Rethinking '*Base' Training*
by Michael McCormack

Another competitive year comes to a close, a brief training respite ensues, and then triathlon and cycling talk inevitably turns to Base.

"I gotta start logging my Base miles, lots of them. It's all about saddle time, count those hours. Pace must be strictly easy because it is Base-building time. Tis the season for LSD. If you are going to build a house, you need a strong foundation or your house will collapse! Yikes!"

Indeed, let us consider the simplistic rote analogies of if you are going to build a house, you have to have a strong foundation, and in endurance training a strong foundation can only be represented by a large volume of LSD miles.

In the Romanesque period of architecture, grandiose cathedrals were constructed on massive scale that history had never before seen. Think of this as Ironman, where people from all walks of life are setting out to tackle an event whose distances stretch the perceived limits of human endurance.

The building method during the Romanesque period was a simplistic one. Basically, huge walls of enormous thickness were erected to support these behemoth structures. Stone and mortar, stone and mortar, and more stone and mortar. Think of this building approach as akin to more and more LSD.

Large structures of unprecedented scale were indeed the result of this epoch's commitment to size. However, there were limitations to this most basic of building methods. For example, because of the thickness of the walls and the monotone structural basis, the interiors of these buildings were dark and dingy places where light did not easily penetrate. (here the analogy opportunities are too bountiful!)

There were also inherent height limitations with a building method whose primary component was volume of mass. Basic, amorphous mass proved to be very limited in providing an adequate foundation from which to gain closer proximity to the heavens above. This building method is analogous to a large volume of low intensity miles preparing you to cover the distance, but with the limitation being at a pace and finishing time far short of endurance sports' Holy Grail of testing one's personal limits.

The ensuing Gothic period brought with it revolutionary building methods which solved several inherent limitations of the dark Romanesque period. Flying buttresses shifted weight loads and allowed cathedrals to soar to withering heights.

Incredibly, these greater heights were achieved using less building materials! Furthermore, these same structures possessed a structural integrity that permitted grand openings which were adorned with beautiful stained glass windows and served to better illuminate the interior spaces. The analogy here is that the use of different methods can produce better a result despite a reduction in materials.

Back to the future. Base...just what is *Base* anyway? And once we figure out what *Base* is, why do we do *it*?

Perhaps we might pause here to provide a definition of *Base* that we might all agree on:

> ***Base training is that beginning of a training course that will allow you to maximally progress throughout the training period leading up to your primary race goal***

However, the devil is in the details and based on what I see too many people doing in the name of *Base*, as in non-varied LSD training, my characterization of traditional base training is redundant and relatively unproductive training.

The primary reasons to reconsider the effectiveness of LSD training are:

1. Fails to recognize that athletes are generally active throughout the year and prepossess a stable muscle structure and base level of conditioning
2. Exaggerates the period of time necessary to "build base" before moving on to more focused and productive training intensities
3. Fails to consider that there may be other more effective methods for building base

A couple of other items to ponder while rethinking traditional base-building are:

- When training is reduced, such as during off-season, speed and strength are the first things that one loses, and endurance the last. Why then does one do exhaustive training for a system that is the last to go, quickest to build, and prepares you for little else other than riding slowly?
- During the cold and dark winter months, how practical is it to "build base" with the traditional just keep adding hours method, particularly for multi-sport athletes who train other sports as well?
- What will yet another year of LSD prep do to improve previous seasons' results? My experience is that the same process has an uncanny knack for producing the same old results.

In both my own training, and that of coaching hundreds of athletes over the years, I have found that a steady diet of strength work and threshold training is a far more effective way to build base than the traditional LSD *for several months approach*.

The workouts I prescribe generally last an hour and are performed on a computrainer or a windtrainer, and carry the tangential benefit of being far more in sync with the majority of peoples' lifestyles---- small details like jobs, children, etc. which impose non-negotiable time constraints.

