

Nutrition Tips for Female Athletes in High School Sports

As an athlete, you depend on skill, strength, and endurance. Optimal performance takes time, training, and patience, but that's not all: you must take special care to get enough energy to fuel your body and brain during the day; hydrate before, during and after practice and games; and refuel and rehydrate afterward.

What should I eat?

- Eat carbohydrate-rich meals to fuel and refuel muscles so you'll be ready for action
- Three meals and snacks are typical for most student-athletes to meet daily energy needs
- Include carbs, protein, dairy, fruits/veggies and fats at meals
- Include carbs with lean protein/dairy and fruit/veggies at snacks
- Know what foods sit well with your body: experiment with new foods or meals on training days, not before or during competition.

Energy Needs

Every athlete's needs are different: the amount of food you need depends on your age, height, weight, metabolism, sport, and activity level. Female athletes, in general, need enough energy to maintain both optimal performance and healthy growth and development. Snacks and meals should contain a balance of carbs, proteins, and fats, with some flexibility based on training day, game day, tournaments, and non-training days (rest days).

Carbohydrate: Carbs aren't bad! They are essential for athletes and are your **primary fuel source** to meet your energy demands. Overall, carbs should make up 60% - 75% of your daily food intake. At every meal, carbs (grains, cereal, pasta, breads, crackers; fruits and veggies) should cover at least one-half of your plate.

Protein: Your body's source for growth, repair and maintenance of muscle and tissues. Exercise, NOT protein shakes, protein bars or extra protein, is the key to leaner, stronger muscles. Aim to include 3-4 ounces of poultry, fish/seafood or lean red meat; 1-2 eggs or 1-2 servings of plant-based protein sources such as legumes, beans, tofu/tempeh at meals. Round out meals and snacks with Greek yogurt, cheese or milk (including low fat chocolate milk) to meet protein, energy, and mineral needs.

Fat: Fats provide energy, support cell function, help to produce important hormones, and aid in nutrient absorption. At meals and snacks, fats are responsible for getting the "I'm satisfied" signal from your stomach to your brain. Include 1-3+ servings of fats at meals from sources like avocado, nuts, seeds, nut butters, olive oil, canola oil, hummus, tahini, guacamole, salad dressings and butter. Because they take longer to digest, limit or omit fats eaten within an hour of practice or games.

Water is essential to performance every day—on and off the field. Aim to drink about 40 oz of water throughout day, before thirst sets in. *Water is always the best choice!* Add flavor to water by adding fresh or frozen fruit slices (lemon, lime, orange, frozen berries, or watermelon) or by diluting juice (2/3 water, 1/3 juice). A sports drink can be okay during training or intense physical activity to provides fuel and replaces lost fluid and electrolytes. Avoid energy drinks and sources of caffeine, which promote dehydration, especially while training in hot weather.

When should I eat?

- Breakfast is the most important meal of the day! Choose nutrient-rich foods like whole grain cereals with milk; yogurt, fruit and granola parfaits, smoothies or bowls; bagels with nut butters and fruit; eggs with English muffin and juice; avocado toast with feta cheese and tomatoes.
- Don't skip lunch! Nutrient-rich lunch options: grilled chicken sandwich with fruit and yogurt smoothie, a peanut butter and jelly sandwich, chicken noodle soup with crackers and fruit, chicken or turkey wrap, or sliced turkey on a bagel, grain bowl with chicken, tuna or eggs, pasta with sauce and salad.

Meal timing BEFORE training or competition:

- General rule: allow 3-4 hours for a large meal to digest, ~2 hours for a smaller meal, 1-2 hours for a shake/smoothie, and <1 hour for a light snack, according to your own tolerance
- A high-carbohydrate snack 30-60 minutes before training (skip protein here—the goal is quick energy and ease of digestion): fruit, pretzels, crackers, sports drink, granola bar
- During training: include a formulated sports drink like Gatorade a when a training session is longer than 2 hours

Recovering energy and replenishing fluids AFTER exercise:

- FLUIDS: Your first priority is to replace fluids you lost from sweating.
 - Most athletes can recover with plain water and normal meals.
 - You know you're rehydrated when your urine color is pale yellow.
 - FOOD: Eat within one hour after training. A meal of carbohydrate-rich foods, high-quality protein, and ample fluids will meet your recovery needs. Ex: 3-5 oz. chicken, whole wheat pasta, veggie sauce, green beans, roll, butter, milk, and water.
 - If you're unable to eat a meal within an hour, bring a recovery snack to eat within 30 minutes after practice. Choose high-carb foods with a little protein: low-fat chocolate milk, trail mix, cereal and milk, yogurt parfaits, fruit smoothies, cheese stick and crackers, or bars like Cliff bar, Lara bar, Kind bar.
- **Following a well-planned nutrition strategy designed for you can best prepare you to perform!**

For additional guidance on meals, snacks, and timing relative to training and competition, contact Kristin for a consultation. 267.879.5148

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Sources: NCAA Sports Science Institute ncaa.org/sports, Sports, Cardio and Wellness Practice group of the Academy of Nutrition and Dietetics, *Nancy Clark's Sports Nutrition Guidebook* (July 16, 2019).