

## **TRAINING TIPS from Carmichael Training Systems (Week 7 of 12)**



### **Fueling great training rides**

By Carmichael Training Systems

As your training volume and intensity increase, you're likely reaching the point where specific sports nutrition strategies will really improve the quality of your rides and the effectiveness of your post-workout recovery.

Endurance exercise is fueled primarily by fat and carbohydrate (protein contributes energy, but not much). As you increase your intensity, the percentage of energy coming from carbohydrate increases, but it's important to realize that you continue to burn a lot of fat for energy even as the rate of carbohydrate usage increases. If you are well fueled (your glycogen stores are topped off) going into a ride you can complete a 60-90 minute workout – including hard intervals – without needing any additional calories. For longer training rides, and for your Tour de Cure event, you'll need to replenish carbohydrate energy on the bike so you can continue riding at a steady pace. So how do you stay fueled during you event and training rides leading up to your event? The key is consuming carbohydrates from sports drinks, energy gels, bars, gummies/chewables, and foods like PB and Jelly, bananas or other whole foods that you like to eat.

Most cyclists' bodies can absorb around 60 grams of carbohydrate per hour, and typical energy gels have about 25 grams of carbohydrate (CHO). The general recommendation is to take in between 30-60 grams of CHO per hour for rides that last longer than 90 minutes. Smaller riders or riders who are maintaining an easy pace can meet their needs near the bottom of that scale (30-35 grams per hour), whereas bigger riders or athletes who are really pushing themselves may need to consume closer to 45-60 grams per hour. For riders who have power meters and can determine their energy output by looking at the kilojoule readout on their cycling computer (kilojoules of work done on the bike are roughly equal to the calories burned to accomplish that work), you should consume 20-30% of your hourly kilojoule workload in carbohydrate. So, if you're riding at 600Kj/hr, you would want to consume 120-180 calories (30-45 grams) of carbohydrate per hour.

Start looking at the amount of carbohydrate in the food and drink you take in on the bike. I recommend having a bottle of sports or electrolyte drink and a bottle of water on your bike. The bottle of sports drink usually has around 25 grams of CHO per bottle. A GU will have around 25 grams of CHO as well, so if you drink 1 bottle of sports drink, plus one GU (washed down with water) you are already at 50 grams of CHO! For rides or events lasting longer than 3 hours, I would recommend adding in some solid foods in addition to gels and sports drink. A sports bar, granola or energy bar, PB&J, banana, Fig Newton cookies, or pretzels are common choices. The key is to trying different combination and foods during your training rides and finding what works for you.

Let's take a minute and talk about the feed or aid stations at the charity rides. Most charity ride aid stations are well staffed and well stocked, which is great because you don't have to carry as much food and fluid with you on your ride. But be careful because they can also be your downfall! Plan

ahead and figure out what you need to eat and drink (we're going to talk hydration next week) during your event. If you stopped at one aid station and there is another one 5 miles up the road you probably don't need to stop at that one, too. They usually will have big spreads of food with lots of options that look delicious 30 miles into a ride. Stick to what you know, don't try something new the day of your event, you never know how your stomach is going to react to something.

If you have been eating and do find yourself with an upset stomach, continue to sip on plain water until it starts to feel better, an upset stomach is often the result of putting more calories and carbohydrate in than your gut can tolerate.

The most important thing is to practice eating on the bike; it will improve the quality of your training rides and lead to a successful nutrition plan the day of your event.

*Carmichael Training Systems Founder and Head Coach Chris Carmichael is the 2012 National Spokesperson for the American Diabetes Association Tour de Cure. This article is part of a series of articles prepared by Chris and the coaches at CTS to help you prepare for your Tour de Cure event. For more information on CTS and to sign up for our free newsletter and a chance to win a signed copy of "The Time-Crunched Cyclist" book, visit [www.trainright.com/register](http://www.trainright.com/register).*