

Eating Before Exercise - Foods for Athletic Competition

Meal planning and eating before athletic competition

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Health's Disease and Condition content is reviewed by Medical Review Board

What an athlete consumes before, during and after exercise is important for comfort and performance during exercise. While eating soon before exercise doesn't provide the bulk of the fuel needed for the activity, it can prevent the distracting symptoms of hunger during exercise. The major source of fuel for active muscles is carbohydrate which gets stored in the muscles as glycogen in the days before exercise. This is one reason that the post-exercise meal is critical to recovery and being ready for the next exercise session.

When To Eat

Exercising on a full stomach is not ideal. Food that remains in your stomach during an event may cause stomach upset, nausea, and cramping. To make sure you have enough energy, yet reduce stomach discomfort, you should allow a meal to fully digest before the start of the event. This generally takes 1 to 4 hours, depending upon what and how much you've eaten. Everyone is a bit different, and you should experiment prior to workouts to determine what works best for you.

If you have an early morning race or workout, it's best to get up early enough to eat your pre-exercise meal. If not, you should try to eat or drink something easily digestible about 20 to 30 minutes before the event. The closer you are to the time of your event, the less you should eat. You can have a liquid meal closer to your event than a solid meal because your stomach digests liquids faster.

What To Eat

Because glucose is the preferred energy source for most exercise, a pre-exercise meal should include foods that are high in carbohydrates and easy to digest. This include foods such as pasta, fruits, breads, energy bars and drinks.

Planning

Planning is essential if you are competing in an all-day event, such as track meets or other tournaments. Consider the time of your event, the amount of your meal and the energy required. Also, be aware of the amount of fluid you consume. You should plan ahead and prepare meals and snacks that you have tried before and know will sit well with you. Do not experiment with something new on the event day.

Suggested Pre-Exercise Foods

Eating before exercise is something only the athlete can determine based upon experience, but some general guidelines include eating a solid meal 4 hours before exercise, a snack or a high carbohydrate energy drink 2 to 3 hours before exercise, and fluid replacement (sports drink) 1 hour before exercise.

1 hour or less before competition

- fruit or vegetable juice such as orange, tomato, or V-8, and/or
- fresh fruit such as apples, watermelon, peaches, grapes, or oranges and/or
- Energy gels
- up to 1 1/2 cups of a sports drink.

2 to 3 hours before competition

- fresh fruit
- fruit or vegetable juices
- bread, bagels
- low-fat yogurt
- sports drink

3 to 4 hours before competition

- fresh fruit
- fruit or vegetable juices
- bread, bagels
- pasta with tomato sauce
- baked potatoes
- energy bar
- cereal with low-fat milk
- low-fat yogurt
- toast/bread with limited peanut butter, lean meat, or low-fat cheese
- 30 oz of a sports drink

Sugar and Performance

If you are an endurance athlete, evidence suggests that eating some sugar (like energy bars, some types of candy bars, or sports drinks) 35 to 40 minutes before an event may provide energy (glucose) to your exercising muscles when your other energy stores have dropped to low levels. However, you should experiment with such strategies before competition because some people do not perform well after a blood glucose spike.

Caffeine and Performance

Caffeine acts as a stimulant on the central nervous system. It had been thought to boost endurance by stimulating a greater use of fat for energy, and thereby reserving glycogen in the muscles. Research, however, doesn't support that theory. When caffeine improves endurance, it does so by acting as a stimulant.

Caffeine can have serious side effects for some people. Those who are very sensitive to its effects may experience nausea, muscle tremors, and headaches. Too much caffeine is a diuretic, and can result in dehydration, which decreases performance.

Foods to Avoid Before Exercise

Any foods with a lot of fat can be very difficult and slow to digest and remain in the stomach a long time. They also will pull blood into the stomach to aid in digestion, which can cause cramping and discomfort. Meats, doughnuts, fries, potato chips, and candy bars should be avoided in a pre-exercise meal.

Keep in mind that everyone is a bit different and what works for you may not work for you teammate or training partner. Factor in individual preferences and favorite foods, and an eating plan is a highly individualize thing.

Sources:

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