



The health and safety of players is of utmost importance to the Club, so much so we believed it was necessary to have a Hydration & Nutrition Guide for Players.

Many thanks to Jean Schneider, swimthrusummer@yahoo.com, who donated her services to research and develop this guide to Hydration & Nutrition for our players.

Recommended Hydration For FC Somers Soccer Players

Example	Recommendation	Tips
2-3 hours prior to exercise	16-24 oz (2-3 cups)	Drinking 2-3 hours before exercise allows enough time for fluid to be lost through urine before exercise begins.
30 minutes prior to exercise	5-10 oz (1/2-1 cup)	Remind athletes there is no benefit to taking in more fluid than this.
During Exercise	5-10 oz (1/2-1 cup) every 15 minutes*	One gulp equals about 1 oz. When counseling an athlete, measure a cup of water and ask them to drink it, counting how many gulps it takes to drink the fluid. This can give the athlete a guide for fluid consumption based on his or her swallowing rate.
Post Exercise	At least 20 oz (2 1/2 cups)	Encourage athletes to weigh themselves before and after exercise for an estimate of water loss.

* Of course during a soccer game this is difficult to accomplish but be cognizant of needs.

On the following pages you will find additional resources and information regarding nutrition and hydration for both athletes and soccer players.



Sports Nutrition: Tips for Fueling Athletes

Your Fueling Plan

Superior athletic ability comes from genetics and training. However, without good food choices and the correct timing of meals, your training and performance will suffer. You need a fueling plan that includes the right balance of carbohydrates, protein, and fat, enough vitamins and minerals, and the correct amount of fluids.

Carbohydrates

- Carbohydrates are the best fuel for working muscles.
- Plan to include carbohydrates in all your meals and snacks.

Protein

- You need protein for muscle growth and to repair muscle damage after exercise.
- You also need protein to make red blood cells, which move oxygen to muscles, and white blood cells, which help fight infection.
- Your body uses protein to make hormones and enzymes, which help regulate metabolism.

Fat

- You need fat for energy.
- Fat also helps your body to use some vitamins as well as plant chemicals known as “phytochemicals.”
- Fat helps move substances in and out of cells, and it helps keep your brain and nervous system healthy.

Vitamins and Minerals

- Vitamins and minerals do not give you more energy, but they help to unlock the energy stored in food so your body can use it as fuel.
- Your body needs calcium, magnesium, fluoride, and vitamin D to keep bones strong.

Fluid

- Water is the most important nutrient. If your body weight drops just 1% from losing fluids, your performance will suffer.
- Be sure to replace the fluids you lose through sweat when you are active.

Strategies

Here are some food and fluid strategies to help you put a fueling plan together.

Breaking Your Fast

- Eat breakfast every morning. The level of glycogen in your liver can be substantially lower in the morning, so you need to refuel your body to replace the energy it used while you slept.
- Eating breakfast will also help you to think. Student-athletes who eat breakfast perform better in the classroom than those who skip breakfast.
- It’s okay to choose non-breakfast foods, like last night’s pizza, leftover Chinese food with rice, or cheese and crackers.
- Here are some other, more traditional choices you can enjoy:
 - Fruit or yogurt smoothie
 - Breakfast sandwich with egg and cheese
 - Frozen waffles with fruit
 - Banana dipped in peanut butter
 - Hard-boiled eggs
 - Instant grits or a cereal bowl

Before You Workout

Three or four hours before a practice, workout, or competition:

- Choose foods with lots of carbohydrates, such as rice, pasta, potatoes, yogurt, fruit smoothies, vegetables, fruits, crackers, breads, rolls, or muffins.
- Drink plenty of water or sport drinks.

One hour before a practice/workout/game:

- Have a snack of an energy bar, a granola bar, ½ bagel, large banana, or four or five graham crackers.
- Wash the food down with at least 1½ cups (12 ounces) of sport drink. Hint: 1 swallow or gulp equals about 1 ounce.

During Breaks and After Games and Practice

- During halftime or time-outs, drink water or your favorite flavor of sport drink. Both water and sport drinks will hydrate you. A sport drink will also give you fuel and replace sodium that is lost in sweat. The sodium in sport drinks helps your body hold onto the fluid.
- After you work out, drink about 3 cups (24 ounces) of sport drink or water for every pound of body weight that you lost while you were active.
- Check the color of your urine. If it looks like apple juice, you are dehydrated and need to drink more. If it looks like lemonade, you are getting enough fluids.
- Eat something within 30 minutes of the end of your practice, workout, or game, especially if you train hard every day.

When You're Out and About

When you eat out, choose:

- Single burgers, instead of “monster burgers” with bacon and cheese.
- Sandwiches with turkey, chicken, or roast beef, instead of tuna salad, chicken salad, or salami. Pile on the veggies!
- Grilled chicken sandwiches or grilled chicken salads, instead of fried chicken.
- Grilled meat or grilled fish, instead of fried meat or fried fish.
- Pasta dishes with lots of pasta and red sauce, instead of pastas made with a lot of meat, cheese, and cream.
- Stir-fried vegetables and steamed white rice, instead of dishes with a lot of meat or fried egg rolls.
- Waffles, pancakes, grits, scrambled eggs, or grilled ham, instead of bacon, sausage, or biscuits.
- Pizza with thick crust, vegetables, and canadian bacon, instead of a pepperoni, sausage, or “meat lover’s” pizza.



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: