



Sports Nutrition Essentials for the Female Athlete

Suzanne Nelson-Steen, DSc, RD,

Sports nutritionist for the University of Washington and co-author of *Ultimate Sports Nutrition*

Women in sports spend hours in practices and workouts focusing on what their body can do, but fall short when it comes to giving their muscles high-octane fuel. The right mix of fuel from foods and fluids is essential for gains in strength, speed and peak performance. It's time to set the training table straight with targeted nutrition tips—for women only.

Strong Bones

Most of the calcium in your body builds and maintains bones and teeth. Calcium also helps your heart beat and your muscles contract and relax. Over time, if your diet is too low in calcium, your bones may become weak and break more easily. That's why it's important to get enough calcium—at least 1300 mg each day. Here is a list of calcium sources:

	Amount	Calcium
Yogurt, nonfat or low fat	1 cup	350–400 mg
American processed cheese	2 oz	348 mg
Skim, low fat milk	1 cup	300 mg
Orange juice with calcium	1 cup	300 mg
12" Cheese pizza	2 slices	300 mg
Ice cream, frozen yogurt	1/2 cup	85–100 mg

Pumping Iron

Iron is needed to help red blood cells carry oxygen to your working muscles. Female athletes typically don't get enough iron in their diet. Physical training combined with low dietary iron can cause a gradual lowering of iron stores. This may lead to a condition called iron deficiency anemia. Symptoms can include fatigue, irritability and reduced endurance. Female athletes can have their iron

level checked by a blood test. Keep your iron stores pumped up (18 mg each day) with these tips:

- Meat, poultry and fish contain a form of iron that is much better absorbed than the iron found in plants.
- Iron in plant foods is better absorbed when eaten with meat, poultry, or fish. For example, to boost iron absorption from plant foods, try broccoli/chicken stir-fry.
- Foods high in Vitamin C (oranges, tomatoes, potatoes) help the body absorb iron from plant foods. For example, drink orange juice with fortified cereal to help your body to absorb the iron in the cereal.
- Be cautious: Dietary iron supplements should only be taken under medical supervision.

Fad Diets = Fading Energy

Fad diets don't have what it takes for peak performance. They're usually too low in calories and carbohydrate—the very components athletes need to compete! Fad diets can leave you feeling sluggish, irritable and unable to concentrate. Eat a variety of foods balanced in nutrients for training and peak performance.

Be Wary of Weight Loss Supplements

Lose weight! Melt body fat! These are typical marketing claims made by supplement companies. Unfortunately, these claims are not supported by facts and are usually just an attempt to increase sales. The ingredients of dietary supplements are not as regulated as foods are so there is no guarantee of safety, potency or effectiveness. Just because a supplement claims to be natural, doesn't mean it's safe. In fact, the herb ephedra, an ingredient in many weight loss supplements, has been linked to harmful

side effects like heart attacks and stroke. Ephedrine is also banned by many athletic organizations. Don't risk your health and eligibility! If you want to lose weight effectively and safely see a healthcare professional.

Staying Strong and Lean

Smart calories and a strength-training program will build a strong, lean body. Here's the scoop on building muscle:

- High protein diets don't mean bigger muscles—this is a myth.
- A strength-training program that challenges muscles is a MUST.
- Extra calories are required to build muscle—eat meals and snacks during the day.
- Eat foods that are carbohydrate rich (grains, fruits, veggies).
- Include lean protein foods (chicken, lean meats, fish, beans and eggs).
- Choose foods that are low in fat.

Fluids—Drink Up!

One of the best ways to improve performance is to drink enough of the right type of fluids. Sports drinks, such as Gatorade Thirst Quencher:

- Taste good—The flavor and sodium in sports drinks encourages drinking beyond just satisfying thirst to prevent dehydration—something water doesn't do.
- Aid performance—Carbohydrate in sports drinks helps bodies train and compete.
- Help keep you in the game—Drinking sports drinks can prevent dehydration-related problems, such as lightheadedness and heat cramps, so athletes can go the distance.

The Gatorade Sports Science Institute (GSSI) serves to share current information and expand knowledge on sports nutrition and exercise science to enhance the performance and well being of athletes. For more information, check out the GSSI web site at www.gssiweb.com.

Keep a sports bottle close by during practices and games. Drink using this schedule:

Before exercise	Start hydrated — not thirsty. Drink 1 to 2 cups (8 to 16 ounces) an hour before
During exercise	Drink at least 1/2 to 1 cup (5 to 9 ounces) every 15 to 20 minutes
After exercise	Drink enough to bring your weight back to what it was before exercise

FACT: Sports drinks are not high in calories. They have about half the calories of soda, fruit juice or sweetened iced teas.

Pre-Event Meals

Be ready to go at gametime by fueling up about 3 hours before. Here are some examples of quick meals that are high in carbohydrate, moderate in protein, and low in fat:

- Fruit yogurt, 1/2 bagel, orange juice
- Chicken breast, vegetables, baked potato, fruit, low-fat milk
- Pasta with tomato sauce, mixed green salad, frozen yogurt, low-fat milk

Train your body from the inside out. Eat a variety of foods and replace fluid losses to fuel peak performance. Athletes who consume adequate calories and nutrients feel better, train harder, recover more quickly and are less susceptible to illness.