With proper know-how (very important), athletes can build these training progressions for many, many months without fear of plateauing, much less overtraining. These same progressions can be carried much further than if opportunity had been previously squandered with redundant LSD training.

Variety is a hallmark principle to this training and is far more stimulating physically and mentally than the low intensity monotone approach. One might also have a general sense that more interesting training is likely to be more effective as well.

For my athletes that live in warm weather winter climates, I recommend weekends for outdoor riding at a steady aerobic pace. For those that reside in cold-weather climates, I think it better to remain indoors and add to their diet of focused rides, or if one has a computrainer as most of my athletes do, to ride occasionally on gently rolling courses at a steady wattage such that HR remains 20-30 beats below lactate threshold.

For heart rate zones to be relevant to training purposes, they must be based on either a lab test or a workout protocol performed on a bike and designed to demonstrate lactate threshold. Arbitrary calculations involving age-based subtraction methods will produce arbitrary training zones.

Barring an IM event in March or April, I see no sense in riding more than 2 hours indoors. Clearly, I am one of the foremost advocates of indoor bike training, yet I have ridden as long as 2hrs on a handful of occasions only. It is far better to build the strength and threshold progressions in concise 50-80 minute sessions than to log long boring training hours indoors.

Athletes will have plenty of time to hit the roads when good weather arrives in April and May. My experience is that a well-constructed diet of 1hr focused indoor sessions translates into 3-3.5hrs at a steady and sustainable aerobic effort on the roads. Athletes will also find that they are much faster at their aerobic pace.

So is the traditional LSD base-building method wrong? Not necessarily. However, exclusively performing LSD workouts throughout the early season with discipline and consistency for years and years will not, in my experience, provide the best foundation for your core training and race preparation no matter how well you follow an LSD plan.

Frankly, I don't think anyone needs to pay a coach to tell them to train easily for 12-15 weeks and to gradually increase volume. If you are stuck on this method, then save yourself the coaching fees and simply increase volume by 10% each week, and every 4th week incorporate an easy training week with reduced mileage and spend more time stretching.

Of course there will be people that will disagree with the concepts I am describing. However, I doubt that those that disagree have had first-hand experience in the methodology of applying the principles I advocate, much less have successfully implemented this proven method with countless athletes of all abilities.

In short, their only frame of reference is if one were to do less of the same kind of monotone training the results would be a poorer performance, and this would likely be true. However, just as the Gothic structures introduced new building methods to achieve better results, so too must basic training methodology be changed if one is to train less and achieve a better result.

Certainly, we can all agree that triathlon, and Ironman events in particular, are premium tests on an athlete's endurance ability. It then follows that if one's preparation is fundamentally flawed, then this shortcoming will be painfully exposed in the event. My athletes, from professionals to novices, have consistently demonstrated that with an innovative mix of building materials and training methods, a better foundation can be built than that which is produced by the rote piling on of bricks and mortar.

To blindly argue against so much obvious success at events as grueling as the Ironman distance, is to gaze at the centuries old cathedral masterpieces of Reims and Chartres, and insist that such beautiful and lofty structures cannot possibly be constructed without a bulkier and more adequate base.

For those of you riding the annual LSD train who are now considering how best to proceed, I encourage you to take a hard look at your past seasons and ask yourself whether or not you feel you are reaching your potential. If the answer is "no", or "I am not sure," consider a following a different approach. Ask yourself again, how you can expect to achieve a different result with the same training method. Consider a change in the way you train, not just the amount of training you do.

Readers can learn about how I awakened to this innovative training method in my article entitled "Ride Less, Ride Smarter, Ride Faster." Another related article is "Training Backwards, the Pyramid Turned Upside Down."

Michael McCormack is a two-time Ironman Canada Winner who has coached competitive athletes since 1994. Michael resides in Mill Valley, California with his wife Etsuko and son Jimmy. You can read more about Michael's background at www.triathloncoach.com.