



Carbohydrate, Fat, and Protein Needs for the Athlete

For people who exercise for about an hour every day, there is no difference in the recommended *macronutrient* ratio from the non-active individual. The 2010 Dietary Guidelines suggest that 45 to 65 percent of your calories should come from carbohydrates, 10 to 35 percent from protein and 20 to 35 percent of calories from fat.

For the athletes who exercise longer than one hour a day, an increase in total calories and some alternate nutrition considerations are key to reaching peak performance and staying healthy and strong!



What Athletes Should be Doing Differently

Carbohydrates (Carbs)

Simple carbs, found in fruits, milk and refined foods, are the most accessible for your muscles to use. Many of the refined food sources, however, come with very few nutrients and are often empty calories. Complex carbs, found in pastas, vegetables, legumes, cereals and other whole grain products digest slowly. The majority of your carbs should come from sources such as fruits, vegetables, legumes, and whole grains.

Carbs are the main source of fuel for your muscles. The harder you work, the more carbs your body needs. For events that last *longer than 90 minutes*, it could be helpful to eat a high-carbohydrate diet, where 70 percent of calories come from carbohydrates, for three days before the event.

Fats

Exercise is initially fueled by carbohydrates, but during longer bouts of exercise less carbohydrates are used and fat becomes a major source of energy. Since fats are a vital source of energy for athletic performance, fat consumption should stay above 15 percent of daily calories.

Protein

Protein helps build and repair muscle tissue and boost the immune system. Consuming protein rich foods before and after exercise help to reduce muscle soreness. While exercise may increase an athlete's protein needs, it really depends on the particular athlete and that athlete's type and frequency of exercise. Most athletes do not require more protein than the recommended 20 to 35 percent, and typically athletes and non-active individuals consume more protein than that!