NUTRITIONAL TIPS – PREPARING FOR THE MARATHON

By Ann Mather, Celebrity Nutrition Advisor, Famously Fit

Whether you are a top athlete, or a fitness enthusiast, or just someone wanting to take on the challenge of the Marathon, there is almost nothing more important than taking care of your nutrition. And that means starting now – not a few days before the event.

You will be placing more and more stress on your body as your training regime intensifies. This is not only because you will be burning more calories, but you will be using up more essential minerals and vitamins as you increasingly use your muscles and sweat.

If you want to reach your maximum potential, and protect your health, all of your systems must be perfectly tuned. Without the right foods during the whole of your training program, no amount of coaching or practice will push you to your best. This means that – from now on - you have to eat a variety of high quality, mineral and vitamin rich foods, all day and every day. The nutrients that you need are proteins, carbohydrates, fats, minerals, vitamins and water!

Here are some simple tips to follow, but if you want more information, keep on reading!

- Eat a balanced diet, every single meal, every single day, with each meal containing a varied combination of carbohydrate, protein and dietary fats in the ratio 4:1:1/4
- Drink lots of water
- Ensure you have a pre-exercise meal containing a small amount of protein, dietary fats and easily digestible foods rich in carbohydrates. The timing of this will vary dependent upon when you do your exercise
- Take a small nutritious snack 30 minutes before you exercise
- During your workout, hydrate regularly with lots of water – 8-10 fluid ounces for every 15-30 minutes
- If you training regime lasts more than 90 minutes, replenish lost glycogen stores with easy to digest, high glucose carbs (e.g. glucose based sports drinks or an energy bar)
- After your training, continue to drink lots of water to replace that lost through sweat
- Eat a balanced meal within 2 hours of your exercise to replenish lost nutrients. Ensure that this contains protein to help to repair and rebuild muscles damaged through exercise and to maximize the bodies ability to store glycogen
- Build up your glycogen store starting at least 3-5 days before a main event – using fruits, vegetables, whole grain and pulses which are more easily digested

- Build up a small amount of fat store as you approach the Marathon – essential for endurance sports such as Marathons – but from the right types of fat. Do not eat fat immediately before a main event since it is very slow to digest and will take too long to convert into usable energy.

Energy Pathways

As you prepare for the Marathon, and as you increase the level of endurance training that you do, your body will continually move through 3 different energy pathways.

a) very short term energy – normally seconds - quick sprints, high bursts of energy for a single weight lift – come from ATP stored in the muscles. It is used up extremely quickly.
b) The anaerobic pathway is again quite short lived – using immediately available carbohydrate or glucose. This is used in a matter of minutes, before the lactic acid starts to build up. We all know that burning feeling!
c) The final source of energy is called aerobic. This is where all nutrients are converted into energy, using the increased oxygen that results from a raised heart rate and more rapid breathing, and this is the source of energy that is most important for endurance sports.

How Many Calories

If you are planning to run the Marathon, your endurance training (i.e. the amount of time that you spend running at a set pace) will increase. Each time you train, you need to consider how much energy you are likely to expend.

The majority of people entering the Marathon are not top athletes. If you were, you would be planning to run the Marathon in about 2 ½ hours! If you are reasonably fit you can expect to run it in between 4 and 4 ½ hours. If you are in it for fun, at a walking or at a very gentle jog, you may achieve it in 5 ½ - 6 ½ hours.

Here are some very interesting statistics!

A top athlete, attempting to finish the Marathon in 2 ½ hours, would need to run an average 1 mile/5.6 minutes. This person would burn 1260 calories per hour x 2.5 = 3150 calories

A moderately fit person aiming to finish the Marathon in 4 hours would need to run a 9.2 minute mile. This person would burn 780 calories per hour x 4 = 3120 calories!

Someone in it for fun, taking it slow, might aim to finish the Marathon in 6 hours, so would average of a 13 minute mile. This person would burn about 600 calories per hour x 6 = 3600 calories!

Amazingly close in terms of calories burned, isn't it?

It's About How the Calories Are Burned!

The Slow Pacer

Okay, so the slow guy is probably not that fit, a bit overweight and is probably best relying on stored fat to carry him/her through. Eating a balanced diet for several months before hand is important, but this person should not be looking to eating lots of loaded carbs as well! Let's get rid of the fat!

Fat is a great fuel for low intensity endurance events – working at 50% or below of your maximum heart rate for a long period of time. So if you aim is to walk or jog the Marathon, this is a great fat burner! The best strategy you can adopt is to ensure that you have a little bit of stored fat to see you through.

Indeed, fat is essential and provides the main fuel for long duration, low to moderate intensity exercise such as marathons. It provides the highest concentration of energy of all the nutrients. One gram of fat equals nine calories. This calorie density, along with our seemingly unlimited storage capacity for fat, makes fat our largest reserve of energy. One pound of stored fat provides approximately 3,600 calories of energy

As you train and prepare for the Marathon, don't be frightened to build up a very small amount of fat store – but from the right types of fats – ideally from fish oil, most nuts, seeds, olives and olive oil, avocado, and whole grain

The Moderate Pacer!

The moderately fit guy may have a small amount of stored fat. So this person should plan to use this up, but a few days before any intensive training or before the Marathon itself, build up the glycogen store. During the race, take a little bit of glucose based drink or an energy bar. You have some fat reserve to fall on, a bit of glycogen stored – you don't need too much else!

As your intensity increases, so you need to rely more on carbohydrates and build up your glycogen store for at least a few days before the main event. Using this source of energy is more efficient than fat but has a limited store – as mentioned above – about 90 minutes. After that your glycogen store will have been depleted. The only way to get around this is to replenish your carbohydrate supply during exercise. If it is possible for you to eat some easily digestible

carbohydrates during your marathon run, this will keep you going for longer. An energy bar or glucose based sports drink are probably the most sensible options.

The Top Athlete

The top athlete is hardly likely to have any fat at all stored in the body, so is really totally depending on glycogen – stored and supplemented. We cannot store that much glycogen, so this person has to take more supplementation during any intensive work out and during the Marathon itself. Lots of glucose based drinks or energy bars. If they don't, they won't get through it!

If you then increase your intensity further – if your aim is to get around the Marathon course in the quickest time possible and don't pace yourself, you will surely deplete your all of your energy stores (fat and carbohydrate). Your body will get to a stage where it cannot take in enough oxygen to metabolize fat or carbohydrate. It is here that you run the risk of drawing on protein stores in your own muscles. This should be avoided by other than the trained athlete who manages his/her nutrition very precisely on a daily basis.

For more information on nutrition and diet from Ann Mather go to www.famouslyfit.com