THE CYCLISTS’S KITCHEN

PREVENT FATIGUE ON LONG RIDES

You too can be the life of the party at day’s end
By Nancy Clark

“I’ll be doing a TransAmerica bike ride and am so afraid I’ll run out of energy in Kansas...Any suggestions?”

Preventing fatigue is the number one concern of long-distance cyclists. Just the thought of pedaling all day, day after day, can strike fear in the hearts of novice touring cyclists. If this is a familiar fear for you, this article can help you enjoy high energy and enhanced stamina during rides that last for hours, to say nothing of weeks or months. Two keys to delaying fatigue (if not preventing, fatigue) during long rides are to:

1. prevent dehydration, and
2. prevent your blood sugar from dropping.

The following tips can help you accomplish those goals.

Dehydration: Prevent it!

When you bike hard (particularly in the summer sun), you sweat. Sweating is the body’s way of dissipating heat and maintaining a constant internal temperature (98.6°F). During hard cycling, your muscles can generate 20 times more heat than when you are at rest. You dissipate this heat by sweating. As the sweat evaporates, it cools the skin. This in turn cools the blood, which cools the inner body. If you did not sweat, you could cook your brain and die. A body temperature higher than 106°F damages the cells. At 107.6°F, cell protein coagulates (like egg whites do when they cook), and the cell dies. This is one serious reason why you shouldn’t push yourself beyond your limits in very hot weather.

When you sweat for more than an hour, you lose significant amounts of water from your blood. The remaining blood becomes more concentrated and has, for example, an abnormally high sodium level. This triggers the thirst mechanism and increases your desire to drink. To quench your thirst, you have to replace the water losses and bring the blood back to its normal concentration.

Unfortunately for cyclists, this thirst mechanism can be an unreliable signal to drink. Hence, you should plan to drink before you are thirsty. By the time your brain signals thirst, you may have lost one percent of your body weight, the equivalent of 1.5 pounds (44 ounces) of sweat for a 150-pound cyclist. This one-percent loss corresponds with the need for your heart to beat an additional three to five times per minute. No wonder dehydration causes early fatigue.

If you are an older cyclist, take heed: thirst sensations change with age; older cyclists become less sensitive to thirst. Research with 56-year-old hikers showed they became progressively dehydrated during 10 days of strenuous hill walking, yet the younger, 24-year-old hikers remained adequately hydrated. This means older athletes, including cyclists, should carefully monitor their fluid intake. If your urine is light colored and in significant volume, your body is adequately hydrated.

Because exercise can blunt your thirst and your mind can override the desire to drink, many cyclists voluntarily replace less than half of their sweat losses. To be safe, always drink enough to quench your thirst, plus a little more. Before starting your tour and before you hit the heat of Kansas, be sure to learn your sweat rate (and fluid targets): simply weigh yourself naked before and after a one-hour ride in the heat with no fluids. For every pound (16 ounces) you lose, you should strive to replace 15 to 16 ounces (80 to 100 percent of that loss) while exercising. This requires training your gut to handle this volume. Do not drink more water if your stomach is already sloshing; enough is enough!

You might find it helpful to mark your water bottle in 8-ounce increments, and even set an alarm wristwatch to remind you to drink on schedule. You’ll also need to plan on having the right quantity of enjoyable fluids readily available. Few cyclists drink enough local water when it tastes lousy!

Low blood sugar: Prevent it!

Without question, breakfast is essential to boost your blood sugar and fuel your body’s engine for a long day of riding. In addition to breakfast (and lunch), you need to consume sports snacks during the ride. Depending on your body size and ability to tolerate fuel while you bike, you’ll want to target at least 200 to 300 calories per hour of endurance cycling. The larger you are, the more calories you will need. For example, if you weigh 180 pounds, you may be burning 600 calories per hour and should target at least 300 calories per hour, such as 24 ounces of a sports drink and a medium banana, or six Fig Newtons (plus water).

The carbohydrate-based snacks you eat during a ride not only fuel your muscles but they also maintain a normal blood sugar level. Too often, riders “hold off” until dinnertime to enjoy a big meal at the end of the day. Wrong. Because your brain relies on the sugar in your blood for energy, keeping your brain fed helps you concentrate and think clearly. Because so much of performance depends on mental stamina, maintaining a normal blood sugar level is essential to fuel your rides and enhance your stamina. Plan short stops to have a quick snack, quench your thirst and enjoy some conversation.

While you are riding, your body doesn’t care if you ingest solid or liquid carbohydrates — juice, dried fruit, animal crackers, granola bars, dehydrated cola, energy bars, whatever. Despite popular belief, even sugar can be a positive snack while cycling, and is unlikely to cause you to “crash” (that is, become hypoglycemic). That’s because sugar feedings during exercise result in only small increases in both insulin and blood glucose.

Plan ahead

Before you start your tour, practice fueling during your training rides. This will help you learn what foods and fluids best suit you. Why be listless and listless at the end of the day when you could be the life of the party?

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