+61 2 9899 6004
www.energylink.com.au
coaching@energylink.com.au
Contact Energylink today

How do you get the edge without going over it?
By Bruce Thomas

It is very unusual to achieve a personal best in a race when you are sick or injured. No matter how clever or innovative your training, irrespective of your burgeoning natural ability, being sidelined or less than 100% healthy does not allow you to achieve your goals. When talking about gaining the edge in training, one has to be careful that you do not end up over the edge!

Athletes, after a positive experience in triathlon, like to set themselves goals. This is a good and necessary thing. If you have no goals, and consequently no direction, it is hard to motivate yourself to improve. To ensure that you improve over time and maintain interest in the sport you should set up a hierarchy of goals that, at each level, are realistic and achievable. If you do this then you give yourself the necessary stepping-stones for success. The big secret in achieving your goals and, consequently, the highest priority in training is consistency. If you can train consistently, without interruptions from illness, injury or a lack of desire, then you are well on your way to rewriting your personal record book.

All too often you hear a triathlete with scary ability bemoan the fact that they cannot put two or three months training together without falling sick or spending time with their physiotherapist to deal with an overuse injury. How do we get past this? Generally speaking we need to develop our training gradually varying the intensity and volume in such a way that our body develops athletically. More specifically, we need to start with the right foundation. To be able to train consistently and efficiently throughout the season we need to establish a base to build upon. Irrespective of how long you have been in the sport, base training is crucially important.

What are the goals of base training?

1. To develop aerobic efficiency. Training at low intensity allows your aerobic system to adapt so that oxygen is transported to the working muscles more efficiently. This occurs through training everything from your heart and lungs to increasing the capillaries through your muscles to enable oxygen to get where it is needed more quickly.
2. Improve your musculo-skeletal strength. When our bodies are asked to work hard through exercise, it is not just the muscles that get hammered. The muscle to bone attachments (tendons) and the bone to bone attachments (ligaments) also get put under stress. Ligaments and tendons, when damaged, take a long time to recover (much longer than muscles or bones). If they are not ready for the stress of more intense training they can result in a hiatus in training as they repair. Base training helps to prepare tendons and ligaments for the training to come.
3. Prepare our immune system. Our immune system is integral in recovery from training. Building the training up slowly gives the immune system time to adapt to the demands that will be made on it as the training progresses.
4. Mental adaptation. After a season of solid racing and training it is good to give the mind a little less to worry about in training. Doing some easy base work (particularly if you can do it with one or more friends) requires much less mental energy than racing or hard training sessions. This base work prepares the body so that the hard training later in the season is not so taxing and allows the mind to freshen up.

Apart from the obvious benefits of base training, this phase of training provides an opportunity to work on some other aspects of your training away from the pressure of racing. This quieter time of the year and of training is a useful time to spend some time looking at your technique

and seeking to gain some athletic ground by improving your efficiency. It is also a good time of the year to address any strength imbalances that you may have noticed that you have developed. This can be done with weights or another form of resistance training.

So what does this phase of training mean in practice?

The Swim: Since swimming is a non-weight bearing activity it is possible to maintain a slightly higher level of intensity in the base period than in the other two disciplines. Having said this, a large number of triathletes come to swimming later in life and, for these athletes swimming at any level of intensity is hard work. A session designed by a swim coach as an easy session for a squad of swimmers may bury the average triathlete. You will have to recognize your swimming level (or discuss it with someone) so that your time in the pool is best utilized in this base period. Sets during this phase should be longer in duration and aerobic in intensity. For solid swimmers sets with variations on intervals from 150m to 800m with short rest are appropriate. For weaker swimmers the intervals should be shorter as, over the longer intervals the lack of efficiency results in fatigue and consequently, a less aerobic session.

As far as technique goes with swimming, the most efficient way to make progress is to watch yourself in the water. It is very difficult to see exactly what you are doing as you swim and so it is equally hard to make adjustments to your swim stroke. For many swimmers, what they perceive themselves to be doing in the water and what they are actually doing are two completely different things. If you can get someone to video your swim stroke, even if it is just a friend with a VCR, then at least you can get an idea of what you look like. More useful is underwater footage of you swimming and analysis by a qualified coach. A couple of things that you might like to concentrate on in your swim sessions are your head position and your hips.

