

THE ENDURANCE COACH.COM

To base train or not to base train...MORE POWER!!!

Interesting debates have taken place regarding whether aerobic base training is necessary or not for cyclists and triathlon competitors. Primarily it depends upon your specific demands and if you are a tour rider which requires multiple long days in the saddle, a large base is something which would undoubtedly stand you in good stead.. what if you are an amateur triathlete or cyclist, working full time with limited hours for training? What if your races last no longer than a single day and involve only 1-2 hours of riding?

It's all about power

Training zones are simple tools to help guide your training intensity and as a cyclist you can use either heart rate or power to establish such zones. For the purpose of this article let's presume that everyone has a power measuring device such as 'SRM' or 'Power Tap' which displays the amount of power you are producing, measured in 'watts'.

How do zones work?

Simple, the idea behind zones is to ensure that everyone is working at a similar intensity. If every cyclist in a group is working within zone 1, then the intensity should feel the same to each of them, they would all describe the intensity as 'fairly light'. Generally when cycling clubs ride together the group may ride at the same speed, but riders may be working at varying intensities in order to keep up. To compensate for this they can ride behind another person to gain the effects of slipstreaming, thereby reducing their intensity.

Example zones

Tom visits the lab and completes a maximal ramp test which progressively gets harder until he can't keep the pedals going, from this test we calculate a 'maximal aerobic power output' (MAP) of 350 watts and produce the following 5 zones:

Zone 5 = 90-100% MAP = 315-350 watts

Zone 4 = 80-90% MAP = 280-315 watts

Zone 3 = 70-80% MAP = 245-280 watts

Zone 2 = 60-70% MAP = 210-245 watts

Zone 1 = 50-60% MAP = 175-210 watts

Scenarios to consider

The main thing to identify from the zones calculated above is that the MAP dictates all zones, including zone 1. The higher the MAP the greater the number of watts produced in zone 1 and the faster you will travel at this intensity, although it will still feel like zone 1, it would still feel 'fairly light'.

Bob's MAP is 400 watts, his zone 1 therefore calculates as 200-240 watts (50-60%). He finds this 'fairly light' but cruises along at 18-19mph, riding a nice road on a nice day.

John's MAP is 300 watts, his zone 1 therefore calculates as 150-180 watts (50-60%). He finds this 'fairly light' and cruises at 16-17mph, riding the same road.

Use it or lose it

Your MAP will be at its highest when you are at your strongest (possibly just before your biggest race in the middle of summer). If you ride well below your MAP for long periods of time, you will not maintain your MAP, it will decrease. This is a simple 'detraining' principle, use it or lose it.. let's go back to the scenario above for John..

John's MAP is 300 watts and from November to January he only rides in zone 1 to develop his aerobic base (150-180 watts), due to the fact that he only rides at a low intensity his MAP drops to 270 watts. John's 'new' zone 1 is now 135-162 (50-60% of 270), it still feels 'fairly light' and his heart rate does not change, to John, this feel exactly the same as it did in November, but now he's riding at 15-16mph as opposed to 16-17mph. As a result of his zone 1 riding, John is now slower. Read that again..

Endurance riders beware!!

Are you doing Ironman? Riding long sportives? You need to be very wary of thinking that riding long slow miles will always improve performance. In certain cases it is necessary, but for many, it may not be the sole way forwards with regards to performance.

I've worked with a large number of athletes and I'm confident that 90% of them could comfortably ride 100 miles if I asked them to ride only in zone 1. Riding at such intensity is not particularly taxing and the pace would feel 'fairly light' for everyone. The key thing which separates each rider is how fast they travel when riding in zone 1, for some it would be 14mph, for others it would be 19mph. This difference in speed is dictated by the number of watts produced within zone 1 and the number of watts produced in zone 1 is dictated by MAP, in fact, the speed at every intensity is controlled by MAP.

If you have been competing in long distance events and found yourself going slower as a consequence, or at least failing to get faster.. you need to think about whether you are 'John' and whether you need to re-think your approach.

Marc Laithwaite

marc@theendurancecoach.com