

## **Painful Legs**

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**What's the matter?** You're still pretty new to road cycling and love it -- can't get enough! But one thing is bugging you. At the beginning of most rides your legs feel tight and the muscles burn, especially on hills. You also feel short of breath. Later in the ride, your legs improve and breathing comes easier. Is this normal? Can the painful start be prevented?

**Here's help:** First, realize that it takes a while to convert untrained leg muscles into endurance-trained muscles.

Specifically, you have to convert a sub-group of fast-twitch muscle fibers (physiologists call them FOG fibers) so they have more endurance capacity. You also need to develop more capillaries to transport oxygen-rich blood to the working muscles, and this takes time too -- about a year to develop significant endurance capacity.

Also, think about how you're warming up as rides begin. Any cyclist's legs can burn early when they're asked to provide power or strength, as when hitting a ride's first hill.

**Rookie riders with good athletic ability** often climb early hills too fast or in too big a gear because they're doing it with fast-twitch fibers -- the same ones used for jumping or running fast. But these fibers build up lots of lactate, causing the burning sensation. They also fatigue quickly.

So if your ride has a hill close to the start, gear way down so you can spin up with a light resistance, even if it's at an embarrassingly slow speed. In fact, ridden this way, an early hill can be an effective way to warm up.

On tamer terrain, simply start by turning a moderate gear to loosen muscles and kick-start circulation. Gradually increase both the gear and cadence during the next 10-15 minutes until your legs are loose.

**Tip!** Finish rides by gearing down and spinning easily for the last 5 minutes. This "cool down" period will reduce the waste products of exercise in your muscles. For many cyclists it helps legs feel less tight or sore when the next ride begins.