

# Nutrition for Cyclists

By Dr. Jeremy Law (CMCC, Class of 2014)



Road cycling, especially over consecutive days and hundreds of kilometres, requires strength, endurance, some anaerobic strength (sprinting or during efforts up short and steep hills), and a LOT of energy. Amateur cyclists often struggle determining what they need to eat before, during, and after rides to get fit, stay fit, and to recover fast for the next time out on the bike.

Long hours on the bike call for a diet high in energy from protein, vitamins, minerals, and carbohydrates (as our fuel stores are largely depleted after long rides and need to be replenished). The timing of meals to replenish carbohydrate stores also becomes important to maximize the recovery potential between training or racing sessions. Carbohydrate and other nutrients such as protein and vitamins immediately after a long training session will kick-start muscle glycogen synthesis (the form of sugar that humans use for energy) and prepare fuel stores for the next training sessions. Immediate refueling also promotes other recovery processes compared with waiting an extended period of time.

A cyclist averaging 300 km of training per week might use up to 150-200 kJ/kg/day and need 5-8g/kg/day of carbohydrates and 1-1.6g/kg/day of protein in their diet to replenish the energy used (g/kg = grams per kilogram of the rider's body weight)!

To meet these requirements, a varied diet that is higher in carbohydrates but still containing proteins and minerals and vitamins, can be more easily consumed via frequent meals and snacks versus the traditional three meal strategy. Many elite level cyclists identify themselves as 'grazers', as they feel they are almost always eating!

## Iron

During training, ensure that enough iron is being consumed through consumption of red meat, fish, chicken and green vegetables as cyclists can run the risk of minimizing their intake to reach low body fat proportions. Iron supplements should only be taken if a blood test indicates that iron levels are low. A tendency to get sick often, as well as constantly feeling tired could be an indication to visit your medical doctor and inquire about your iron levels.

## Important Notes for Long Rides

**Fluid and food intake:** Not surprisingly, dehydration will impair your performance and enjoyment of your bike ride! The amount of water you need to take in needed largely depends on the intensity of your effort as well as the temperature and conditions of the roads you are riding on (for example, flat and cool vs. hilly and hot and humid). Fluid loss through sweating can vary between 300ml/hr and 1200ml/hr, but can be even greater in more extreme conditions! Drinking an adequate amount of water is critical.

If reaching for your water bottle to drink while cycling makes you nervous, consider a backpack hydration system or even safely stopping on the side of the road to take a drink break. Two water bottle cages and full water bottles on your bike should be the minimum for each and every training ride. Bicycle shops can help you create even more spots to bring more water on longer rides, for instance, behind your seat or in front of your handlebars.

**Hitting the Wall:** This is often associated with low carbohydrate levels and/or low blood sugar levels. Consider using an athletic drink mix that will address hydration as well as carbohydrate replacement in one sip! Be cautious of sports drinks made with refined sugars. Look for drinks that are designed for endurance athletes as these are easier to digest. These are often available at your local cycling or running shop.

**Eating on the bike:** New cyclists often avoid eating while riding due to the bike handling skills and confidence required to get a bar or a banana from a bike jersey while still rolling. Try practicing this on a stationary trainer at home so you have some practice before trying this on the road. It is common for cyclists and endurance athletes to consume between 30-60g of carbohydrates per hour while exercising. This goes for recovery from training as well. Start to eat before you feel tired or hungry!

**Always be prepared!** Even with promised roadside support, or a short planned training ride, make sure that you bring something to eat and drink on EVERY training and event ride. If you or a riding partner starts feeling low, the training ride turns out to be longer, or the support team doesn't show up, you will have what it takes to keep biking with energy.

Suggestions for foods to bring on your long training rides

- 800-1000 ml sports drink, 800-1000 ml water
- 2 carbohydrate sport gels (easily consumed with water, easily absorbed and used carbohydrate source)
- 2 pieces of fruit (bananas are great!)
- 2 cereal or sport protein and carbohydrate bars

And remember, for a faster and efficient recovery after a training session, a fast snack high in carbohydrate (with some protein) will mean a great boost to your next time out on the bike!

### References:

*Australian Sports Commission Fact Sheet: Road Cycling*

*AIS Sports Nutrition, last updated August 2009. © Australian Sports Commission.*

*As seen on May 28, 2014*

[http://www.ausport.gov.au/ais/nutrition/factsheets/sports/road\\_cycling](http://www.ausport.gov.au/ais/nutrition/factsheets/sports/road_cycling)

### Jeremy Law

Has been an avid cyclist and triathlon enthusiast for 10 years, was a finisher in 10:28 Ironman Mont Tremblant, has participated in and finished 10 marathons and is also an ultra marathoner. In addition to cycling and running, Jeremy was an alpine ski racing coach for over 10 years in Nova Scotia. In what little spare time he has, he is a part-time sales associate at Endurop Sport Toronto triathlon and bike shop.