, you are setting yourself up for disappointment. Remember – there is always next year.

As with the beginner's program, the following 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 marathon training is often underestimated by marathon runners. 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 marathon runner's "best friend," many people use pasta as their preferred source of carbohydrate to fuel their runs. This is a good idea in principle, 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?
Due to everyone's unique genetic makeup, it is very difficult to accurately suggest how many calories (kcal) a runner should eat on a daily basis to meet training demands.

Before energy requirements can be estimated for training, you must first of all find out what your Resting Metabolic Rate (RMR) is. Your RMR is simply the amount of energy your body uses for normal everyday physiological functions e.g., making your heart pump, enzyme secretions, brain function etc.

The web site www.realrunner.com, provides a rough guide on how to estimate your RMR. The table below is similar to how the World Health Organisation calculates RMR. Over the years scientists have come up with a number of different ways to estimate RMR, but the below table is as accurate as you will find outside a laboratory.

WOMEN

18-30 years old: weight (Kg) x 14.7. Answer + 496 =RMR

31-60 years old: weight (Kg) x 8.7. Answer + 829 = RMR

MEN

18-30 years old: weight (Kg) x 15.3. Answer + 679 = RMR

31-60 years old: weight (Kg) x 11.6. Answer + 879 = RMR

Once you have found out you RMR, you must then determine what your typical daily level of activity (not exercise) is and multiply it by the suggested number:

If you work in an office or sit all day - x 1.4

If you move about and are fairly active - x 1.7

If you are very active - x 2.0

Example

If you are a sedentary 40 year 65kg woman:

65(kg) x 8.7. = 565 + 829 = RMR

565 + 829 = 1394kcal.

RMR is therefore 1394 kcal daily.

Multiply by your daily activity number:

1394 x 1.4 = 1951 kcal a day.

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

A 13 stone male running at a 4:30hr pace 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.

Over the next few months, your body will be using all the major food groups to fuel your body to train for the big day, but carbohydrates are perhaps the most important.

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:

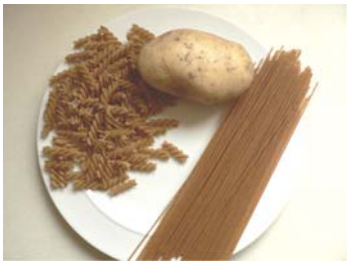
Carbohydrates = 4 kcals / gram
Protein = 4 kcals / gram
Fat = 9 kcals / gram

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.

During the longest run of all – race day, your body will demand energy from all the macro nutrients, even protein. After running for an hour, the body attempts to hold back some of its most valuable energy source – fat. As a result the body then starts using its protein sources in the muscles to supply energy – a process known as catabolism.

Carbohydrates explained

As mentioned, carbohydrates, such as potatoes, pasta, rice, oats, couscous 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). 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 marathon 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 500 grams of glycogen takes us to about mile 18 in the marathon. It is when our glycogen runs out that we 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 the marathons, 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	3	4
50	150	300	400	500
60	200	400	500	600
70	250	500	600	700
80	300	600	700	800
90	350	700	800	900
100	400	800	900	1000

How to stop Hypoglycaemia.

Hypoglycaemia occurs when blood sugar levels drop too low. There are a variety of levels, but in order to enjoy the marathon, it is best to give your body the best chance to keep your blood sugar levels constant.

The following guidelines should not just be adhered for the race itself, but also during your long 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 filled to the brim. 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 run, it is vital that you take on carbs, in the form of sugar (glucose) to keep your blood sugar levels up and slow down your muscles' use of glycogen. 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 marathon itself.

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, but they do happen at the in marathons. 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, 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.

During the marathon, lucozade sport drinks are provided at 5 different points. To keep your glucose and salt levels up, make sure you take a drink at these designated points.

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.

How much fluid?

Knowing how much fluid to drink is very difficult to judge, due to individual differences, atmospheric temperature, clothing and running speed.

As rough guide, you should be aiming to take on around 1000 ml /hr (1 litre per hour). This works out to be around half a pint every 15 mins.

To get a more accurate idea as to how much fluid you lose on a long run, try weighing your self with no clothes on, immediately before you set off. When you return, weigh your self naked again before re hydrating and see how much weight you have lost. You must obviously add on the weight of any fluids you took on whilst running – 1 pint weighs around 1lb.

