

## **Doc Talks Lance**

### **Looking for Clues on the Bike**

As we have now been graced with the presence in our sport of the "special one", the questions amongst many of our coaches and athletes about bike cadence has again exploded to the fore. Watching Mr. Armstrong blasting down the road with a high cadence, and then beating a few of our upper level or 2nd tier pros has created a ground swell of looking for clues. How come the doc is such a proponent for non-biker trained athletes to use low cadence? We see the best "bike rider of all time" spinning in the sun of Panama like there was no problem then blasting to the podium.

Let me put it in perspective for you.

History lesson

First, Lance as a junior was out swimming and out riding the great Mark Allen and Dave Scott, before he took up cycling. He did that with his high school representative swim ability that was good enough for a possible swim scholarship at a university. Then, he blasted them with a big gear munching cycling technique that had most experts back then (and there weren't many about the same number as now just a lot less than the nows) there supposed experts said "Wow, if only he didn't push so big a gear" he may run a little better, and keep in mind he was still 17 or so looks poor against Mark Allen, who spent the next 10 yrs making every ones run look poor. So, Lance Armstrong was always a triathlete of exceptional ability.

Cycling

Then, he switched to cycling, and with proper training the big hulk that was Lance Armstrong won a world road race title before his illness by jumping early and sprinting from over 1 km out from the finish. As I

think it was put as I was watching it "Lance is a strong grinding sprinter, as his cadence is low he does not have the acceleration of the pure speed men but he has this power endurance that makes his sprint last 2 or 3 times longer than the explosive guys."

Comeback

All this changed when Lance made his come back. A few other parameters changed as well all chronicled if one is an unbiased inquisitive person. However, the Lance Armstrong machine morphed into a sleeker model. The point is Lance didn't always push the high cadence. My take: if one has had not had a thorough riding up bringing learning to feel the pedal stroke is only the domain of a fortunate few. Even many pro riders who train from 750km to say 1200 km per week still don't find the magical feel on the pedals that the top 2 % do. My point here is if riders who are pro and spend 6 days a week training minimum of 4 to 5 hrs a day can't find it then how can some one with no background who can only put in a maximum of 200 km a week find it? Yes there will be exceptions. But how many do you think? I tend to not train for the exception but instead make adjustments when they do come along every generation or so.

Many field and lab tests have been done to basically show spinning is more efficient to the newcomer than just pumping the big gear or as we call it at teamTBB, stomping. These tests results don't get aired much because the end results nearly always bore out the different conclusion than what the cycling fraternity were looking for in the test. Confirmation could not be given. In fact, most if not all tests showed that subjects who were not trained produced more power and sustainable speed at cadences between 60 (yes you read right people) between 60 and 70 cadence. Any higher and the efficiency was lost. Now, I've seen studies from USA, Australia , England , and even France, and all come with the same conclusion over 70 cadence the subjects watt to power endurance was significantly less than the under 70 cadence brigade . The same riders under the same conditions lost as much as 10 % of their vital scores. Another anomaly to the spin

guys that is no such thing to normal logical humans was that in all cases the heart rate began to climb at the various cadence levels, and once the riding novices were asked to hold 100 cadences. Not only did their performance diminish greatly, but also their heart rate rose to levels approaching 15 % below max for the entire tests. Again, across all data, I saw this was universal, and I would hope to any reasonable person not a debatable point.

## Triathlon

So me being a simpleton, I thought:

a.) We have to train three not one discipline so our hours are limited for bike training compared to cyclists.

b.) Most if not all athletes that I come in contact with are not ex professional bike riders with an already wound in innate feel of the pedals. Thus the style of spinning may be detrimental to them riding to the best of their ability.

c.) In triathlon, the race is not over once we hop off the bike. So, riding with an elevated heart rate close to ones anaerobic threshold would not be advisable if one wanted to run at a reasonable pace.

Yes these were assumptions back then when I formed my opinions, but I would think based on sound principles. Over the years experience has taught me that this judgment was indeed one of my better ones as all riders in the age group classes I have helped have made rapid and sustainable gains on the bike.

In conclusion, there have been great champions who raced Lance who pushed bigger gears. Yes they didn't knock him over and unlike Lance they took stuff who "has never failed a dope test" in his own words. So people don't get the wrong impression, but suffice to say his engine over the years has been honed to such an exceptional state that well it is the exception, and copying someone like that is akin to what we see for the non-swimmer in our sport shown tapes of Ian Thorpe or Popov,

and then told we are going to build our technique around this model. It is the highway people, the fast track, to the slow way.

**BELIEVE ME!**

I'm about function over form, what works for the individual is what is right. Watching a 100kg or 220lb athlete spinning down the road at 100 cadence makes me depressed just as watching a certified level coach teach a 50 kg or 110lb 5'2 female to swim like Michael Phelps, who is 6'6 or 185 cm and looks like an aircraft carrier. It makes me cry and want to have these coaches certified in another way. If you are not exceptional or you don't have an innate feel for the pedals, take my tip: if you want to run to the best of your ability off the bike and get the most out of it when your on it, then lower cadences will produce for you. As Lance says and he knows, "it's not about the bike" but for me it's how you pedal it!

Cheers,

The Doc