



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.