



## The Beginner's Guide to Triathlon Nutrition

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So you are gearing up for first triathlon! Congratulations and welcome to the sport. I made my grand appearance in 2002, doing one Olympic Distance Triathlon before jumping into Half Ironman and Ironman distance races. Yes, I can say it is truly an addicting sport! Fortunately, with being a Registered Dietitian, an Exercise Physiologist, and having a background in endurance training, I have a distinct advantage in knowing what I have to do both nutritionally and in training to maximize my own performance. For many, however, it is not that easy which is why I am going to provide you five essential nutrition tips as you prepare for your upcoming season! Happy trails!

### Tip #1: Meet Your Daily Energy Demands

It is not uncommon for athletes to underestimate their energy demands during training. Unfortunately, with inadequate fuel in your tank, you will never reap full benefit from your training and actually can heighten your risk for injury. Depending on daily training volume and intensity, most triathletes require a range of 16-30 calories per pound of lean body weight, with male triathletes training for long course triathlons requiring the latter end of these requirements. If you are looking drop a few pounds of body fat, you should never restrict by more than 1,000 calories per day as this causes muscle breakdown. To avoid an energy drain associated with restrictive eating patterns, a smaller restriction of 250-500 calories each day will help you lose ½-1 pound of fat mass a week. On the flipside, if you need to gain body weight, boost your calorie intake by 250 calories daily.

Aim at a balance of 55-60% healthy carbohydrates (fruits, vegetables, whole grains, beans), 15-20% lean protein (soy, low-fat dairy, chicken breast, fish, round steak, turkey), and 20-25% healthy fats (avocado, nuts, seeds, olives), spreading out your total calorie needs into 4-6 smaller meals throughout the day. Be sure to avoid dietary plans that entail avoidance or restriction of major food groups (e.g., carbohydrate-restricted diets), as they are not balanced and can lead to performance declining nutrient deficiencies as well as potentially serious health consequences.

To give you an example of what a nutritionist eats: As a 110 pound female with ~15% body fat, I generally consume ~2,500 calories during Ironman training which does not include calories that I consume during or immediately after training. I split my 2,500 calorie daily intake into 4-6 400-600 calorie meals consisting of combinations of carbohydrate and protein and a whole lot of colorful fruits and vegetables. A typical day of eating for me includes:

- **Breakfast:** Oatmeal blended with granola, berries, almonds, and milk along with Naked Juice
- **Lunch:** Vegetarian turkey sandwich with lettuce, tomato, cheese on whole grain bread,

- vegetable soup or salad, a piece of fruit, and low-fat chocolate milk
- **Afternoon Snack:** Fruit smoothie prepared with yogurt, juice, and frozen fruit or an energy bar and piece of fruit
- **Dinner:** Large salad plus a pasta dish prepared with soy-meat
- **Evening Snack:** Small bowl of granola with almonds and nonfat milk

### **Tip #2: Stay Hydrated**

Aim at drinking half your body weight (pounds) in fluid ounces each day. This does not include your morning cup of Joe or any other caffeinated beverage but it does include any fluid you consumed at rest that is liquid at room temperature (e.g., juice, milk, broth). In the 1-2 hours prior to your workouts, tap off your fluid tank by finishing one water bottle full of fluid (~16-24 ounces). During your workouts, aim at drinking 5-12 ounces of fluid intake every 20 minutes. Carry a water bottle or fuel belt with you if going on routes where no water fountains are available. Opt for a sports drink containing electrolytes when your training extends beyond 90 minutes. Rehydrate with a sports drink after a workout if you find your urine color tending towards a bright yellow color rather than clear or you have lost a significant amount of weight (1 pound or more)!

### **Tip #3: Eat Prior to High Intensity or Long Duration Workouts**

To ensure optimal energy levels during high intensity or long duration (>90 minutes) training, aim at consuming  $\frac{1}{2}$  your lean body weight in carbohydrate grams for every hour prior to starting your workout. For most female triathletes, this equates out to be 45-60 grams of carbohydrates (~200-250 calories) for every hour prior to starting; an energy bar or a piece of whole grain toast spread lightly with peanut butter and topped with 1 sliced banana would be sample snack ideas for 1 hour prior to your workouts. For most male triathletes, this equates out to be 60-75 grams of carbohydrate (~250-300 calories) for every hour prior to starting; a banana and an energy bar or a small bowl of Special K cereal topped with strawberries and nonfat milk and a glass of orange juice would be sample snacks 1 hour prior to starting your workouts. Make sure to minimize the amount of fiber, protein, and fat in the meal, as these three nutrients will slow down digestion and potentially cause gastrointestinal problems (e.g., diarrhea) during your workout. Also, make sure to drink fluids with your meal to ensure optimal absorption of the nutrients.

### **Tip #4: Be Sure to Refuel When Training Longer Than 90 Minutes**

To optimize fuel usage (burn fat, spare your limited carbohydrate stores), be sure to start refueling after 90 minutes of training. For every hour beyond 90 minutes, aim at  $\frac{1}{2}$  gram of carbohydrate (essential in all races lasting longer than 90 minutes) and up to  $\frac{1}{8}$  gram of protein (desirable when training for Half Ironman and Ironman distance races) per pound of lean body weight. Again, for most females, this equates out to be 45-60 grams of carbohydrate, which could be replenished by consuming 1 energy gel with electrolyte enhanced water every  $\frac{1}{2}$  hour beyond 90 minutes of training. For male triathletes, an hourly dosing of 60-75 grams of carbohydrates is generally warranted. This could be fulfilled by consuming an energy gel with electrolyte enhanced water plus 8 ounces of a sports drink every half hour beyond 90 minutes of training. Opt for sports foods containing small amounts of protein (Accelerade, Perpetuem, energy bars) when training for long course triathlons.

### **Tip #5: After Hard Training Efforts, Eat a Carbohydrate-Protein Combination.**

Within 30 minutes after finishing, aim at consuming  $\frac{1}{2}$  gram of carbohydrate and  $\frac{1}{8}$  gram of

protein per pound of lean body weight. For most female triathletes, a 200-250 calorie snack is appropriate whereas most male triathletes will require closer to 300+ calories for post workout replenishment. At this time, you could opt for a sports food or you can go for real food. Some of my favorite post-workout recovery foods include low-fat chocolate milk, smoothies with a protein boost, peanut butter/honey/banana sandwiches, salted pretzels dipped in yogurt, and cottage cheese/fruit combinations. Meal replacement shakes like Boost and Ensure also provide a convenient nutritional punch when time is at a minimum.

*Interested in customized meal planning and sports nutrition coaching? Kimberly J. Brown, MS, RD, has worked with athletes worldwide, creating menus specific to individual training and metabolic demands and designed to help maximize endurance performance. Information on my programs can be found at [www.kbnutrition.com](http://www.kbnutrition.com). Kim can be reached at [kim@kbnutrition.com](mailto:kim@kbnutrition.com).*