

ASK COACH FRED

Training & Nutrition Tips

What's the Danger Pace on Long Rides?

(From [www.RoadBikeRider](http://www.RoadBikeRider.com), 4/7/11, Fred Matheny, author)

Question: In three weeks I will ride my first 300K (186-mile) brevet. A friend told me that the rule for pacing long rides is: Never go anaerobic. Sounds like smart advice, but how can I tell when I'm in danger of doing it? -- **Bud S.**

Coach Fred Replies: You're talking about the "anaerobic threshold," a phrase used for many years. Nowadays, the preferred terms are lactate threshold (LT) or OBLA (onset of blood lactate accumulation).

To simplify the physiology, as you increase intensity, your body produces lactate. At relatively low workloads, the lactate is cleared readily. But at higher intensities, it builds up and you slow down rather dramatically.

The term "lactate threshold" refers to the intensity at which your body can no longer clear the lactate accumulation. Fit cyclists can sustain a threshold heart rate (about 90% of their maximum) for an hour. On longer rides, like your 300K, you'll need to reduce your average heart rate considerably below that figure to last the distance.

You don't need a heart monitor to do it. The trick is to ride at a pace that keeps your breathing regular. When breathing becomes forced it's a sure sign you're asking your system to clear a lot of excess lactate. Doing so uses muscle fuel and almost certainly means you'll ride slower later in the event.

The trick is to keep your enthusiasm under control, especially on climbs or in pacelines where you might be forced to ride too hard.

That said, you can gain quite a bit of time on hills if you carefully elevate the pace to just below your LT and recover on the descents. But in a long event, you need to be extremely careful with this strategy because a foray or two over LT can cost you dearly.

Bottom line: If you're breathing hard during a long ride, you're probably in trouble -- unless you're so fit that extended efforts near your LT are possible. But riding that hard usually exacts a high price later in the event.

The only way to learn your maximum safe pace is to get experience in longer events. This is one of the educational benefits of a brevet series. With progressive distances of 200, 300, 400 and 600K, riders learn plenty about pacing and endurance.

Lots of us know what it's like to push too hard early in a century or double century, then pay the price. But that's actually an effective way to learn for sure where the limit is.