PERIODISATION OF TRAINING

By Ben Bright of Triathlon Performance Solutions

Triathletes love to train. That much is obvious by the decision to participate in a sport that incorporates three individual endurance sports! But simply training hard every week will only take you so far. To get the most out of your training you need to alter your training impetus at various times of your training year. If you train in the same way all the time your body will eventually adapt and you will reach a plateau in performance.

Using a varied approach to training is called periodisation and was pioneered by Dr. Tudor Bompa in the 1960s. Although it seems logical now, Bompa's breakthrough was to identify that varied but specific training stimulus at different times of the year could lead to peak performance at the critical time - Championships. This theory has been well accepted for decades and most coaches adhere to it in one way or another.

Training is the process of stressing the body, or system, and then allowing it to recover and adapt to that stress, thus becoming more efficient. Periodisation ensures the variation of that training stress, thus requiring the body to adapt to different stimuli and therefore reach a higher level than if trained at one intensity all the time. Think of it this way - if you were carving a sculpture from wood (as you do) but you only used one massive chisel, then you would end up with a very basic, rough sculpture. If you used 3-4 different sized chisels you would be able to refine your sculpture into something more precise.

The mistake many people make in their understanding of periodisation is that they believe only one training intensity should be used in each phase, or they overdo the focus on a single intensity in a phase. A good Periodisation plan should simply emphasise a certain type of training volume and/or intensity in a given phase, but each phase should contain various types of training intensity

There are various different terminologies for the different training phases out there but in this instance I will keep things simple and limit it to four. The training zone intensities specified below (1-5) are those used in Garmin Training Center:

Preparation:
This phase is the very beginning of the training year. Normally it comes after the end of season break, before beginning any big volume training. The idea is to prepare the body (cardio vascularly and muscular skeletally) for the rigours of the harder training to come and get the body into a routine of training. It's also a good time to work on your technique and core strength.
Aim to use the same weekly routine that you will use when you are in full training but only with 40-70% of the total volume you will eventually get to and all at a very low intensity, around Zone 1. This is the only phase where you will train in only one intensity zone. This phase should endure between 2-4 weeks, depending on your level of fitness and experience, and aim to build your volume through this phase.

Base:
This is the most important phase. Because Triathlon is an endurance sport the biggest limiter to the performance of most triathletes is basic aerobic endurance. This Training phase focuses on improving the body's ability to metabolise oxygen efficiently by increasing capillary density, plasma volume and aerobic enzymes, or simply put the ability to transport to and use oxygen in the muscles. The majority of training should be in Zones 1 and 2 but should also include some time spent in the upper zones, from 3-5, as well. This phase is the longest of all (between 8 - 16 weeks normally) because the adaptations listed above are slow to occur and a big base of aerobic endurance is the building block for subsequent performance improvement. During this phase you will be at 100% of your maximum training volume.

Progression:
This phase takes the work you have done in your Base period and moves it forward. The majority of your training will still be in your lower Zones but more emphasis will come onto Zone 3 training, using the middle to high levels of your aerobic system and improving your ability to efficiently clear lactic acid and use carbohydrate as fuel. Sessions will remain long in duration but speeds and intensities will be higher and some sessions will be touching on your intended race intensity/pace. Overall training volume will remain high, at 90-100% of your maximum, making this probably the toughest phase of all. Training in Zones 4 and 5 should also be included in this phase and it should last between 4 to 8 weeks.

Specific:
This phase should coincide with you nearing your goal event of the season. Overall training volume should decrease to around 70-80% of your maximum to allow for better recovery from sessions so you can attain the quality training you are looking to achieve. The emphasis of your training intensity now shifts into your upper Zones, 4 and 5, which stimulates your ability to produce and buffer lactic acid as well increasing your maximal aerobic capacities. This translates into more training at or above your intended race pace/intensity but individual sessions are shorter to compensate. Still, the majority of training should be in your lower aerobic zones to maintain your aerobic base and allow recovery from your higher intensity training. The time frame for this phase is 3-5 weeks and training volume should taper down as you near your race, resulting in you competing at peak fitness.