It is a good idea to do this regularly in different temperatures and on various distance runs, so that you get a good idea how much fluid you are losing whilst running. Remember, although the vast majority of weight you lose will have come from fluid loss, the weight of carbs and fat lost will also contribute.

The best way to tell if you are hydrated enough is to simply take the “pee” test. When you pass water, if your urine is a dark yellow colour and has a strong odour, it indicates that you are dehydrated and should drink some water. If your urine is clear or straw yellow, it indicates you are properly hydrated. If you are taking multivitamin tablets (see supplements section), it is worth noting that vitamins B2 can cause your urine to turn bright yellow, so do not be alarmed!

Drinking on the run

During training runs, you must practice drinking whilst on the run. You will have to do it for the marathon 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.

On Race day, there are water stations at every mile marker so there is no need to worry about taking your own fluids. Even if you do not feel thirsty, it is still a good idea to drink something at every water station. Just take a few sips to re hydrate, then enjoy the sensation of feeling like a professional runner, by throwing your bottle to the side of the road!

Alcohol

During your marathon 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 the marathon. 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 your long 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.

Caffeine

Coffee, Tea and the notorious caffeine receive a lot of press. There are so many articles giving contradictory advice on how they affect our health, it leaves many people confused as to if they are good or bad.

When it comes to training, caffeine has a similar effect on the body as alcohol, in terms of its diuretic effect. When caffeine is consumed, it makes you need to go to the bathroom. Although this effect is lessened for people who drink it regularly, dehydration though drinking excess tea and coffee can be significant if you are training.

Although there is no strict reason why you should stop drinking products containing caffeine, try not to consume any in the hours leading up to a run, so as not to affect hydration status.

You may discover, whilst reading other nutrition literature that caffeine can actually have a positive effect on running. There is some strength in this theory, but I would be cautious if you are to use caffeine as an"ergogenic" (performance enhancing) product.

There are some studies to suggest that by consuming caffeine before a work out, it can make fat more readily available as an energy source, therefore sparing muscle glycogen and delaying fatigue. As wonderful as this may sound, for this desired effect you would need to consume around 4 cups of strong brewed coffee before a run. Not only will this give you a stitch, it will also cause intestinal discomfort and a dry mouth. With side effects like this, you have to question whether it is worth it. The answer – not really! Stick to the water.

Nutritional Supplements

Like caffeine, 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 the marathon is an arduous task for your body. 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.

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, several 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.

Anterior compartment syndrome

If the muscle to the left of your shin bone (on your left leg) and to the right (on the right leg) is sore, it is likely that you have anterior compartment syndrome this muscle known as the "Tibialis Anterior."

Pain is in increased if you lift your foot up and relieved when relaxed. The reason for the pain is still not really known, but it is thought that a sudden change in training intensity or running

surface causes the muscle to swell. This swelling pushes against internal structures in the leg, increasing pressure and therefore causing pain.
If you are new to running, the sudden impact of the road on your legs can induce anterior compartment syndrome, but the discomfort usually lasts just a couple days and training can resume normally – pain free.

If you experience recurrent cases of “Tibialis anterior” pain it is best to seek professional advice.

Medial Tibial Stress Syndrome
This is another common form of shin splint and one which can affect runners for more than just a few days. It can be very debilitating, due to the discomfort and making it impossible to run. Cardiovascular fitness can still be maintained by cross training, but running can only be resumed once the condition has been looked at by a professional.
The main symptom of this condition is pain on the inside of the tibia bone (shin bone) about two thirds to three quarters of the way up.
The cause of MTSS is usually an excess of running, by those who run on hard surfaces such as pavement or roads. However, it can also be brought about because of biomechanical imbalances from the hips, knees and foot over pronation, so advice from a specialist is vital.
Treatment for this condition is rest, to allow inflammation to die down. If a biomechanical problem is the cause, special trainer inserts known as “orthotics” can be made to rebalance the running stride to stop the feet from “over pronating.”
The best way to prevent contracting MTSS is to make sure you increase your running distances slowly. Increasing your long runs too soon and too fast, places great stress on the muscles in your shin, as they have not had time to adapt. This can cause inflammation can flare up the condition.

