Mercy Sports Medicine Nutrition Guidelines for Female Athletes



Many elements contribute to success in sports, including talent, training, motivation and resistance to injury. When talented, driven and well-trained athletes gather for competition, the margin between victory and defeat is typically small. Attention to every detail can make that vital difference, and nutrition needs to be a fundamental element in any athlete's preparation.

Diet affects performance, and the food that an athlete chooses in training and competition will affect how well that athlete trains and competes. Athletes need to be aware of their nutritional goals and how they can select an eating strategy to meet those goals. Food choices may have the biggest impact on training, and a good diet will help support consistent intensive training while reducing the risk of illness or injury. Consistent good choices can promote adaptations in muscle and other tissues in response to the hard work and training that an athlete puts forth on a daily basis.

Athletes are all different, and there is no single diet that meets the needs of all athletes at all times. Individual needs also change when it comes to male versus female athletes, and considerations must be made to accommodate these nutritional needs. According to the American College of Sports Medicine, females need at least:

- 1000-1300 mg/day of Calcium
- 400-800 IU/day of Vitamin D
- 60-90 mcg/day of Vitamin K
- 1.2-1.7 g/kg/day of Protein (15-20% of daily calories)
- 6-10 g/kg/day of Carbohydrates (55-65% of daily calories)
- <25% of daily calories should come from Fats



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These nutrients are a basic guideline for those who are engaging in strenuous physical activity. Carbohydrates are key nutrients for energy supply, but the carbohydrate needs will depend on the training load and therefore vary from day to day and across the season. Athletes must be aware of foods that are good sources of carbohydrates and make these a focus of their diet. Chocolate milk is a good source of bone building nutrients such as Calcium and Vitamin D, and can also be an excellent post-training drink as it has the correct amounts of protein, carbohydrates, and fat. Daily multivitamins can also be helpful to provide the proper intake of vitamins and minerals for those with dietary restrictions.

Water is the most essential of all nutrients in an athlete's daily intake. Our bodies are made up of 55-60% water, and approximately 70% of muscle tissue is made up of water. An athlete should drink at least 13 cups (104 oz) of water each day, not including that water consumed during exercise. Proper hydration prior to strength and conditioning sessions will set the stage for optimal performance. Athletes should drink at least two cups of water, 2 hours before practice or competition, and one cup of water approximately 20 minutes prior to a practice or competition. Following these guidelines will ensure proper hydration and increased performance during competition. Sports drinks can be used to refuel after a session, but should be used sparingly, due to the high sugar content found in most brands.

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