



## Nutrition Guide

The purpose of this nutrition guide is to prepare runners to optimize their performance. This divided into 4 sections: Body Composition, Eating Habits, Foods, and Tips.

### BODY COMPOSITION

The goal of a runner is to develop leanness. In order to achieve this goal, an individual must become familiar with their body composition and its components. There are several developed measures that assist an individual in evaluating body composition. They are: % body fat, BMR (basal metabolic rate), and BMI (Body Mass Index).

**Body Fat Percentage-** the amount of body fat in your body expressed as a proportion of your body weight. The chart below breaks down BFP to help runners determine a baseline category. For a runner to optimize their performance, they should fall in the mid to lower end of the athletic range.

	MEN	WOMEN
Essential Fat	2-4%	10-12%
Athletic Range	6-13%	14-20%
Fitness Range	14-17%	21-24%
Acceptable Range	18-25%	23-31%

**Basal Metabolic Rate-** The minimum level of energy your body expends when at rest to function effectively including your respiratory and circulatory organs, neural system, liver, kidneys, and other organs. For example, my BMR is slightly less than 2000 calories per day. However, when factoring in the amount and intensity of my running my daily BMR doubles and my necessary caloric intake jumps to 4000 calories per day. This is an important number to become familiar with as it may have a significant impact on performance. Runners exceeding their BMR already have an excess of calories, adding in running will burn those but make them hungrier. This might result in the athlete over-eating with a false sense of compensation, resulting in an increase in their body fat percentage.

**Body Mass Index-** a number calculated using your weight and height that can be used to estimate if your body weight is considered healthy. You can find charts online to find your BMI.

Here's a four point plan that was detailed in Matt Fitzgerald's book Performance Nutrition:

1. Measure your body fat percentage to establish a starting point.
2. Make targeted changes to your diet and other lifestyle habits.
3. Measure your body fat percentage regularly to track your progress.
4. Monitor your running as a check against becoming too lean or making changes that are not beneficial to your well being.

## Eating Habits

Kids today on average have very poor diets. Fast food, soda pop, and various sweets are readily available and affordable. Let's take a look at several ways to eat better.

1. **Carbs-** runners need carbs, but there is a difference in types of carbs. Runners want to focus on "good" carbs that are low on the Glycemic Index. The GI ranks carbs according to their ability to affect blood glucose. A lower ranking means the carbs' glucose will digest slower and keep a more constant glucose level in the blood. How many carbs do I need a day? 2-4 grams per 1lb of body weight
2. **Protein-** runners have a higher need for proteins. It's better to eat proteins from fish and chicken. There are also energy bars and shakes that have high protein content, my favorite is the cliff power bar (contains 20g of protein). These are excellent for pre and post workouts. A runner needs around .8 grams of protein per pound a day.
3. **Fats-** fats are vital for a healthy lifestyle; however, we want "good" fats. Examples include: fish, olive oil, nuts (unsalted almonds). Avoid trans fats and consider adding flaxseed to your food. I add flax to my peanut butter sandwiches and all the cereal I eat. It's a great source of omega-3.
4. **Water-** replace beverages with water. A 12 ounce coke has 150 calories; water has none. You need to drink ½ to 1 ounce of water per pound of body weight per day to maintain hydration.
5. **Eat Breakfast-** If you skip breakfast, your body has recently gone 8 to 12 hours without any nutrition. Now you're tacking on a few more hours. This will prohibit your body from maintaining a balanced metabolism and contribute to over-eating during later meals.
6. **Graze-** Eating smaller meals more frequently (5 or 6 a day) is a great way to reduce appetite and increases activity levels. Make sure your snack includes 7-10 grams of protein. A good rule to follow is 3 for 3. Eat a combination of carbs, proteins, and fats every 3 hours.
7. **Eating Out-** Do it less, enough said.
8. **Get More Sleep-** a recent study concluded that those who get only 2-4 hours of sleep per night are 73% more likely to be obese than those who sleep 7-9 hours. The more you sleep you'll be rewarded with less hunger.

## Foods

Below is a list of foods, drinks, and snacks that are good for runners.

Unsalted Almonds (snack)

Dried Blueberries (good on cereal)

Chobani Greek Yogurt (loaded with protein)

Fruits: peaches, oranges, apples, grapefruit

Scrambled Eggs or Vegetable Omelet

Protein/Power Bars (Cliff Bars)

Tuna (can't stand it, but it's good for you)

Peanut Butter on a whole wheat bagel

Whole Grain Breads

Cereals High in Fiber

Pastas

Oatmeal

Homemade Trail Mix: unsalted almonds, dried blueberries, dried bananas, walnuts, and flax seed

Endurox R4 (this is an awesome pre and post workout drink found at most running stores and GNC)

Sports Drinks (Powerade and Gatorade)

## Tips

The Night Before a Race

-Higher in carbs                      Examples: Pasta dishes, Rice dishes, Lean protein, cooked vegetables, fruit

-Moderate in fiber

-Easy on the fat

-Plenty of fluid

Race Day

\*Runners should eat 2-4 hours before their event

-Low-fat protein                      Examples: peanut butter and jelly, crackers, milk, fruit, juices, bagels, granola bars, powerbar (high carb/low protein)

Post Race

-Carbs                                      Examples: R4, Gatorade, Energy Bars

-Protein