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## FUELING YOUR BODY TO GO LONG

BY LISA ENGLER

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# Overview

With the increased popularity of Ironman distance triathlons, the nutritional needs of endurance athletes are not only greater than those of recreational endurance athletes training for shorter races, but also require a conscious approach to dietary decisions. In his book “Paleo Diet For Athletes”, Loren Cordain, PhD., professor of exercise and sport science at Colorado State University points out that modern day endurance sport athletes have a lifestyle that “puts them in some form of recovery almost continuously during heavy periods of training” comparing it to that of Stone Age men and women 25,000 years ago. The typical diet of many endurance athletes, which includes pasta, potatoes, bread, rice and other simple carbohydrates simply won’t sustain the body during strenuous training.

## The Optimal Diet For Ironman Training

There’s no secret formula for fueling the body during training periods since nutritional needs of every athlete varies. However through his research, Dr. Cordain has discovered a nutritional strategy that has been recommended by multi-sport coaches including Joe Friel, author of several books including “The Triathletes Training Bible”.

Key concepts of Cordain’s nutritional strategy are quite simple: eat a lot of fruits and vegetables, eat lean protein with every meal, use high glycemic index (GI) carbohydrates during and after training for recovery, avoid foods that contain saturated and hydrogenated fats, eat moderate amounts of good fats and eat a larger number of smaller meals.

## Prior to Workouts

About two hours prior to long workouts (2 or more hours), athletes should eat low to moderate GI carbohydrates such as berries, apples, pears, grapes, steel-cut oats and multi-grain hot cereal. Caloric ratio should be 200-300 calories per hour until the workout begins. In the case where food intake isn’t possible during this time frame, athletes should consume at least 200 calories up to 10 minutes before the onset of exercise.

## During Workouts

High GI carbohydrates such as sports drinks and energy gels or bars are recommended during long workout bouts. Athletes need an intake of 200-400 calories per hour depending on the intensity of exercise. Workouts lasting one hour or less only require hydration with water, there is no need for additional intake of carbohydrates.

## Immediately After Workouts

The first 30-minute window after workouts is critical for recovery. During this time athletes need to use a recovery drink that provides a carbohydrate to protein ratio of 4-5:1. You can use a

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commercial powdered drink, or make one yourself by blending a banana, 16 ounces of fruit juice, 3-5 tablespoons of glucose powder and 3 tablespoons of protein powder.

## Extended and Long-Term Recovery

Athletes should focus their diets on moderate to high GI carbohydrates during the 2-3 hours after their workout, or as long as the workout lasted, whichever is more. If there is a time to eat less than optimal foods like pasta, pancakes, bagels and other high GI foods, this is it. However, after this period of time has passed, the remainder of your day should be focused on eating fresh, organic fruits, vegetables and lean proteins.

## Carbohydrates, Proteins, Fats and Water

The four macronutrients that everyone needs to survive are carbohydrates, proteins, fats and water. How much of each of these macronutrients we need is widely debated. According to the Mayo Clinic, the average American eating a 2000-calorie per day diet needs 45-65 percent of their daily diet to come from carbohydrates, 10-35 percent of their daily diet to come from proteins and 20-35 percent of their daily diet to come from fats. As an endurance sport athlete, those ratios can be narrowed down.

Dr. Cordain recommends a 60-20-20 ratio of carbohydrates, proteins and fats with a shift to slightly lower carbohydrates and more fat during off-season periods.

Water intake is critical especially when you factor in long, intense workouts which makes multi-sport athletes run the risk of being dehydrated. To ensure that your water intake is adequate the Mayo Clinic advises that you should drink enough to rarely feel thirsty and produce 1.5 liters of colorless or slightly yellow urine per day which is likely to be more than the recommended eight 8-ounce glasses.

## Tips

Success in your training and racing requires dedication to eating optimal foods at the right time. Here are some quick tips:

- Make small changes over an extended period, especially if you've been accustomed to eating a haphazard diet.
- Reduce your intake of saturated and partially hydrogenated foods like cheese, crackers and other snack foods, replacing them with fresh fruit and vegetables.
- Get enough protein in your diet by eating lean proteins such as fish and poultry.
- Don't count your calories, but do watch your saturated and hydrogenated fats. Remember that mono-unsaturated, and omega-3 polyunsaturated fats (olive oil, flaxseed, nut butters, fish oil) are fine in moderation.
- Eat more whole, organic fruits and vegetables.

## References

"Paleo Diet"; Loren Cordain; 2005

"Triathletes Training Bible"; Joe Friel; 1998

["Healthy Diet: End the guesswork with these nutritional guidelines";](#)



Lisa Engles is a pioneer and leader in bridging the mind-body gap in the health and fitness field. She is the creator of the InnerState Coaching process which she uses to help her clients shatter limiting beliefs and emotions so that they are fully empowered to create and live their dreams. She is a regular continuing education provider for USA Triathlon and Western Athletic Clubs where she teaches coaches and personal trainers how to work with their clients to recognize and let go of self-sabotaging thoughts and behaviors that block optimum health and fitness.

Lisa is a USAT certified coach and spent 5 years as the head coach for the Silicon Valley Triathlon Club (2002-2007). In addition, she is a freelance writer for Livestrong.com, holds a degree in Exercise Physiology and is the board director for the National Alliance for Emotional Health. Lisa is certified through ACSM and NASM as a personal trainer and is a certified Life Coach through the Coaches Training Institute.