

# Nutrition Tips for Refueling

## Refueling Before Exercise

Just as you put fuel in the car before going on a long drive, you need to fuel your body before you exercise. Pre-workout fuel can help:

- Prevent hypoglycemia (low blood sugar) and its related symptoms of light-headedness, fatigue, lack of focus, lack of endurance, and indecisiveness.
- Settle your stomach, absorb some of the gastric juices, and prevent hunger.
- Fuel your muscles with carbohydrates that can be processed into stored glycogen, enter the bloodstream for quick energy, and fuel the brain.
- You exercise harder, so you can burn more calories, which may result in a loss of undesired body fat.

## Fueling Three to Four Hours Before a Workout

Three to four hours before a workout, you should have a full meal. A meal at this time allows your body to digest a more complex meal.

Examples:

- Turkey sandwich on whole grain bread, one yogurt on the side, and one fruit cocktail
- One bowl of granola with a large banana and milk
- Whole wheat pasta with meatballs, tomato sauce, and a side spinach salad

## Fueling One Hour or Less Before a Workout

To fuel your body one hour or less before a workout, consider a simpler food option. Even five minutes before you exercise, a small snack can be put to good use in your body. The key is selecting a snack option that is easily digestible.

Examples:

- Small box of raisins with handful of almonds
- Single serving of yogurt
- Chocolate milk
- Half of a granola bar with one small banana



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## Refueling After Exercise

Refueling your body after a workout, practice, or game is an important part of the recovery process. What you eat after affects your recovery after today's game and also tomorrow's.

### If you can make time to train, you can make time to refuel.

Why refueling is so important:

- Carbohydrates consumed post workout stimulate the release of insulin, a hormone that helps build muscle and transports carbohydrates into the muscles to replenish the glycogen
- Carbohydrates combined with protein (10-20g) creates an even better response, and it reduces the increase of the hormone cortisol that breaks down muscle
- Turns on your appetite again, and within an hour or so you'll be ready for a full meal
- Aids in the recovery of the broken down muscle tissue and prevents further muscle breakdown



## Refueling Within 30 Minutes or Less

Refueling your body within the first 30 minutes of completing a workout should not be a full meal. Strive for a mixture of carbohydrates and protein. Even a snack as few as 100 calories can make a big difference.

Examples:

- Eight ounces low fat chocolate milk
- Fruit smoothie: low fat yogurt, banana, berries
- Peanut butter and honey sandwich (half or whole)
- Small turkey wrap with eight ounces grape juice
- Sports drink with half a granola bar
- One ounce of pretzels with hummus
- Half turkey pita with eight ounces cranberry-apple juice
- Eight wheat thins with one ounce low fat cheese
- One can of chicken noodle soup

For more information on sports nutrition, visit [UPMC.com/SportsNutrition](https://www.upmc.com/SportsNutrition).

To schedule a sports nutrition appointment, call **724-720-3081**, or email [SportsNutrition@upmc.edu](mailto:SportsNutrition@upmc.edu).