Cycling: Making the Case for Cross-Training

by Ben Ollett

If you read much of the scientific literature about endurance training, you'll quickly come across the concept of 'specificity of training.' It basically states that the more you do something, the more your body will adapt to the specific demands of that activity. So, if you want to get faster at cycling, the more frequently you ride, the more your body will adapt to pedaling a bicycle. I don't think there are too many people that would disagree with this idea. But, leave it to endurance athletes to test the limits of that theory. "If I'm pretty fast when I ride 15 hours per week, just think if I rode 30 hours per week...I'd, of course, be twice as fast." That logic would hold somewhat true for a period of time, but eventually your body's specific adaptations become problematic. Let's put overtraining aside and assume you are recovering perfectly from those 30 hours of training per week. Your body is now a finely tuned bikeriding machine. So, what's the problem? The problem is that the non-cycling muscles in your body atrophy and become de-conditioned to most other activities. You develop muscle imbalances and become susceptible to overuse injuries as well. There are a couple of reasons why this problem is worse in cyclists than in, say, runners.

The first has to do with the fact that cycling is essentially non-weight bearing. Much like an astronaut whose body adapts to a zero gravity environment and sheds muscle mass and bone density, a cyclist's body will adapt to the general lack of eccentric muscle contraction and need to bear weight. This is why a well-conditioned cyclist may experience muscle soreness from everyday activities like walking down stairs or going for a hike.

The second problem with cycling as your exclusive mode of exercise is its limited range of motion. Your spine and musculature are adapting to a position that they're not really designed for. Think about it – if you're racing in the drops, you're not all that far off from the fetal position. Your spine is in an unnatural position, your hips and associated muscle groups are experiencing little to no extension, and your core musculature is not having to work to hold your body upright. Over time, these things become problematic. Your psoas and other hip flexors can become tight and essentially shortened and your core muscles become weak and don't support your spine and hips properly, and muscle imbalances cause antagonist muscle groups to function poorly.

So, what's the solution? Intelligent cross training. Here are a few options:

1) Running

Running works many of the opposing muscle groups to cycling. It's hamstring-driven, whereas cycling is quad-driven. Your core muscles are forced to hold your torso upright and your hips experience extension. At the same time, you're still training your cardiovascular system. If you haven't run in a long time, it's going to be unpleasant for the first 2-3 weeks. Start with short, slow runs and gradually increase. Running is also a great option for bad weather days. If you maintain your running legs, you can pretty much ditch the trainer for the entire winter!

2) High Repetition Weight Training

I've experimented with quite a few weight training programs over the years. During my soccer days, I did plyometric, squat, and deadlift workouts that were great for explosive power. I've spent a couple of winters in the gym doing similar workouts as a cyclist, and came into spring with a great sprint and a very de-trained aerobic system. Weightlifting, unless you're a track sprinter, won't make you a faster cyclist. But, the benefit of consistent high repetition work is a balanced musculature and an increased resistance to injury, which will indirectly enhance performance. Think of it as body maintenance. Squats, Romanian deadlifts, deep lunges, pushups, pullups and lots of corework are all great exercises. Shoot for failure in the 20+ repetition range. Choose a weight that provides resistance throughout the entire range of motion, as opposed to too heavy a weight results in a limited range of motion and poor technique. Treat these workouts as supplements to your aerobic training, not substitutes.

3) Yoga

There are quite a few different types of yoga, all valid in their own right. In my mind, yoga falls under the category of strength, flexibility, and body maintenance work. It provides a whole body approach and equally addresses strength and flexibility, which is important. Yin yoga is a great and relaxing way to work on flexibility and is something that can be done as a recovery activity. Other types, such as Bikram, are a workout in themselves. Between the physical rigor and 100 degree room temperature, Bikram is not a recovery activity.

These are just a few ideas out of many good options. If you have other ideas, feel free to email me at ben@wholeathlete.com or run them by your coach. If you're consistent with cross-training, you'll find it is quite enjoyable and provides a welcome mental break to on-the-bike training. If you focus on balance in your training as opposed to complete specificity, you'll be better off in the long run.

About the author

Ben Ollett Ben has been coaching cycling for nearly ten years and has worked with all levels and disciplines of cyclists, from Olympic mountain bikers to middle school cyclocrossers. His athletes have won a total of nine US National Championships including six in the Pro Women's Mountain Bike category and three at the U23 level. Read full bio>