

Peak Performance: Nutrition and Hydration Strategies while Training for the Summer GT

Whether you are an elite racer or participating in the Summer Grand Traverse for the first time, you will be challenging your body's limits. As most of you already know, training can take 3-5 hours or more a day whether you are highly competitive or just want to finish. Also, if you are participating in both events, optimal recovery in between is crucial to go from the run to the bike the next day. Clearly, nutrition and hydration are critical to be able to finish.

During endurance training for a particular event, your body uses mostly carbohydrates and fats. You do need some protein, but the other macronutrients are most important. You can burn up to 3000-5000 calories per day. In order to achieve adequate energy intake, one must eat frequently and modify choices based on the training program, which factors in intensity, duration, and mode. Environmental conditions must also be considered. If you fail to match energy intake with expenditure, performance will be impaired. Often, it is difficult to consume the amount of calories needed in competition, so it is important to have adequate endogenous fuel stores, or one will begin to experience fatigue.

During daily training sessions over the next few months, food and hydration need to be top of mind. Here are some suggestions to help you along your journey:

- Optimize your training diet: ultra-endurance athletes should consume adequate calories and carbohydrates. Strive for 5-12 grams per kilogram of body weight per day of carbs while you are training to maintain a desirable intensity. Make sure you get about 1.2-1.6g of protein per kg per day. For the most part this can be met by consuming a mixed diet that provides adequate energy. Consume at least 1g of fat per kg of body weight. This is about 20-35% of total calories. Choose a nutrient-dense diet containing plenty of fruits, vegetables, whole grains, legumes, lean meat, and dairy products. Consuming carbohydrates before a training session can help performance by "topping off" muscle and liver glycogen stores. The pre-session meal should contain about 1-4 grams per kg body weight, consumed 1-4 hours before the activity.
- If you are consuming enough calories for an endurance training program, you should meet your requirement for vitamins and minerals. When it comes to supplementation, some athletes may need extra iron as iron needs and losses can increase. If you have a particular eating style or preference, like veganism, some nutrients could be low if you don't plan right. The best way to determine what a person's particular needs are is micronutrient testing, so you can supplement correctly and not unnecessarily.
- Drinking during endurance training is necessary to prevent the detrimental effects of dehydration and electrolyte loss on performance and health (excessive dehydration is greater than 2% body weight loss). Athletes should customize their fluid replacement plan because there is so much variability in one's sweat rate, both fluid and electrolyte loss. Make sure you begin to drink water/fluids slowly about 4 hours before your training session. 5-7 ml/kg is recommended (for a 150-pound person, that is about 12-16 ounces).
- Consuming carbohydrates during training sessions can improve performance and maintain blood sugar levels. Small amounts of carbohydrates from sports drinks, sports bars, chews, and food

may enhance performance in endurance sessions lasting 60 minutes or longer. If you are planning a 1-2.5 hour session, consume 30-60 grams of carbohydrate per hour. For a session that is 2.5 to 3 hours and longer, consume 80-90 grams of carbohydrates per hour. What to bring along is very personal. Some athletes prefer to drink their calories, whereas others like water and solid food. You should also consider how you tolerate different things. Some people prefer more “real” food, whereas others like the convenience of bars and chews. You may want to consider a combination so you don’t get tired of the same taste. Make sure you are always balancing food with fluids so what you eat and drink empties from the stomach in a timely manner and gets utilized.

- Consuming carbohydrates after a training session helps to rapidly fill carbohydrate stores. During the early period of recovery (0-4 hours) consume 1-1.2 g/kg/hour of carbohydrate. The initial recovery meal should also have about 15-25 grams of high-quality protein to promote muscle tissue repair. Ensure you drink about 24 ounces of fluid for each pound lost and consume adequate sodium to recover from dehydration.
- Make sure you plan ahead and have some prepared items for before, during, and after a training session. Then you won’t be tempted to eat whatever is available, which may not provide the right nutrients. Some suggestions: whole grain wraps, hummus, bean dip, fresh veggies, nut butter and jam, nuts and dried fruit mixes, ingredients for a smoothie, some homemade wholegrain muffins, lean poultry and meats, yogurt, and fresh fruit, cottage cheese, low-fat pasta or quinoa salad. There are many electrolyte/carbohydrate beverages available today. They should be tested for taste and make sure you tolerate them. What works for one person doesn’t necessarily work for everyone. This is also true for energy bars and chews. Once you find items you like, keep them handy so you can grab them quickly.
- Practicing what you eat and drink is KEY to being successful on race day! Anything you do during the event needs to have been already tested. Also, adjusting your fueling strategies based on your workout intensity, duration, and environmental conditions can be helpful. There can be a lot of trial and error, but its worth it during training so you are well prepared the day of the race.

For the most part, these are general guidelines to follow. If you have an interest in customized recommendations, it may be helpful to schedule a nutrition consultation. Also, if you have continued gastrointestinal stress during training, it might be beneficial to check for any food sensitivities or intolerances. Feel free to contact me!! Visit my website to obtain more helpful nutrition information, email a request for services, or sign up for my monthly newsletter.

Angela B. Moore, M.S., R.D., CLT

ACSM Certified Exercise Specialist
Certified LEAP Therapist for Food Sensitivities and Intolerances
angela@fitlifeofcolorado.com
FitLife of Colorado
www.fitlifeofcolorado.com
720-201-1128