

# Eating Before Exercise

## Athlete Scenario

*The day of a football game, I often feel nervous and sometimes skip lunch, only to feel hungry later. Games are usually in the afternoon so I know I need to eat something beforehand. Playing both offense and defense, I rarely get a break. What foods can I eat and at what times to supply me with enough energy to perform well the entire game?*

## Goals of Nutrition Before Exercise

- Consume a carbohydrate-rich snack or meal before exercise to top off muscle stores. With pre-competition jitters, liquid meal replacements may be a better choice than whole foods.
- Include small amounts of protein in your pre-exercise meal(s). Protein helps build and repair muscle tissue. Adequate protein before exercise may help reduce post-exercise muscle soreness.
- Choose pre-exercise meal(s) that are low in fat and fiber to ensure optimal digestion.

## Pre-exercise Foods & Fluids

### 3-4 Hours Before Exercise

- Peanut butter & honey on toast + instant breakfast drink
- Fruit and yogurt smoothie + low-fat granola
- Oatmeal with brown sugar and almonds + skim milk + banana
- Low-fat cottage cheese + apple butter + crackers + fresh grapes
- Lean hamburger on bun with lettuce & tomato + side salad + yogurt-fruit parfait
- Turkey and Swiss sandwich + fruit + sports drink
- Low-fat tuna melt sandwich + fruit cup + fat-free yogurt

### 30-60 Minutes Before Exercise

- Sports drink or water
- Sports gel, sport beans or gummies, sports bar
- Piece of fruit or jam sandwich

Written by SCAN registered dietitians (RDs). The key to optimal meal planning for athletes is individualization. For personalized nutrition plans contact a SCAN sports dietitian or Board Certified Specialist in Sports Dietetics (CSSD) by accessing "Find a SCAN Dietitian" at [www.scandpg.org](http://www.scandpg.org) | 800.249.2875

## Tips to Take With You

1. Experiment with foods and drinks in practice and lower level competitions to determine the best timing and your tolerance for pre-exercise foods.
2. Practice! Figuring out what works best for you will boost confidence in eating before exercise.
3. Fuel muscles early with easily digestible carbohydrate-rich foods and beverages for training or competition later in the day.

## Contact SCAN

Web site: [www.scandpg.org](http://www.scandpg.org)

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# Eating During Exercise

## Athlete Scenario

*In the three marathons I've run, I perform well the first half and then struggle to reach the finish line. I drink sports drink and eat energy gels throughout the race. After about 2 hours, I get stomach cramps that slow me down. Although I know that nutrition is important, I can't get it to work for me. How can I use nutrition to help me perform well throughout my marathon?*

## Goals of Nutrition Before Exercise

- Optimal fuel blend: Nutrition during prolonged exercise requires the proper mix and timing of fluids, carbohydrate, and electrolytes. Too little fluid or too much carbohydrate can result in cramping and other intestinal problems.
- Adequate fluids to replace sweat losses: Prevent excessive fluid loss (>2% body weight lost as fluid). Dehydration can cause fatigue and impair performance. Knowing your sweat rate will help you determine the right amount of fluid to drink.
- A plan tailored to YOUR needs: A nutrition plan based on YOUR needs can help maximize performance. Experiment with sport drinks and foods for different types of workouts and competitions. Record your tolerance to learn what works best.

## During Exercise Foods & Fluids

- Sports drinks that contain carbohydrate and electrolytes, while avoiding ingredients that may slow digestion.
- Easily digested carbohydrate-rich foods during endurance events, for example, banana, bread or roll with jam or honey, sports foods (gels, gummy chews), or bite-sized pieces of low-fat granola or sports bars.
- Fluids consumed with carbohydrate gels or carbohydrate-rich foods to speed fuel transport to muscles.

