

## Training Backwards: the Pyramid Turned Upside Down

In my first article on Ironman training, I discussed how Ironman athletes looking for improved performances should be focusing less on bragging rights for most miles ridden, and more on riding fewer miles at a faster speed. I would like to build on this theme of faster and more enjoyable racing through more focused and less time consuming training.

Endurance training builds only endurance. Endurance training will eventually yield a diminishing return. Unabated or forever growing endurance training will eventually cause this diminishing return to become a negative return, and rides will become slower and more tedious. Too many triathletes' training is characterized by both of these conditions.

I never understand how, after a draining regimen of overdistance rides, athletes suddenly expect to *metamorphasize* into blazing speed demons. Your body will only do what it has been trained to do. As much as you might wish to resemble a ball of fire on wheels, speed and strength do not suddenly pop out of the oven on race day.

Time-consuming long slow distance will produce a long and slow race. This has been demonstrated countless times--no mystery here.

Strength and threshold training clearly build strength and speed, after all, that is what this training is designed for. What people do not appreciate however, is that this type of training **also** builds endurance. Done properly, threshold and strength training can be built over a long period of time, all the while building endurance in the background.

The training formula that I find most effective for long distance events is to build a solid "base" of threshold and strength training, and to then apply this to endurance training in the later phases of training. My experience is that the endurance rides are subsequently done at a much faster pace and offer greater value. I go into a race feeling strong, fast, and with my last endurance rides having been very strong. This approach also helps to avoid the burnout that seems to affect so many Ironman athletes.

Ironically, my training formula also complements nature's seasons and athletes' general time availability. Cold and dark winter months can see a predominance of indoor training of relatively short duration, warm summer days with extended daylight can see you excited about longer endurance sessions on the road as you continue to gain momentum for your event.

To illustrate my training thesis, let's consider an analogous weightlifting exercise which contrasts the traditional high mileage approach with a program that is more oriented toward more strength oriented program.

Your primary goal in this training exercise will be to determine the maximum weight you can lift for 30 repetitions. The exercise might be bench press or single-leg leg press.

Your secondary goal will be to get a sense for maximum strength, for example, the maximum weight that you can lift for 6 repetitions. (Note: I prefer this number as opposed to 1-2 reps because of the reduced risk of injury) You have 8 weeks to get yourself ready, and here are two distinct training approaches:

1. Doing high numbers of reps 20-50 with lighter weights for 8 weeks; analogous to doing high mileage bike preparation
2. Doing lower reps, for example a progression that begins with 10-12 reps and methodically descends to 6-8 reps; analogous to the focused quality training that I endorse

Here is what you will find based on my experience:

- The lower rep strength approach will see you performing better in the 30 rep endurance test than the seemingly more relevant endurance approach  
Observation: strength training builds endurance! How else to explain a better result in an endurance test than that produced by an endurance-based method.

- The lower rep strength approach will see you performing **far** better in the maximum strength test.  
Observation: endurance training is not an effective means to build strength.
- Training doing primarily high reps of 20-50 becomes very tedious.
- Training with the strength approach is more interesting because it evolves and the improvement along the way is plain to see.
- If we had interspersed an occasional high rep session in the strength approach, in the later weeks for example, the endurance test result would have been better yet.

My guess is that in looking at the two training approaches, you probably would have surmised the same conclusions. Maybe it is time to begin to apply these same principles to your Ironman training as I have done.

I have applied this same weight lifting formula to long mountain climbs that I use to reference my cycling fitness. In Madrid, there was an imposing mountain range that offered a variety of climbs ranging from 30-50min at steady grades of 6-8%--pretty challenging. One climb always served as my barometer, Navacerrada, a climb that is often featured in the Vuelta de Espana.

It became very obvious to me early on that climbing up and down this range all the time quickly had me hating life and did little to improve my assaults on Navacerrada's challenging grades. It could be pretty depressing to see yourself at a cadence of 70 for 30minutes with heart rate at threshold and higher, only to eke out 10 seconds improvement.

On the other hand, developing a strength progression where I performed intervals ranging from 2'>45", pedaled at a prescribed cadence (80>>50), targeted a prescribed wattage, and focused on maintaining a smooth pedal stroke, had me climbing in bigger gears and radically improving in my mano-a-mano sessions with Navacerrada.

#### **In summary:**

Triathletes underestimate the endurance carry-over from one season to the next, and from one discipline to another.

Triathletes are generally active throughout the year, so base does not disappear as much as one might think. Once a cup of water is full, pouring more water into it will not yield a fuller cup; and so it is with endurance training. Ah so, Master.

Ironman endurance training can be greatly enhanced if it is prefaced with threshold and strength training.

#### **Mailbox**

Judging by the e-mail I received after my first posting Ride Less, Ride Smarter, Ride Faster," I seem to have struck a resonant chord with many athletes, and piqued the curiosity of others.

1. From an athlete in San Diego: "You must have done a lot of base miles in earlier years to compensate for a relative paucity of training, ie. 1hr20' computrainer sessions?"  
Not true. First year owning a bike was 1987. Longest ride that year was 50 miles. 1988: Longest ride was 60miles.  
1989: First 100 mile ride ever was in June which was a century ride in Madrid. Did 5-6 100m rides that summer/fall. First Ironman that October with time of 8hr53min; 4hr47' bike split.  
1990: most mileage ever, by far. Tons of miles. Hawaii 9hr45min, almost 1 hour slower than the previous year.  
1991: January-April; indoor sessions of 1hr-1hr20 exclusively. Raced Olympic Distance the 3 weeks prior to Ironman Canada, which I won with the fastest bike split.  
Besides my own experience, I have numerous neophyte triathletes who have turned in outstanding IM performances adhering to this same upside down training pyramid. The testimonials section of my website offers several examples; begin with Neal Pirie.
2. From an athlete in Germany; "I look forward to my indoor computrainer sessions with trance music during the week. These sessions generally last 1-1.25hrs. Do I still have to do long rides and what does this equate to on the roads."

I have done different experiments over the years in attempt to quantify the “exchange rate.” I find that a diet of 1hr-1hr10’ focused indoor sessions translate into 3.5-3.75hrs on the road at a steady clip with baseline heart rate 20-30 below threshold.

3. From an athlete that I worked with in the past: “I just read your piece on the IM live website and could not contain my knowing laughter. You are so right it hurts! Your influential philosophy of bike training continues to make me feel like I never had a clue before I met you, and continues to bring a whole new level of fun to riding. Thanks!”  
Good for my ego.
4. From an athlete in Virginia: “I need help in getting to Ironman Florida this November. It is now April and I am exhausted and don’t know if I will make it.”  
This athlete should not even be thinking Ironman at this early season juncture, nor should she be anything remotely resembling exhausted from her training.
5. From an unnamed athlete: “How many joints do you recommend I smoke each day?”  
If smoking joints keeps you from pummeling your body into submission and hating your bike, then smoking joints might not be any more harmful to your overall health.

**Coming Topics:**

Efficiency is Everything in an Endurance event:

- efficient pedaling
- efficient gear selection
- efficient fuel burning

Heart Rate Training Made Relevant: