Client Name: Date:

RDN/NDTR: Email: Phone:

Fueling for Soccer Players

Soccer is a high energy demanding sport that combines moderate-intensity endurance activities with short, intense bursts of speed. You need endurance, strength, agility, and focus to perform at a high level. You are constantly moving, running, or sprinting. Soccer players often play the entire game without a substitution. Proper fueling to stay strong for the entire match is important for success in the sport.

Playing soccer uses up a lot of your body's glycogen (carbohydrate stored in muscle). You may feel fatigue if you don't consume enough carbohydrate, which may limit your ability to maintain high-intensity effort, especially in the second half of the game.

You will need to eat regular meals and snacks to get enough calories for the high-energy demands of the sport before, during, and after training and competitions.

Tips

- Eat 5 to 6 meals with nutrient-rich foods each day to fuel performance and help you meet your body composition goals.
- Eat at least 5 servings of fruits and vegetables daily to get vitamins and minerals in your diet.
- Carbohydrate should make up most of your diet. The amount of carbohydrate you need can be anywhere from 3 to 12 grams of carbohydrate per kilogram of body weight depending on your sport, position, training load for that day, and overall goals. Your sports registered dietitian nutritionist (RDN) will help you determine the amount of carbohydrate that is right for you.
  - Choose high-quality carbohydrate foods such as whole grain breads and cereals, rice, pasta, starchy vegetables, whole or dried fruit, and low-fat milk and yogurt.
  - Eat fewer refined carbohydrates and sweets such as pastries, cookies, cakes, candy, sugar-sweetened soft drinks, fruit drinks, sugar-sweetened tea, and specialty coffee drinks.
- Protein provides the building blocks for muscle mass for healthy growth and development. Daily estimated protein needs vary from 1.2 to 2.0 grams per kilogram of body weight based on factors such as training status, training period, and other special circumstances. Your sports RDN will help you understand the amount of protein that is right for you.
  - Timing of protein intake is important for building muscle. Eat protein with carbohydrate within the first hour after training to provide needed amino acids (the building blocks of protein) to your muscles for repair and growth.
  - Aim to eat protein about every 3 hours during the day, including 1 hour before bed.
  - Eating more protein than the recommended amount will not build muscle faster or add extra muscle mass.
- Add healthy fat to your diet to ensure you have adequate fuel to support your training and to help with the absorption of vitamins. Your fat intake will need to be 20% to 35% of your total calorie intake. The amount of fat you need in your diet will increase as your training volume increases. There are no performance benefits to a very high-fat intake or a very low-fat intake. Your sports RDN will help you understand the amount of fat that is right for you.
  - Healthy fats include olives and olive oil, nuts and nut butters, avocado, and vegetable oils (such as canola oil).

Carbohydrate and Protein Serving Sizes

Thinking of carbohydrate and protein foods in serving sizes may help you better understand how to choose adequate fuel before, during, and after training and at meals and snacks. Your sports RDN will help guide you in choosing the right amount of foods and timing when you eat these foods to maximize your sport performance.

Carbohydrate foods	Serving Size (1 serving = 15 grams of carbohydrate)
Bread	▶ 1 slice
Tortilla	▶ One, 6 inches
Corn	▶ ½ cup
Mashed potatoes	▶ ½ cup
Baked or sweet potato	▶ ½, medium
Rice	▶ ⅓ cup
Popcorn	▶ 3 cups
Apple	▶ 1, small
Grapes	▶ 15
Tangerine	▶ 2
Raisins	▶ 2 tablespoons
Orange juice	▶ ½ cup
Milk or yogurt	▶ 1¼ cups

Protein Foods	Serving Size (1 serving = 7 grams of protein)
Cheese	▶ 1 ounce
2% milk	▶ 1 cup
Plain yogurt	▶ 1 cup
Cottage cheese	▶ ¼ cups
Egg	▶ 1 (whole)
Beef, pork, chicken, turkey, or fish	▶ 1 ounce
Tofu	▶ ¼ cup
Nuts, seeds	▶ 2 tablespoons
Peanut butter	▶ 2 tablespoons
Black beans or kidney beans	▶ ½ cup, cooked

Hydration

Healthy hydration habits are essential for soccer players. You should begin drinking fluids first thing in the morning and continue throughout the entire day. Consume extra fluid before, during, and after practice and games You will have limited opportunities to drink during a match, so it's important to take advantage of every chance you get to drink. Even exercising in cool weather can lead to sweat loss and dehydration if you don't replace fluids and electrolytes.

Water is the best fluid choice for during the day and should also be consumed during and after practice and games. A sport drink is a good choice during long, strenuous practices and games. Sports drinks provide a good balance of carbohydrate, sodium, and potassium to replace losses. Keep a sports bottle filled with water or a sports drink nearby.