## Tips to Take With You

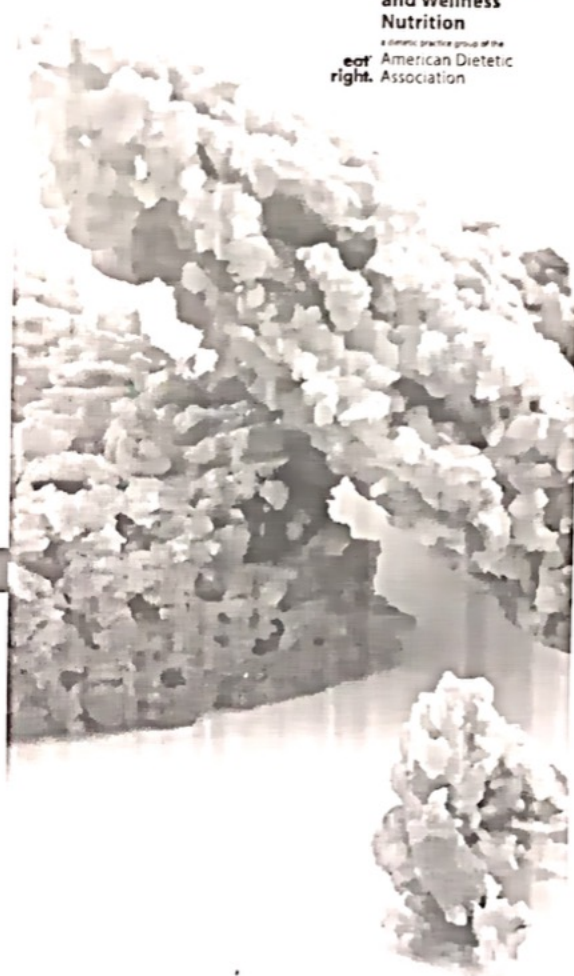
1. Start with a full tank. Begin exercise well hydrated and with adequate muscle fuel (carbohydrate).
2. Try new products and foods during training sessions to determine the type, amount, and timing of foods and fluids that work best for you.
3. Consume fluids early and consistently to replace sweat losses. Calculate your sweat rate and sweat losses to determine your fluid needs.

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# Eating for Recovery

## Athlete Scenario

*The day after a hard soccer practice, my legs feel heavy, I feel sluggish, and I'm often sore even if I didn't have a resistance training session the day before. My performance at practice suffers because I'm unable to put forth 100%. I usually drink water and sometimes a sports drink during practice and games, but afterward I don't usually feel like eating much. What can I do so I have more energy at practice and feel better about my performance?*

## The Goals of Recovery Nutrition Include

- Restore fluid and electrolytes (sodium and potassium) lost in sweat; weigh before and after exercise and replenish what was lost
- Replace muscle fuel (carbohydrate) utilized during practice
- Provide protein to aid in repair of damaged muscle tissue and to stimulate development of new tissue
- Begin nutrition recovery with a snack or meal within 15-60 minutes following practice or competition

## Rehydration Fluids

- Carbohydrate-electrolyte sport drink to replenish fluids and electrolytes lost in sweat

## Recovery Snack Ideas

- Smoothie made with yogurt and frozen berries
- Sports drink (carbohydrate, electrolyte, fluid) + sport bar (carbohydrate, protein)
- Graham crackers with peanut butter + low-fat chocolate milk + banana

## Recovery Meal Ideas

- Whole wheat pita sandwich with turkey and veggies + pretzels + low-fat milk
- Rice bowl with beans, cheese, salsa, avocado + whole grain tortilla chips or whole wheat tortilla
- Stir fry with lean steak, broccoli, bell peppers, carrots + brown rice

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## Tips to Take With You

1. If you have 2 training sessions per day or your next training session is within 8 hours, recovery nutrition is crucial
2. If you do not have an appetite following a training session, choose liquid foods that meet your recovery goals
3. Along with carbohydrate, fluid, and electrolytes, protein is an important part of recovery, particularly if you participate in high intensity training sessions that damage muscle tissue (resistance training, interval sessions, etc.)

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