



Name _____ Date _____

Email _____ Phone _____

Fueling Softball Players

Softball is a skill sport, meaning that precision, agility, and hand-eye coordination are important to success in the sport. It is not a high-calorie-burning sport. A 143-pound softball player burns about 4½ calories per minute playing softball. That is comparable to the number of calories burned while doing laundry or grocery shopping. Softball players probably burn more calories in training and conditioning for competitive softball than during an actual game. Pitchers and catchers burn more calories than players in other positions.

USA Softball is the national governing body for elite softball players (www.usasoftball.com).

Fueling Strategies

Softball players may burn more calories in practice or training and conditioning sessions than during a game. Choosing nutrient-rich foods with moderate calories can fuel performance without leading to weight gain.

The nutrients that provide energy (calories) are carbohydrate, protein, and fat. The amounts of each nutrient you need to fuel your practice and competition are given below.

Carbohydrate

Carbohydrate should make up most of your diet. During intense training periods, eat 1.8 to 2.7 grams of carbohydrate per pound of body weight per day (4 to 6 grams per kilogram). For example, a 143-pound softball player would need 257 to 386 grams of carbohydrate a day. On less intense training days or when sidelined by injury, you only need 1.4 to 1.8 grams of carbohydrate per pound (3 to 4 grams per kilogram).

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, tea, and specialty coffee drinks.

These foods have **15 grams** of **carbohydrate**:

- 1 slice bread
- 1 6-inch tortilla
- ½ cup corn
- ½ cup mashed potatoes
- ½ medium baked or sweet potato
- ⅓ cup rice
- 3 cups popcorn
- 1 small apple
- 15 grapes
- 2 tangerines
- 2 tablespoons raisins
- ½ cup orange juice
- 3 cups green beans
- 1¼ cups milk or yogurt

These foods have
7 grams of protein:

- 1 ounce cheese
- 1 ounce beef, pork, chicken, or turkey
- ¼ cup cottage cheese
- ½ cup black beans or kidney beans
- 1 whole egg
- 2 tablespoons peanut butter
- 1 cup milk or plain yogurt

Protein

Protein provides the building blocks for muscle mass and for healthy growth and development. You need 0.55 to 0.6 grams per pound (1.2 to 1.4 grams per kilogram). For example, a 143-pound softball player would need 79 to 86 grams of protein a day. Eating more protein than the recommended amount will not build muscle faster or add extra muscle mass.

Choose lean protein foods such as lean beef and pork, chicken, turkey, fish, eggs, and low-fat dairy foods. Nuts are a good source of protein and contain healthy fats. Eat fewer high-fat protein foods such as regular burgers, brisket, ribs, sausage, and full-fat cheeses and dairy foods.

Fats

There is no specific recommendation for fat for softball players, but healthy fats should be a part of every athlete's diet. Healthy fats include olives and olive oil, nuts and nut butters, avocado, vegetable oils (such as canola oil). Fat has more calories than carbohydrate or protein, so healthy fats can add calories for softball players who want to gain weight.

What Should Softball Players Eat Before and After a Workout?

When possible, eat 3 to 4 hours before a hard practice or competition. Aim for a low-fat meal with about 200 grams of carbohydrate and 30 grams of lean protein. This will ensure you have enough fuel on board but will leave time for your stomach to empty before you take the field. A turkey sub sandwich with baked chips and a side of fruit or a grilled chicken wrap on a flour tortilla with pretzels and fruit juice or low-fat milk are examples of meals that will meet the energy demands of practice or competition.

If there is not enough time to eat 2 to 3 hours before a practice or game, eat a snack 1 to 2 hours before you begin. Good choices include juice, fruit, milk, granola or cereal bars, a small bagel with peanut butter, cheese and crackers, a bowl of cereal, or yogurt. If there is less than 1 hour before exercise, liquids, such as a sports drink or a low-fat liquid meal replacement, may be the best choice.

For practices longer than 1 hour or for all-day softball tournaments, pack portable snacks. Try to eat 25 to 30 grams of carbohydrate every hour. Good choices for snacks include sports drinks, which provide carbohydrate, fluid, sodium, and potassium; peanut butter sandwiches; pretzels; string cheese; trail mix; dried fruit; orange slices; baked chips; smoothies; or 100% fruit juice.

