

High Performance Nutrition for Athletes

To reach your highest potential as an athlete, all of your body systems must be perfectly tuned. Nothing is more important to your well-being and ability to perform than good nutrition. The best training in the world will not help you perform at a high level if you do not eat right. Eating the right foods helps you maintain desirable body weight, stay physically fit, and establish optimum nerve-muscle reflexes. Without the right foods, even physical conditioning and expert coaching aren't enough to push you to your best. Good nutrition must be a key part of your training program if you are to succeed.

There is no one "miracle food" or supplement that can supply all of your nutritional needs. Certain foods supply mainly proteins, other foods contain vitamins and minerals, and so on. The key to balancing your diet is to combine different foods so that nutrient deficiencies in some foods are made up by nutrient surpluses in others. **Eating a variety of foods is the secret.**

The nutrients--the proteins, carbohydrates, fats, vitamins, minerals, and water--are teammates that work together to provide good nutrition. Just as each team member carries out different tasks during a game, each nutrient performs specific functions in your body. A lack of just one nutrient is a disadvantage to your body. Your body needs all these nutrients all of the time, so the foods you eat should supply them every day.

Just because you are not hungry does not necessarily mean that your body has all the nutrients it needs. You can fill up on foods that contain mostly carbohydrates and fats, but your body still has basic needs for proteins, minerals, and vitamins.

Listed below are the 5 main food groups. As an athlete you should eat a balanced selection from all five groups. Recommended minimum servings per day are given for each group:

Milk, Yogurt, and Cheese Group (3-5 servings daily) 1 serving is an 8 ounce glass of milk, 8 ounces of yogurt or 1 1/2 ounces of natural, unprocessed cheese.

Meat, Poultry, Fish, Beans, Eggs, and Nuts Group (3 to 4 servings daily) 1 serving is 3 ounces of lean, cooked meat, 2 eggs, 1 cup of cooked dry beans, peas, or lentils or 4 tablespoons of peanut butter.

Vegetable Group (3 to 5 servings daily). 1 serving is 1/2 cup of cooked vegetables, 1/2 cup of chopped raw vegetables, 1 cup of leafy raw vegetables such as lettuce or spinach, or 1 glass (6 ounces) of juice.

Fruit Group (3 to 5 servings daily). 1 serving is 1 whole fruit such as a medium apple, banana, or orange, 1/2 grapefruit, 1 glass (6 ounces) of juice, 1/2 cup (4 ounces) of berries, 1/2 cup (4 ounces) of cooked or canned fruit or 1/4 cup of dried fruit

Bread, Cereal, Rice, and Pasta (6 to 11 servings daily). 1 serving is 1 slice of bread, 1/2 hamburger bun or English muffin, one small roll, biscuit, or muffin, 3 to 4 small or 2 large crackers, 1/2 cup cooked cereal, rice, or pasta or 1 ounce ready-to-eat breakfast cereal.

Because of their rapid growth and development and higher levels of physical activity, teen athletes should eat the higher levels of servings recommended from each food group. An active athlete could easily eat eleven servings of breads/cereals and four to five servings of the other food groups each day. Some athletes may even need more than the maximum servings recommended. Eating the maximum number of servings recommended from all five-food groups provides about 3,000 calories.

In no instance should you eat less than the minimum servings for any food group.

You need the minimum servings to supply a base level of essential nutrients and calories required for good health. Consuming the minimum servings listed above will supply about 1,600 calories, which is the minimum a teen girl should take in. Teen boys need at least 2,000 calories a day and thus need more than the minimums given.

Athletes need plenty of starchy foods because, along with proper training, these foods cause muscle and liver cells to store glycogen. Glycogen is a vital energy source for most sports. When muscle cells run out of glycogen, muscle fatigue sets in and performance suffers. Foods high in starch include: pastas, spaghetti, noodles, ravioli, beans, rice, potatoes, carrots, peas, corn, sweet potatoes, bread, bagels, muffins, pancakes, waffles and cereals.

Unfortunately, many girl athletes think of starchy foods as "fattening" and cut out breads, cereals, and starchy vegetables. The results are predictable: low glycogen, low energy, and poor performance. The girl athlete who wants top performance must eat starchy food so that she goes into an event with glycogen reserves. Starchy foods are not fattening in themselves. Eating more than the body needs and not exercising is the main cause of obesity. America is currently experiencing an epidemic of overweight kids who eat too much junk food and do not exercise. However, the girl athlete who is training properly shouldn't worry about extra weight from starchy foods.