

ULTRA ENDURANCE FUELING

By Sunny Blende, Sports Nutritionist

Ultra races are really an eating and drinking contest with exercise and scenery included. The goal is to maximize your calorie intake thereby enhancing your performance without pushing your system over the edge and exceeding your stomach's capacity to absorb nutrients. This can be tricky and needs to be practiced in training before it will become a consistent habit in racing. At one point or another an endurance athlete's weak link is usually his or her stomach. If you can capitalize on your nutritional fueling, you'll be well on your way to a PR ultra with a strong and comfortable finish.

The classic mistakes when it comes to hydration and fueling, according to Tim Tweitmeyer, himself a five-time winner of the Western States 100 Mile Run, are first, not drinking early enough. Second is not taking in enough calories early enough and the third is not paying attention to the need for salt or sodium.

Even a two percent loss of water through sweat during exercise will result in a decrease in performance and an increase in effort. By the time you experience a six percent loss dehydration has set in and it becomes very difficult if not impossible to come back from this state. Studies have shown that athletes slow down in their performance approximately two percent for every one percent loss of body weight. If you weigh 170 pounds and lose three and a half pounds (two percent of your body weight), you would slow by four percent. If you were running an average 10-minute mile, you'd add 24 seconds to every mile! And it would seem a lot harder. It is important that your intake of fluids match your sweat losses. Start early and don't get behind.

To delay fatigue and keep performing at your best during an ultra you need to replace carbohydrates before your glycogen stores get depleted. The average maximum amount of carbohydrate you can absorb and burn during extensive exercise is about 240 calories per hour or about one gram per minute of exercise. Eating more than this and you will be in double trouble because extra carbohydrates will be stored in fat cells (a waste of time during a race) and the metabolic process of storing takes precious energy away from your racing muscles. In addition this storage of carbs takes extra water too. Taking in less than your ideal amount of carbohydrates takes its toll because once you begin to feel fatigued and hypoglycemic (low blood-sugar) you cannot take in additional calories to make up the deficit. Start early and don't get behind.

Electrolytes, especially sodium or salt, become more crucial in ultra endurance events because the longer races mean the effects of sweat loss and the ensuing dehydration become cumulative. As the heat, duration and the intensity of an event increase, sodium loss can become critically high. Sweating leaves the blood thicker, which makes the heart pump harder sending your pulse rate sky high. But trying to rehydrate by drinking water alone can result in hyponatremia—diluting the blood sodium level to the point that you become confused, disoriented and faint, and eventually, can lapse into a coma. The need for salt can vary according to the weather and the athlete's sweat rate so be sure and take in electrolytes in sports drinks and eat some salty snacks such as pretzels, chips, potatoes with salt, or possibly try electrolyte capsules or suck on rock salt crystals. Start early and don't get behind.

Practice drinking and eating in training runs. Get comfortable with what your stomach can and cannot tolerate so you will be able to stay ahead of the fueling game with familiar and performance enhancing drinks, gels, bars and food. Have a plan but be prepared to be flexible. Stable blood sugar directs calories to muscles so try to fuel yourself with small amounts continually. Liquids will leave the stomach sooner than gels and gels sooner than solid foods. Fructose can cause abdominal distress and diarrhea. Practice and use this knowledge so you can refuel while cruising through the aid stations to a strong and smiling finish.