Your head should be in the most hydrodynamic position. This means that you should be looking at the bottom of the pool and not lifting your head too high in the normal swim position. A drill that will help you to work out the correct position is to push off from the wall in the pool and see how far you glide with your head in different positions. You will find that you will glide the furthest when your head is in a neutral position.*

The Bike: Triathletes are notorious for smashing themselves every time they go out on the bike. Being naturally competitive it is often beyond us to allow someone to finish the ride in front of us and, if there is any sort of challenge or race on in a bunch ride, the triathletes will be in the thick of it. At this time of year we should take the time to chill out on the bike and force yourselves to do some easy rides in which you take the time to think about what you are doing.

A large number of triathletes ride the bike by stomping on the pedals. While this gets you along the road at a reasonable pace it is not the most efficient way to ride a bike. “Stomping” on the pedals uses gravity and your body weight to transfer power to the pedals but also focuses a large amount of work on some of the smaller muscles of the quadriceps. These smaller muscles consequently fatigue more quickly and make it difficult to maintain speed. If you learn to pedal in circles (using the fact that your feet are attached to the pedals to pull across the bottom of the pedal stroke and to lift up the back of the stroke) you start to utilize the large muscles of the hamstrings and the gluteus.

To train your body to pedal correctly you are best to put the bike into an easy gear in which you can pedal comfortably at a cadence of 90-100rpm. At this cadence you are not spinning so fast that momentum spins the pedal for you. Then it is a simple matter of thinking about what you are doing as you pedal and breaking the pedal action up into parts: “push down, pull back, lift up” is a good starting point. Training your body to pedal correctly at low intensity means that you have the skills in place to do the same at higher intensity.

During the base phase of training it is also useful to spend some time riding at a higher cadence greater than that to which you are accustomed. This helps to train your neuro-muscular coordination, which will also improve your cycling efficiency.

The Run: When watching a fun run or triathlon you will observe a whole range of running styles. Some look ungainly and yet the athlete posts a fast run split. This would suggest that technique is not as critical to a fast run time as it is to a fast swim or bike split. While this may have a degree of truth, a more efficient running style can only be an advantage.

During a base training phase you have the opportunity to generate some easy volume on the run. Your body will naturally adapt to easy volume by becoming more efficient. While you are doing these runs think about running in a relaxed manner holding yourself tall, with your hips in a neutral position, looking ahead of you. Too many people, particularly when they try to run fast, change from a relaxed person into a knot of flexed muscle. When running the upper body should be relaxed and essentially upright with the work being done by legs operating from a strong core.

Again a friend with a video camera can be of assistance in trying to see what you do when you run. Most peoples running problems come from a lack of core stability, which is why there is so much emphasis these days on improving an athlete's abdominal control. There is a wide range of abdominal exercises that are available and classes like Pilates are good for developing this aspect of a runner. Isometric exercises (in which you hold a position rather than moving as you would in a sit-up) are very worthwhile when trying to improve core stability.

The tricky part comes when trying to utilize newfound strength on the run. Many athletes can do any abdominal strength exercise that you may care to mention and yet are still sloppy when they run. There is a skill to employing a stable core when running. To do this you need to think about activating your trunk by "sucking your belly-button towards your spine" and to also activate your gluteus. At first it will feel very challenging but as you practice for short periods during each run, the skill will become second nature.

So that gives you something to work on during these quieter, colder months when there are not so many races in which to compete. Remember that the base training phase is of crucial importance in a training program – equally important as any other phase of training. Take the opportunity to capitalize on your ability by preparing for next season properly and enjoying your winter training.

* Obviously this is just one part of swimming to consider and there are many other drills that you can practice to address different technique faults. While there is not enough room to go into detail here, a good swim coach will be able to direct you or a follow up article on some other drills is a possibility.