After practice, recover with a carbohydrate- and protein-rich snack. Carbohydrate replaces muscle glycogen (carbohydrate stored in muscles) that was lost during a long practice or

competition, and protein stimulates muscle protein repair. Good choices include a turkey or grilled chicken sandwich, a slice of vegetable-cheese pizza, low-fat chocolate milk, cottage cheese and fruit, or cheese and crackers. If you are practicing or competing on the same day or the next day, start your recovery within 30 minutes after training. If the following day will be a rest day, add recovery foods to your next meal.

Vitamins and Minerals

Softball players can get all the vitamins and minerals they need by making healthy food choices and eating a variety of foods. Have at least 5 servings of fruits and vegetables each day. Adding berries to breakfast cereal, dried fruit to trail mix, frozen fruit to plain or vanilla yogurt, side salads with meals, vegetables on sandwiches, and salsa on baked potatoes and snacking on fresh fruits and vegetables will help you get all the nutrients you need.

Softball players should pay extra attention to choosing iron-rich and calcium-rich foods. These nutrients are needed by women in larger amounts, especially during teen years. Lean beef in a stir-fry, dark-meat chicken or turkey, kidney beans and black beans, and breakfast cereals fortified with iron are good choices. For calcium, choose low-fat milk (cow's milk or soy, rice, or almond milk), low-fat cheese, yogurt, almonds, leafy green vegetables, orange juice with added calcium or smoothies made with milk or yogurt.

Hydration Strategies: What Should Softball Players Drink?

Softball is played in the spring and summer months when heat and humidity can be high, so hydration is critical for sports performance and good health.

Water is best for most athletes. Plan to drink about 2 cups (16 ounces) of water 2 to 3 hours before practice or a game. Then drink 1 cup (8 ounces) of water 10 to 20 minutes before taking the field. When practicing or playing a game when the temperature and humidity are high drink about 1 cup of fluid every 10 to 20 minutes during activity. Keep a sports bottle filled with water at the bench so it is easy to reach. If you don't like the taste of plain water, slice up lemons or limes to drop into your water bottle for a refreshing taste.

Sports drinks are a good choice when you have long practices, when the game goes into extra innings, or when you play multiple games during a tournament. Stick to the basic tried-and-true sports drinks such as Gatorade or PowerAde, because they provide a good balance of carbohydrate, sodium, and potassium to replace losses. Follow the same drinking schedule as for water, but also listen to your body. 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.

Frequently Asked Questions

Between doubleheaders the team has about 30 minutes. What snacks are best to keep us fueled for the second game?

A good snack between games is one that provides easily digested carbohydrate, a small amount of lean protein, and a hydrating beverage. Low-fat yogurt, bananas, mini bagels, string cheese, saltine crackers, apple or orange slices, and water or sports drinks will provide energy and help replace fluids before the second game.

Our team eats out after every game. Are there any healthy choices to be found at fast-food or quick service restaurants?

Every fast-food and quick service restaurant has healthy choices. Before you order, check out the restaurant's website on your smartphone for nutrition information. Many restaurants post calorie information on the menu board, so compare choices that fit within your calorie budget. For example, the calorie difference between a broth-based soup and a cream-based soup (chicken noodle soup versus loaded baked potato soup) can be hundreds of calories. Try to skip the “value” meal that comes with fries and a large drink and order *à la carte* to save calories.

What are some good resources for nutrition and softball?

The best resource is a registered dietitian nutritionist, especially one who specializes in sports nutrition.

To find a qualified sports dietitian, connect to the website of Sports, Cardiovascular, and Wellness Nutrition (SCAN) (www.scandpg.org) and use the “Find a SCAN RD” search box. SCAN also has free sports nutrition fact sheets on a wide range of topics at www.scandpg.org/sports-nutrition/sports-nutrition-fact-sheets.

For online resources, check out the United States Olympic Committee's sports nutrition resources at www.teamusa.org/About-the-USOC/Athlete-Development/Sport-Performance/Nutrition. You will find many resources there, including videos, recipes, and eating guidelines for athletes.

Notes: