



Fueling Swimmers

Fueling Your Sport

- Swimmers have long practices and long competitive seasons. They need to eat 3,000 to 6,000 calories per day during training.
- Carbohydrates should make up the greatest part of a swimmer's food plan. During training and the competitive season, swimmers need 2.3 to 3.6 grams of carbohydrate per pound of body weight per day (5 to 8 g/kg/day). Good sources of carbohydrate include whole grain breads and cereals, fruits, and vegetables.
- Swimmers need 0.55 to 0.8 grams of protein per pound of body weight per day (1.2 to 1.7 g/kg/day). You need more protein at the beginning of the season when you are adding and strengthening muscle. Good sources of protein include fish, chicken, turkey, beef, low-fat milk, cheese, yogurt, eggs, nuts, and soy.
- Swimmers need at least 0.45 grams of fat per pound of body weight per day (1 g/kg/day). Choose heart-healthy fats, such as canola oil, olive oil, and nuts.
- Swimmers burn a lot of calories in their sport, but they often have more body fat than other athletes. This may be because swimmers are often very hungry after many hours in the pool. They may eat more than other athletes, who usually don't feel hungry after being active.
- The Zone diet (40% carbohydrate, 30% protein, and 30% fat) has been recommended to swimmers as the ideal food plan. However, no research has shown the Zone diet to be better than the usual diet recommended for athletes. Swimmers who follow the Zone diet do not eat enough carbohydrates—swimmers need a food plan with 60% carbohydrates (20% more than the Zone diet). Also, the amount of protein in the Zone diet is higher than you need for your sport.

Fluid Needs

- Many swimmers don't pay much attention to fluids because they are surrounded by water! However, the environmental conditions of swimming—the warm pool water, warm air temperatures, and high humidity—can lead to dehydration in less than 30 minutes. Dehydration can hurt the performance of even the most fit swimmer.
- Drink sport drinks when you practice for more than 1 hour, or whenever you have a high-intensity workout.
- Drink 2 cups of fluids 2 hours before practice.
- When you are swimming, keep a fluid bottle next to the pool and drink 5 to 10 ounces every 15 to 20 minutes.
- Weigh yourself before and after practice to determine how much weight you lost to sweat. Drink about 3 cups of fluid for every pound lost.
- Keep a record of how much fluid you drink. This will help you get in the habit of drinking enough.

Supplements Commonly Used by Swimmers

- Creatine supplementation may improve performance in high-intensity, short-duration (less than 30 second) activities, such as sprints. It may also improve interval training.
- Creatine may help you recover more quickly from weight-training sessions, which could help you train harder.
- Creatine monohydrate powder is a common creatine supplement. The recommended dose is 3 to 5 grams per day, spread throughout the day. Taking more than the recommended amount does not improve performance.
- Creatine is not recommended for swimmers younger than 18 years. It is not known whether creatine use is safe for people in this age group.

Top Three Nutrition Tips to Improve Performance

1. Eat carbohydrates to stay energized. Many swimmers complain that they are chronically fatigued. Hard training plus poor nutrition leads to fatigue. To stay energized, eat at least 500 grams of carbohydrate every day during the competitive season. Eating energy bars and drinking high-carbohydrate liquid supplements can help you get enough carbohydrates without eating a large amount of food. Eat 0.7 grams of carbohydrate per pound of body weight (1.5 g/kg) within 15 to 30 minutes of practice or competition. (For a 120-pound swimmer, that equals 82 grams of carbohydrate.) Eat more carbohydrates in the following hour. This will allow you to fuel your muscles for the next day's training or competition.

2. Eat at competitions. Swim meets can last for several days, with events scattered throughout each day. For swim meets, pack easy-to-digest foods that you have tried eating in practice and that can be eaten poolside. Bananas, crackers, and sport drinks are good choices. Eat additional foods with carbohydrates if the time between races is longer than 2 to 4 hours. Good choices include bagels, english muffins, honey, energy bars or gels,

peanut butter crackers, or a trail mix with raisins.

3. Pay attention to hydration. At swim meets, the air temperatures can be warm and humid, and you may sweat more than you realize. Check the color of your urine—it will be a pale, straw color if you are hydrated.

Nutrition Prescription:

_____ calories per day
_____ grams of carbohydrate per day
_____ grams of protein per day
_____ grams of fat per day
_____ cups of fluid per day

Special concerns: