

### **Break it down**

It's possible to go on for hours and hours about training cycles, periodicity, etc, etc, and simply miss the basic point: training is about getting on with it. There are four phases to the training year: basic preparation, intense preparation, competition and recovery. For a triathlete in the UK where our season runs from May to October that effectively means that you have three months of basic training from December to February, two months of intense preparation in March and April, six months of maintenance training during the season and a month off in November.

### **Basic preparation**

This is the "back to basics" part of the year where you are concentrating on the techniques for each sport. In all the sports this will involve lots of drill sessions and feedback from coaches or colleagues. The intensity will be fairly low but the sessions will be long and often repetitive. If you're going to incorporate any strength training into your routine this is the time to do it. It's also the time to try out any new equipment that you are thinking of using in the coming season.

### **Intense preparation**

After three months of getting your body ready and your techniques finely tuned it's time to get serious and start loading the muscle systems. Technique always matters so keep putting small amount of technique into each session but the main objective is to build speed onto the stamina base. Intensity is really the simplest way to describe the difference between the basic preparation and what you are doing now. The heart should be working in top 15% of your range and the sessions should include minimal rest.

### **This is where it hurts!**

Benchmarking is vital during this period. You have to see that you are improving and be able to measure that improvement. Any reduction in performance could indicate overtraining (a major cause of failure in triathlete training programmes!) or illness. Every season we benchmark the club we coach every month on the first session of the month. Individuals should also be benchmarking on a more regular basis, perhaps every two weeks. Again, use of the heart rate monitor and a logbook are vital if you are to keep track of your training and your progress.

### **Competition**

Maintaining a peak of fitness through the entire UK triathlon season is an unrealistic goal for anyone who has a regular life, job, etc. There will be times during the season where you will need to go back and work through a mini-cycle of basic training/intense training to prepare yourself for a special event. Plan your season to include a mix of races over differing conditions and distances. Once you have the plan marked in on the calendar you can then set about planning the smaller training cycles around these events. In an ideal world you can probably peak two or three times during the season but, realistically, you'll probably get two really good periods of three to four weeks where everything functions exactly as planned.

### **Avoiding Injuries**

If you are new to any sport, there is a natural tendency to want to advance as quickly as possible. In most individual endurance sports you can judge improvement by finish time or position. You may think that to improve, it is very simple. You just do more training! Well you can, but you could quite easily find yourself getting injured.

### **Common causes of injury in triathletes**

**Muscle imbalance** - by far the most common injury for triathletes, and indeed most other distance athletes is the overuse type injury. Involvement in a single sport activity usually, leads to the development of a particular set of muscles, which allow the body to perform the required movements more efficiently. However, because of the lack of corresponding growth of opposing muscles, it can lead to an imbalance in the strength of one muscle group compared to another, resulting in the stronger one exerting a greater pull over the weaker one. Often this itself can lead to injuries in the weaker muscles.

In triathlon because of the need to train in three sports there is a much more rounded development of the physique. It is still a good idea to engage in some form of regular resistance type training to help build up the strength not just of the muscles which are used in swimming, cycling and running but also the lesser used muscle groups. The reason for this is that even though these lesser used muscles do not develop to the same degree they are still used in the necessary action. Often this is in stabilising the main muscle groups used during exercise.

Because these stabilising muscles are smaller and less trained it also means that they become tired more quickly. This can have a pronounced effect on a particular action. Imagine a cyclist moving around all over the bike towards the end of a race, or a runner who is struggling to get enough knee lift at the end of a marathon. These athletes' movements have become inefficient due to poor technique, caused by muscle imbalance. This can often result in an injury of some kind.

**Adaptation** - another reason for overuse injuries is related to the process of adaptation that takes place when we progressively increase the training load, as we strive for better results. When we first start training for any sport the body lets us know in no uncertain terms that you 'over did it'. Your muscles are stiff a few days afterwards. As you keep training the stiffness is not quite as bad but nevertheless it is still there. Eventually the muscles adapt to the training load and there is almost no stiffness after a workout. The problem is that the muscles tend to adapt to this new exercise regime much faster than these tendons and ligaments. (Tendons attach muscle to bones, and ligaments attach bones to bones. As we continue to increase the training load the tendons and ligaments get left behind in terms of development/adaptation, and eventually become overused. The first stage of overuse is inflammation and tendonitis, which is easy to treat but can necessitate a reduction in training, to allow full recovery. Hence, it would be a case of two steps forward and one step back.

**Overtraining** - this happens when you continuously increase the training load without giving the body time to adapt or recover. Overtraining is that situation you find yourself in when you are training hard but performances seem to keep getting worse. So what do you do? More training of course to make you fitter except that it doesn't, it makes you even worse. You find that you can't sleep very well and yet you are constantly tired, and your muscles are sore. The solution simply put is rest up, until you feel refreshed and strong enough to resume training.

All of the above conditions can be avoided if you are sensible. Here's how: When you plan your training programme pencil in a week of easy training after every 2-3 weeks of hard training. Also take at least one complete day off during each training week. This means absolutely no training, not even an easy jog to the shops.