

Sports Nutrition



Regular exercise through sport and play are important for the health of children and teens. Healthy eating supports good exercise habits and is important for developing muscles and bones.

Nutrition plays an important role in daily energy levels and keeping energy levels high before, during and after exercise.

Hydrating before exercise

During exercise the body sweats to cool itself. This is especially important in children and teens because their bodies can heat up very quickly and need to be cooled.

Because of this, it is important to drink water regularly in the 24 hours before exercise. This includes drinking 400-600 mL two to three hours before exercise.

An easy way to monitor hydration is to look at the colour of urine. Light yellow to clear urine means you are getting enough fluids, but yellow

to dark yellow means you need to drink more water.

Dehydration can be caused by drinking soda or caffeine (found in coffee, tea or energy drinks, for example) or eating sweet or salty foods. If a child has these foods, they should drink extra water.

Pre-exercise meal or snack

Make sure that your child has enough fuel for exercise. They should eat meals; at least three hours before physical activity and a "pre-exercise snack" at least one or two hours before activity to allow enough time to digest food and minimize stomach upsets.

- Choose foods high in carbohydrate (such as fruit and whole grains). The body absorbs this type of energy quickly.
- Choose foods that are low in fibre to allow for easy digestion and prevent an upset stomach.
- Choose foods moderate in protein and fat.
- Choose foods that are familiar to your child. Only serve your child new foods to try on days that they are not training or competing.

Snack ideas to boost energy and exercise

Carbohydrates eaten alone tend to give you an energy boost, lasting approximately one or two hours. However, eating a snack that combines carbohydrate and protein will provide your body with energy that will last for up to three or four hours. The following is a list of great snacks for energy:

- 15 mL (1 tablespoon) of peanut butter with whole grain crackers
- ¼ - ½ cup of cooked oatmeal
- 30 to 60 mL (2 to 4 tablespoons) of hummus with half a whole grain pita for dipping
- 1 small wrap or sandwich with tuna, egg or lean meat
- 1 to 2 eggs or egg whites with toast

Nutrition and fluids during exercise

Depending on the intensity of exercise and the temperature, your child should drink 125 mL to 300 mL of fluids every 15 to 20 minutes. They should not wait until they feel thirsty to start drinking.

Sports drinks containing carbohydrates and electrolytes are recommended during intense exercise lasting longer than an hour.

To stay hydrated and energized during longer workouts or activities taking place in hot, humid weather, your child should have either:

- 125 mL to 300 mL of sports drinks every 30 minutes

or

- 125 mL to 300 mL of water with a snack containing 30 g to 60 g of carbohydrate for every hour of exercise.

Sample snacks during exercise

- Banana – 30g
- Apple / orange – 20g
- Fig Newtons (2) – 23g

Nutrition to help your child recover after exercise

After exercise, you are less hydrated and have lower muscle energy than you did when you started. At this point, it is important to give your child the nutrition their body needs to help it recover and adapt.

- Have your child drink at least 500 mL of water soon after exercise to rehydrate.
- They should replace every kilogram of body weight lost with 1.5 L of water. For example, if Sidney Crosby lost 1 kg of body weight after a hockey game, he should drink 1.5 L of water over the next few hours.
- If your child has been exercising in the heat or produced a lot of sweat, consider foods that contain the electrolytes sodium and potassium.
- Very intense exercise sessions can use almost all of the stored carbohydrates in the muscles. Eating carbohydrates after exercise will help restore the muscle's energy stores.
- Aim to have your child eat carbohydrate-rich foods within 30 minutes of finishing their activity. They should aim for a 3:1 carbohydrate to protein ratio in their next meal two or three hours after exercise. This means their meal should have three times more carbohydrate than protein, for example 30 g of carbohydrate for every 10 g of protein.
- Protein is important after exercise to help repair muscles.

Sample food choices after exercise

- Greek yogurt smoothie with banana and strawberries (*a good source of potassium)

- Granola with nuts or Greek yogurt
- Turkey sandwich
- Whole grain pasta with tomato or meat sauce

Nutrition tips for success

There is no one "miracle food" or supplement that can supply all your nutritional needs.

Certain foods supply mainly carbohydrates, proteins or fats. Other foods contain vitamins and minerals.

The key to balancing your child's diet and enhancing their performance at sports is to combine foods that balance carbohydrates, proteins and fats and include vegetables and fruit.

Key points

- Healthy eating and exercise habits are important for good health.
- Drink fluids in the 24 hours before an exercise session to ensure hydration.
- Eat a smaller meal or snack one or two hours before exercise time. Your choice should include carbohydrates, a moderate amount of protein and fat but be low in fibre.
- During exercise, drink 125 mL to 300 mL of fluids every 15 to 20 minutes. For exercise longer than an hour, eat 30 to 60 grams of carbohydrates an hour as well.
- After exercise, your child should drink at least 500 mL of water to rehydrate. They should also aim to eat a carbohydrate food no more than 30 minutes after their activity. Their next meal, two to three hours later, should contain a 3:1 carbohydrate to protein ratio.