



Fueling Soccer Players

Fueling Your Sport

- The average distance covered in a soccer match is 5.6 miles (9 kilometers), so your need for calories is high in both training and competition.
- Your training schedule, the intensity of practice, and your age will determine your calorie needs. Adult male soccer players need 21.4 to 27.3 calories per pound of body weight per day (47 to 60 calories/kg/day). Adult female players need 20.5 to 22.7 calories per pound per day (45 to 50 calories/kg/day). A 160-pound male player needs 3,400 to 4,300 calories per day. A 140-pound female player needs 2,850 to 3,200 calories per day.
- Carbohydrate is the best fuel for soccer. Eating carbohydrates gives your muscles the energy they need. Thirty percent of all goals are scored in the last 15 minutes of the game, so choosing the right high-carbohydrate foods and fluids can make the difference between winning and losing a match.
- Soccer is muscle-fuel depleting activity. Losing this fuel, especially in the legs, contributes to fatigue as the match wears on. To get enough fuel, competitive soccer players should eat 3.6 to 4.5 grams of carbohydrate per pound of body weight per day (8 to 10 g/kg/day). Good sources of carbohydrate include whole grain breads and cereals, fruits, and vegetables.
- Drinking 2 cups of a sport drink at the rate of 30 to 60 grams of carbohydrate per hour during a 90-minute game will delay fatigue and improve performance.
- Soccer players need to eat 0.6 to 0.8 grams of protein per pound of body weight per day (1.4 to 1.7 g/kg/day). Protein helps repair muscles and boosts your immune system. Protein is also used for fuel, but it doesn't give you as much immediate energy as carbohydrate does. Good sources of protein include fish, chicken, turkey, beef, low-fat milk, cheese, yogurt, eggs, nuts, and soy foods (tofu, soy nuts, soy burgers).

- Soccer players need 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.

Fluid Needs

- You can lose 2 liters of fluid in sweat during games played in moderate temperatures. In hot weather, you can lose more than 3 quarts of fluid in sweat.
- Two hours before practice or a match, drink 2 cups of fluids.
- During warm ups, drink another cup of fluid.
- At halftime, drink at least 2 cups of fluid.
- After the game, drink about 3 cups for every pound you lost while you played. Weigh yourself before and after a game. This will give you a good idea of your sweat losses. Try to regain the lost weight within 24 hours. Remember the weight loss is fluid loss, not fat loss.
- Choose sport drinks when you play in a soccer game. Sport drinks are lightly sweetened to provide carbohydrates, and they taste good. Pick a sport drink with 14 to 19 grams of carbohydrate and 110 to 165 milligrams of sodium per 8 ounces. The sodium helps encourage you to drink enough fluid.

Dietary Supplements Used by Soccer Players

- Creatine may increase your ability to train because it helps to provide a substance needed to fuel your muscles.
- Creatine does not increase muscle cramps or injury.
- Creatine should not be used by soccer players 18 years of age or younger because it is not known whether creatine is safe for people in this age group.
- Adults who use creatine should stick to the recommended dose of 3 to 5 grams per day, taken throughout the day.

Top Three Nutrition Tips to Improve Performance

- 1. Pay special attention to fluids, especially if you are a youth player.** All soccer players need to get enough fluids to stay hydrated. It's especially important for young players to drink enough. During exercise, children produce more heat than adults, have lower sweating rates, and take longer to get accustomed to hot weather. When they are playing soccer, children should drink 3 to 4 ounces (about $\frac{1}{2}$ cup) of fluid every 15 to 20 minutes. Many children prefer cool fluids and grape-flavored sport drinks. Some juices are advertised as good sport drinks. However, juice contains a lot of carbohydrates so it doesn't replace fluids effectively unless it is diluted with water.
- 2. Eat well after you play.** Eating for recovery soon after practices and games helps you to stay energized for the entire season. Soccer games are often scheduled close to each other, with little time between games to refuel your muscles. Within the first 30 minutes after exercise, eat 0.7 grams of carbohydrates per pound of body weight (1.5 g/kg). (For a 150-pound soccer player, that equals 100 grams of carbohydrate.) Sport drinks, sport recovery beverages, and most energy bars and gels are good choices. Read the labels of recovery drinks to make sure they contain carbohydrate. (Some drinks that are advertised as recovery drinks contain more protein than carbohydrate.)

3. Do not try to lose weight during the season.

Soccer is a sport that demands a lot of energy, and losing weight makes you less able to perform at your best. A sports dietitian can help you lose weight during the off-season while keeping your energy level high for competition.

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: