# **Training Notes**

All people have different levels of 'trainability' and natural potential. It is possible for complete beginners to make very rapid progress and move up the targets, while others find initially that they can't achieve the early training levels.

There are two golden rules whichever level of improver you find yourself: a) Build-up very gradually, and b) You must rest and recover before training becomes beneficial.

# **Building-up**

Even if you come from a good level of fitness, trying to build-up too quickly will certainly get you injured. Running is a repetitive activity that involves your foot hitting the floor repeatedly with considerable force being transmitted up through the legs and into the lower back. The reason that experienced runners can handle such high levels of training is because they have taken years to get there. Your body adapts slowly to new stresses and a product of regular running is that your bones will harden and become more resilient to the new forces. So fit people beware: your engine (heart & lungs) may find it easy – but after a while your legs won't.

### **Rest & Recover**

The natural thought is that you get better when you train hard. While that is not altogether untrue, the reality is that your body actually gets fitter while you are resting. Here's how it works: during hard exercise your body gets tired, waste products build up and energy levels fall as you have used up fuel - you are technically less able than before you started training! If you continued the same level of activity over several days you would become progressively more tired and eventually you will breakdown – either with injury or illness. However, when you stop and rest your body starts to repair the damage, which it will do to a higher level than before as the body recognises a need to adapt to the new stresses that you're subjecting it to.

# Frequency

A regular training pattern is more important than any one session. There is a cumulative effect from training regularly which is not achieved by doing all your training on one or two days each week.

# **Going the Distance**

For 10km races it is feasible to train up to and over the race distance.

Your training is done to encourage physiological changes in your body – one of these is the ability to use different forms of energy. The most efficient energy source is glycogen – basically a sugar stored in the muscles. This will last for about an hour of fairly rigorous exercise – like running. After that has gone the body learns to use fat for energy – which we all have a big supply of. The problem is that the body does not convert fat to energy very efficiently, although it can be improved by doing runs over one hour. You need sufficient time on your feet to help train the energy systems, it encourages local endurance in the leg muscles and joints and it teaches you how to run efficiently. The occasional run over distance run is good for confidence – but in general longer will not mean fitter as you will not recover adequately to do your other training.

### The amount of rest

Some leading athletes appear not to rest at all – to run at World class you have to achieve high quantities of training. These are the fittest and most economical movers in the World who can run for 30-40 mins without breathing, sweating or touching the ground. They are not like us, we expend enormous amounts of energy with each stride as the shock wave from each step knocks the wind out of your lungs.

Speed and ability are not necessarily good indicators of how efficient a runner you may be – slower runner's may simply not have the cardio-vascular system (heart & lungs) to run fast, but can run forever without getting injured. Conversely, plenty of fast runners's regularly get injured because the bodywork is not as strong as the engine. Unfortunately, it is a suck-it-and-see situation, and you'll find out soon enough, however – it is still essential to build in rest days to allow for the training effect to take place.

### **Your Health**

Everyone should be aware that there is a risk involved with active sport – heart defects leading to death being the most serious. That scare out of the way – for the vast majority of people active sport will improve your health and wellbeing.

Before setting out on an exercise regime you are well advised to visit your doctor for a checkup. A good doctor will be pleased to see you and should give you some advice on setting out – particularly if you have had a health problem like asthma or suffer from carrying excess weight.

#### Food & Drink

A healthy diet and high fluid intake are essential. Your body burns carbohydrate for the energy you need to make the muscles move, it also needs protein to help it recover from the damage done by hard exercise and it needs vitamins and minerals to maintain its health. So what you need is a good balanced diet. Make sure you are taking in plenty of carbohydrate but make sure you are not surviving just on carbohydrate – a plate of just pasta isn't a balanced diet. If you are taking in a lot of fruit and veg, yet still get colds you may need to look at vitamin supplements – but they are not essential if your general health is good.

Liquid is essential. Even on a cold day you will lose a lot of liquid through sweating and breathing – if this does not get replaced your body cannot function properly. So make sure you drink regularly, before, during and after exercise – either water or an isotonic sport drink, the choice is down to taste although research does show that liquid is absorbed more quickly when taken as an isotonic drink (but don't treat them like soft drinks – during & immediately after exercise only is advisable).

