

What should I eat and drink before, during and after an enduring exercise?



The main supply of quick energy during endurance exercise comes from carbohydrate, in the form of blood glucose (sugar) and liver and muscle glycogen (the storage form of carbohydrate in the body). When you're exercising at a high intensity for longer than 90 minutes, you usually feel very tired because you've used up this quick form of energy and can't use the fat and protein stored in your body for energy fast enough.

You may be suffering from endurance fatigue during exercise if you feel physically exhausted, light-headed, dizzy, have a headache, feel confused, have mood swings or cramping muscles.

Before exercise

Approximately 2 – 3 hours before an endurance event, drink fluid and try to eat a balanced meal with carbohydrates such as grain products, fruits and vegetables and a low-fat protein choice, such as chicken, beans, peanut butter or hummus. This will help to:

- boost energy levels
- prevent hunger
- keep you hydrated

Some athletes may need to top up their energy levels even more with a carbohydrate-rich snack and beverage 1-2 hours before their activity. Snack examples include sport bars, fruit, cereal bars, bagels, yogurt, and granola bars.

"Carbohydrate-loading" (for competitive activities that last longer than 90 minutes) builds extra carbohydrate

energy stores in the body (as muscle and liver glycogen). Eat more carbohydrate for three days before the competition to increase your body's carbohydrate (glycogen) stores. Add extra pasta, rice, potatoes, fruits, vegetables and sport drinks or sport bars to your diet. Decrease exercise training (taper) during this time to help preserve your increased glycogen levels.

During Exercise

Try to drink or eat at least every 15 to 20 minutes during exercise. Great choices include:

- water or sports drink
- soda crackers or pretzels
- granola or cereal bars as tolerated during prolonged events.





Athletes sweat at different rates (anywhere from under 500 mL an hour to over 2 L per hour). It is important that you drink enough during and after exercise to replace the fluid you lost in sweat. To find out how much you typically sweat during training or competition weigh yourself before and after exercise. Factor in how much you drank. The difference will be sweat losses. Approximately 30 – 60 grams of carbohydrates per hour (such as in the form of a sports drink) can improve exercise performance.

After exercise

Once your activity is finished, your body is ready to store energy again, repair muscles and fill up with fluids. After exercise, start with a shake (blend milk, fruit and ice

together), sport drink, chocolate milk or water. Soon after exercise choose a meal or snack rich in carbs and protein. For example:

- chicken with rice and vegetables
- pasta and meat sauce with salad
- vegetarian chilli with potato and raw vegetables

It's great to have exercise goals and challenges, especially with endurance activities. Well-planned healthy eating before, during and after your long exercise events can help make your experience even more enjoyable!