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. Like medial tibial stress syndrome, 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.

ITB friction syndrome
Ouch! ITB friction syndrome is a very painful injury and depending on its severity, can make walking hard work – let alone running!

On the outside of the leg, there is a long band, similar to a tendon that is known as the Illio tibial band (ITB) It runs from the outer part of the pelvis to just below the outer part of the knee.

During training, this band can tighten and cause a sharp pain at the side of the knee, every time the knee is flexed. Everyday actions such as walking down stairs and squatting down, can initiate great discomfort as the ITB rubs against the structures of the knee, creating friction and inflammation.

In mild cases it is not uncommon for the runner to feel pain free for a few miles, but the friction can build up as the ITB tightens causing inflammation making running impossible due to the pain.
In severe cases, pain is felt for a number of days or even weeks. If the ITB is not stretched properly and inflammation is not reduced, running cannot be resumed for a while.

If you begin to feel symptoms of ITB friction syndrome, ice the affected area and avoid running until pain subsides. If symptoms continue, seek professional advice as this is one injury you want to avoid have hanging about.

The best chance of avoiding this injury is to keep your ITB stretched. This can be done not only by stretching it, but simply by avoiding the reasons it can become tight in the first place.

The initial causes of ITB syndrome can arise for similar reasons as many of the other injuries – sudden change in exercise frequency and intensity, inappropriate footwear and running on a cambered surface. If you run a particular route for your training, it is advisable to change the direction every now and again.

Every year, runners have to pull out of the marathon because they ignore the initial signs of this injury and do not get it treated. Do not let this injury get worse, get it treated!

Over pronation
The term “over pronation” is not an injury in itself, but can certainly lead to a number of injuries mentioned in this section.
When the foot is planted on the ground during a running stride, it should land fairly squarely. When a runner over pronates, the inside of the foot takes a lot of the pressure. Over time, this biomechanical fault can cause muscular imbalance in the lower leg, potentially leading to a variety of injuries. This is the reason why it is so important to wear the right trainers. If you over pronate, it is important that your trainers are specifically for over pronators. To get the best match for your feet and running gait, get your stride analysed.

Runner’s nipple
Although “runner’s nipple” is not an injury that will stop you being able to race, 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.

FAQ's

1. 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.

2. 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 marathon. 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.

3. 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.

4. What should I eat and drink on the morning of the marathon?

   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!

5. What should I do if I start to feel ill during the marathon?

No matter how many marathons someone has run, no one finds them easy. Running 26.2 miles is a long way and very taxing on your body.

Most people feel exhausted for the last 6 miles or so but it is important to differentiate between the feeling general fatigue and illness. The symptoms of hypoglycaemia and hyponatremia explained earlier are not exaggerated or made up. These 2 conditions can and do hospitalise people ever year. If you begin to feel light headed, confused and disorientated, you must stop and seek help from the medical teams located all around the course. It is fantastic to have a time to aim for and work hard to achieve, but not to the detriment of your health. Do not become a statistic.

6. I have read about “tapering” my training as race day approaches. What does this mean?

Tapering your training is a basically a scaling down of your demanding training regime. The usual recommended tapering period begins around 3 weeks before race day. During these three weeks it is advisable not to push yourself through punishing Fartlek sessions, but to slowly scale down the quantity and intensity of your training, to give your body a chance to rest, in preparation for the big day. Many people find these 3 weeks a little unnerving, as they feel guilty not going out for long runs and worry that all the fitness built up over the months will go to waste. This is not true. Remember, the training is simply reduced – not stopped. Your cardiovascular is still being tested, but your legs are being given the chance to rest and recover from any little niggles that are exasperated by long or intense runs.

You may find, during these 3 weeks, that your legs feel heavier than you’re used to and you generally feel sluggish. This is simply due to carbohydrate (glycogen) filling up your stores to the brim, causing a feeling of heaviness. The best analogy is perhaps comparing your body to a formula 1 car. They start the race a little slower due a large fuel load, but are able to keep going for longer.
Come race day, due to adrenaline rush and eagerness to get going, you will feel invigorated and fresh if you taper effectively.

Disclaimer:

“The contents of this guide are to help readers prepare for marathons 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 marathon 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”

Runners Notes