

Riding Wet and Well: The Importance of Staying Hydrated

Though summer is waning, record high temperatures continue to pound much of North America. For cyclists this means dehydration and more serious conditions like heat stroke are ever-menacing foes on the roads and trails. Even casual riders must take extra care to maintain healthy fluid and electrolyte levels. And though the risk for heat stroke diminishes as the weather cools, hydration still plays a critical role in health and performance. In fact, because some riders are less vigilant about fluid and electrolyte intake in the fall, they actually increase vulnerability to muscle cramps, fatigue and other symptoms of dehydration. By encouraging your customers to stay hydrated they will be able to ride further, perform better and enjoy their time in the saddle. You'll also extend the selling season on one of the hottest categories in bike shops across the nation—hydration products.

Beyond Thirst

For most desk jockeys, thirst is a good signal that it's time to get a drink. But if you wait till you're thirsty while exercising, you've waited too long. That's because when we exercise, fluids and electrolytes race from the skin faster than a herd of horses from a burning barn. So by the time your brain catches up and signals "I'm thirsty," the barn door has been open a long time. You're well down the road to dehydration.

Singing the Body Electric with Electrolytes

Electrolytes—which include substances like sodium, potassium, calcium and magnesium—help muscles produce the electrical charges they need to expand and contract. When they are in short supply or out of balance, muscles twitch and cramp up, causing pain and decreased performance. That's why it's best to stay hydrated and supplied with ample electrolytes so dehydration never occurs.

Heat Exhaustion and Heat Stroke

For cyclists riding in very hot weather, dehydration can quickly blossom into heat exhaustion, a condition marked by elevated body temperature, profuse sweating and pale skin, dizziness, nausea, headache, increased heart rate and rapid breathing. At this point, it's critical to stop riding, get out of the heat, rest and drink plenty of fluids enriched with electrolytes and complex carbohydrates. Otherwise, it's only a short hop to full-blown heat stroke, a life-threatening condition where the core body temperature can reach 105 degrees or more.

Water Everywhere

According to guidelines established by the Institute of Medicine Food and Nutrition Board, endurance athletes require at least three to four liters of water a day. When training for long periods or in extreme heat they may need much more. The old rule of thumb holds that the amount of fluid you drink should equal what you sweat out—as much as one liter per hour. Experts at Hammer Nutrition, a manufacturer of nutritional products, estimate that drinking 20 to 25 ounces of fluid per hour during exercise is adequate for most athletes under most conditions. However, some athletes might require as little as 15 or 16 ounces per hour. Truth is, this is not an exact science—hydration needs can vary widely from person to person.

The equation becomes more complex when factoring in electrolytes. Endurance athletes can sweat out more than 2000 milligrams of sodium per hour. Yet taking even half this amount in a short time triggers hormonal responses that can impede performance. Some sports nutritionists advise athletes to use the minimum—as little as 300 to 600 milligrams of sodium per hour of exercise—for best results. It is also very important to take sodium in proper balance with other electrolytes and minerals.

Rocky Mountain High and Dry

High altitude cyclists need to be extra vigilant about fluid intake. As altitude increases, the air gets thin and arid, increasing the loss of fluids and electrolytes. And because barometric pressure in the mountains is much lower than sea level, oxygen is more difficult to absorb, making the heart and lungs work harder to bring air to the blood. Muscles are strained, too, quickly burning stores of energy-giving glycogen. That's why riders should consume more carbohydrates to compensate. Cyclists competing at 7,000 feet or more should try to live and train at altitude for at least three weeks before a race. This gives the body ample time to acclimate.

Fueling Up with Carbs

Many of today's nutritional products come packed with a whole grocery store of ingredients including electrolytes, carbohydrates, vitamins, minerals and even caffeine. What your customers need depends on the type, frequency and duration of their rides. For intense rides of shorter duration—90 minutes to two hours—most cyclists are best served sticking to water and electrolytes.

For rides over two hours, products with carbohydrates provide a much-needed burst of energy. However, your customers should be aware there is a big difference between supermarket-grade energy drinks and the higher-quality products sold by QBP. The former are usually loaded with cheap, simple carbohydrates like corn syrups and high fructose sweeteners, making them little better nutritionally than soda pop. Complex carbohydrates, which are found in nuts, whole grains, fruits and vegetables, break down more slowly in the body and provide a sustained source of energy. QBP offers a wide variety of energy and electrolyte drink mixes, tablets and gels to suit every taste and preference. Remember, some drink mixes can cause stomach upset, so it is important for riders to try different products and find one that works for them. You should advise cyclists to never use a new gel or drink mix before a big event.

After the Big Ride: Recovery

Even though the bike is tucked away in the garage and the shorts are in the wash, the ride really isn't over. Our bodies need to replenish fluids and electrolytes lost during exercise. Mayo Clinic research shows that one or two cups of water are sufficient after a short workout. Long intense rides lasting more than an hour can require much more: 16 ounces of electrolyte-enriched fluid per pound of body weight lost during exercise. Carbohydrates and proteins also play a vital role in recovery, working together to help the body rebuild glycogen stores in the muscles and prevent tissue breakdown, cramping and strain. No problem if you don't feel up for a big bowl of spaghetti and meatballs after the ride. Athletes can get the nutrition they need from a wide selection of easy-to-consume bars, gels, drink mixes and tablets.

Bottles and Hydration Packs

The best way to stay safely hydrated is to make sure there's always a fresh supply of water or sport drink close at hand. There are a variety of "delivery devices" these days, from traditional bike bottles to sophisticated hydration packs, making it easier than ever to stay wet and well on the trail.

Bike bottles and bottle cages

Inexpensive, easy to carry and convenient to use, bike bottles and cages are still the most popular hydration equipment. When riders need more than water, it's easy to add electrolyte powders and go. Unfortunately, the soft plastic tends to absorb and hold flavors. Eventually, they need to be discarded. Easy to wash and more durable, polycarbonate bottles from Camelbak and Nalgene are a good alternative. For those who like a cool drink on a hot day, insulated bottles from Polar keep fluids cold longer than conventional bottles.

Hydration Packs

For long hot rides, hydration packs offer the convenience of carrying a large volume of water. Hydrapak and Nalgene packs are equipped with antibacterial bladders, no-slosh compartments and a ventilated design that keeps your back cool during rides.