Hydration Strategies

- Before practice or game: Plan to drink about 2 cups (16 ounces) of water and/or sports drink 2 to 3 hours before start time. Drinking fluids with sodium and/or eating salty snacks increase your thirst and help your body retain fluid.
- Before taking the field: Drink 1 cup (8 ounces) of water or sports drink 10 to 20 minutes in advance, as tolerated.
- During competition: Drink 3-6 ounces of water or sports drink every 15-20 minutes, or as able during breaks. The goal is to prevent excessive dehydration. Dehydration occurs when your sweat weight loss is 2% or more of your starting body weight. Consider weighing yourself before and after practice to determine what percent of body weight you lose during training, which will tell you if you are drinking enough fluids during training and competition. Remember: The only weight you will lose during a training session is water weight (not muscle or fat tissue).
  - Consume sufficient fluids to limit your total body fluid losses to less than 2% of your body weight.
  - Your sports RDN will recommend hydration-specific goals based on your individual sweat rate, training status, temperature and humidity, intensity of play, and duration.
- When the temperature and humidity are high: Drink fluids that contain electrolytes, such as sports drinks, to prevent excessive dehydration.

Drink when you are thirsty and monitor how much you urinate and the color of your urine. If you are urinating frequently throughout the day and your urine is a light-straw color, you are probably drinking enough fluids.

What to Eat Before, During, and after Training or Competition

Following are examples of how to fuel for training or competition events based on timing. Trial these recommendations during training to make sure your gut can tolerate this fuel timing before competition day. Your sports RDN can help guide you on quantities and choices to meet your individual needs.

Timing of Fueling	Fueling Recommendations
	Training and Competition Fueling
3-4 hours before an event **3-4 hours between events**	Eating 3-4 hours before training or competition or between events will allow you time to digest. Eat a meal high in carbohydrate, low in fat, and moderate in protein. ■ 6-inch turkey sub sandwich and 1 ounce tortilla chips with 1 piece of fruit and 1 cup 2% milk OR ■ 1 grilled shrimp wrap on a flour tortilla, 1 ounce pretzels, 1 cup berries and 1 cup soy milk
1-2 hours before an event **1-2 hours between events**	This snack should be high in carbohydrate, low in fat and moderate in protein. Eat a snack 1-2 hours before your training or competition especially if you didn't have time to eat earlier. If between events, eat a snack as tolerated to replenish muscle stores and prepare for the next event. If you have 2 hours, larger snacks will generally be better tolerated. ■ 1 bagel with 1 tablespoon peanut butter OR ■ 1 granola bar with 30-40 grams of carbohydrate and 8-10 grams of protein OR ■ 5-10 crackers with 1 ounce cheese OR ■ 1 cup cereal with 1 cup 2% milk or soy milk and 1 banana OR ■ ¾ cup yogurt with ½ cup fruit OR ■ 12-16 ounces fruit smoothie with no more than 8 grams of protein OR ■ 8-12 ounces 2% chocolate milk and 1 banana OR ■ 2 hard-boiled eggs and a low-protein/high-carbohydrate granola bar
Less than 1 hour before event or when there is 1 hour between events	Drink carbohydrate-based food or liquids that are easily and quickly digestible. ■ Sports drinks (no specific amount suggested; drink as tolerated) OR ■ 1 piece of fruit such as a banana or orange
	During Training or Competition
Events longer than 1 hour	Eat a snack containing 30 to 60 grams of carbohydrate every hour during training or competition. ■ Sports drinks or other sport products like gel packets, gum packets, energy chews, or sport beans OR ■ 1 piece of fruit OR ■ 1 cup pretzels
	After Training or Competition
30 minutes after event if you have an event the next day **Add recovery foods to your next meal if the following day is a rest day.**	Eat a snack high in carbohydrate and protein. Protein stimulates muscle repair and carbohydrate helps replace glycogen (carbohydrate stored in muscles) that was lost during training or competition. Aim for about 15 to 30 grams of protein and 1.0 to 1.2 grams of carbohydrate per kilogram of body weight. Your Sports RDN will help you determine the amount right for you. ■ 6-inch turkey sub sandwich OR ■ 1 grilled chicken sandwich OR ■ 12-16 ounces 2% chocolate milk or soy milk OR ■ 1 cup cottage cheese and 1 piece of fruit OR ■ 10-15 crackers and 1-2 ounces of cheese

eat right. SNCM Sports Nutrition Care Manual®

FAQs

I get dizzy and light-headed during morning practice but I don't like to eat a traditional breakfast. Any suggestions?

Starting practice with low glycogen stores and/or low blood glucose (sugar), as can happen after an overnight fast, can set you up for dizziness and low energy during a hard practice. Eat and drink something before a match even it is not "traditional" breakfast food. Try a liquid breakfast (a smoothie or commercially prepared meal replacement) to sip on as you head to practice or an energy bar that provides about 100 to 250 calories, 10 grams of protein, and 15 to 30 grams of total carbohydrate per bar, along with water or 16 ounces of a sports drink.

Notes