



WELLNESS CENTER

Lake Shore Campus • Granada Center 310
6439 N. Sheridan Road • Chicago, IL 60626
P 773.508.2530 • F 773.508.2505 • W LUC.edu/wellness

Water Tower Campus • Terry Student Center 250
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Performance Nutrition

Proper nutrition is important for optimal performance whether you are training for a sport or if you are starting your own workout plan. In order to see optimal results and recovery in your performance it is critical to fuel your body before, after, and sometimes during exercise. Consuming adequate nutrients means eating carbs, fat, and protein. Carbohydrates are essential to provide the body with quick energy to complete and recovery from a workout. Fats provide energy for longer duration, lower intensity workouts. Fats are also imperative for recovery. Protein is important for maintaining and increasing muscle mass which, in turn, aids in maintaining and/or increasing metabolism. It is also important to drink about half your body weight of fluids in ounces. Include electrolyte-rich beverages like sport drinks if you sweat a lot or are exercising longer than an hour to replenish what you have lost.

Calorie needs for on and off season:

To estimate your daily energy needs, go to <https://www.choosemyplate.gov/resources/MyPlatePlan>. Energy needs vary based on weight, height, age, sex, and activity levels. Remember that these are simply estimates for energy needs and not an exact measurement. Energy levels during season will be higher than levels off season. As a general rule of thumb, active women should not eat below 1500 calories per day and active men should not eat below 1800 calories per day.

- **Carbohydrate needs:** Depending on the intensity, duration, and frequency of exercise, in general athletes should consume between 6-10 grams of carbohydrates per kilogram of body weight per day. (A kilogram equals 2.2 pounds)
 - *For example, if an athlete weighs 150lbs, divide 150lbs by 2.2 lbs/kg to get 68.2 kg. Then multiply 68.2 kg by 6-10g carbs. So in total, the 150lbs athlete would need between 409-682g of carbs per day.*
- **Protein needs:** The current Recommended Daily Allowance (RDA) for protein is 0.8 grams per kilogram per day. However, the Academy for Nutrition and Dietetics and the American College of Sports Medicine recommend that endurance athletes eat between 1.2-1.4 grams of protein per kg of body weight per day and resistance and strengthtrained athletes eat as much as 1.2-1.7 grams protein per kg of body weight.
 - *For example, if an athlete weighs 150lbs, divide 150lbs by 2.2lbs/kg to get 68.2kg. Then multiply 68.2kg by 0.8 -1.2g protein/kg to get a range of 55-82g protein per day.*
- **Fat needs:** Fat consumption should be a minimum of 20 percent of total energy intake to preserve athletic performance. To calculate the minimum grams of fat per day, multiply the total daily energy needs by 20% to get the amount of fat in calories. Then divide the fat calories by 9 because there are 9 calories per gram of fat.
 - *For example, if an athlete calculates their estimated daily energy needs to be 2500 calories, multiply 2500 calories by 20% to get 500 calories from fat. Then divide 500 calories by 9 calories/gm to get an estimated need of at least 56gm of fat per day.*
- **Fluid needs:** Athletes should drink at least 1 oz per kg of body weight of water per day. When exercising for over an hour, athletes should also drink electrolytes in order to properly replenish lost fluids.
 - *For example, if an athlete weighs 150lbs, divide 150lbs by 2.2kg/lbs to get 68.2kg. This athlete should aim to drink at least 68oz of fluids per day.*

*** Remember that these calculations are estimates and needs change person to person, day to day, and throughout various stages of life.**



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Nutrition for pre- and post- exercise:

| Exercise Type | Low Intensity/Long duration (running, biking, hiking, swimming) | Moderate Intensity/Moderate duration (pilates, yoga, jogging) | High Intensity/Short duration (weight training, CrossFit, HIIT, circuit training) | Post-Workout Snacks (Within 1 hour after workout) |
|--|---|--|--|--|
| Pre-workout Snack Type (1-4 hours before) | -Carbohydrate rich foods for initial quick energy access -Fats to sustain the longevity of the workout | - Carbohydrate rich foods for accessible energy during the workout | -Simple carbs to provide a quick energy source during sets -Protein to maintain muscle mass | Pair a carbohydrate rich food with a protein. Carbs help replenish glycogen (carb) stores and proteins aid in muscle building and recovery. |
| Examples | -Fruits, pasta, grains, granola bars -Peanut butter, cheese, avocado, yogurt, cottage cheese | -Fruit, crackers, granola bars, bagel or toast w/ peanut butter or jelly | -Edamame, protein shake with banana, cup of yogurt with fruit, eggs | -Greek yogurt with granola, nut butter on toast, apple slices with cheese, brown rice and chicken, oatmeal with milk and fruit, handful of nuts with raisins |

Questions

If you have any questions or concerns, please call the Wellness Center’s Dial-A-Nurse helpline at (773) 508-8883. To make an appointment with the dietitian you can also book online at https://wellness.luc.edu/login_directory.aspx.

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