

CYCLING TRAINING

Cycling training varies greatly across the disciplines. From the intense, anaerobically demanding speedway events to the ultra-endurance stage races, each cycling discipline requires a different training approach. Even within the same discipline, variations in distance will have a significant effect on a cyclist fitness regime.



Dan Kehlenbach and John Hughes are writing a book about endurance cycling, tentatively titled *Going the Distance*, to be published this fall. In it they talk about five factors, which are essential for athletic success: Mental, Training, Equipment, Nutrition, and Technique.

Mental

The mental side of the sport starts with self-assessment and goal setting. Why do you ride? What do you want to accomplish this year? The UMCA programs and calendar present a rich array of choices and it may be tempting to over-consume, like a kid in a candy store. The top riders in the UltraCup were successful because of consistent performance—they rationed their efforts over the course of the season.

Reaching goals doesn't just happen; it requires planning. Kehlenbach and Hughes divide the season into pieces:

- Base training: building endurance
- Intensity training: developing power over short distances
- Peaking: combining endurance and power for long-term cruising speed and developing event-specific skills
- Taper: reducing training and storing energy for event(s)
- Performance: the season itself
- Off-season: recovering and getting ready for the next year.

Whether you train by a spreadsheet or the feel of your legs turning the cranks, this is a useful framework.

Training

Dr. Ed Burke in *Serious Cycling* describes the benefits of endurance activity:

- Increasing the potential of your muscles and liver to store carbs.
- Improving your respiratory system.
- Increasing the efficiency of your heart to pump blood to the muscles.
- Improving the neuromuscular efficiency of pedaling.
- Enhancing your ability to burn fat during long rides.
- Increasing the endurance of your cycling muscles by increasing the density of mitochondria in your muscles where aerobic energy is produced.

Overall strength training will also make you a better cyclist. Do you get a nagging pain in your shoulder on long rides. Or do your hands start to hurt a bit from too much pressure? Off-season circuit training will improve your muscle tone and help stave off muscle fatigue during long rides. Core exercises, circuit training and leg resistance workouts provide a nice break from endurance workouts, especially riding the trainer. They need not consume much time—a few hours a week is sufficient. Resistance training exercises are illustrated for core fitness, leg strength, muscular balance, connective tissues and upper body fitness.

Equipment

A key principle of success is to test *everything* before the events themselves. One of the advantages of riding a trainer is that you can test different pieces of equipment and different positions on the bike in the safety of your own garage, without the distractions of the open road.

This is also the time to get your bike and components ready for the season ahead. Most bike shops get very busy as spring approaches—take your bike in early for a complete inspection and tune-up. This will also allow you to take some test rides after you get it back and before your first event.

Nutrition

A healthy body and effective training are keys to performance on the bike and good day-to-day nutrition provides the foundation for these. Jenny Hegmann wrote a terrific article on Every Day Eating for Cyclists in the summer *UltraCycling*. She describes how to estimate your daily caloric requirement, how to analyze your diet and how to eat to provide all the nutrients your body needs.



A food journal is a very useful tool: write down for a week everything you eat and then you can analyze it. The US Department of Agriculture has developed a food pyramid as a guide to good eating. [MyPyramid](#) is a powerful tool and provides an interactive feature that will present a recommended caloric and nutrient intake for you based on your height, weight, gender, and activity level.



Technique

Improving our economy of effort on the bike is one of the best ways to improve performance. As described above, strength training and proper bike fit both can improve economy, i.e., how fast you can ride for a given level of effort. Improving your cycling technique can also improve your economy.

Riding the trainer is a great time to work on your pedal stroke. Riding one-legged is a particularly effective drill. Prop one foot on a stool and pedal away with the other one. Spin-ups are another effective drill, the trainer equivalent of riding downhill on a fixie. Start at about 80 rpm and every minute increase by 10 rpm until you are spinning at 120 or 130 rpm. The goal is to keep spinning smoothly without bouncing in the saddle. Then work your way back down to 80 rpm.

Looking ahead and anticipating is another key skill. In many groups calling out hazards is proper etiquette; however, don't *assume* that the rider(s) ahead will call out potential problems.