

# fuel up!

## Inside

Find out how to **look good**, **feel great** and **play well!**

## Food facts

Food and fluid. Your guide to **better performance.**





## Are you an active teen? Then this is for you.

Do you want to look good? Be healthy? Play well? Believe it or not, it starts with healthy food choices. No matter which sports you play, good food choices help you feel energized, strong and powerful, giving you the edge you're looking for.

### On an active day, which meal do you think is the most important?

If you're like most people, you probably believe it's the one before your game. And many sports experts used to believe this. However, we now know it's what you eat after a game, sport or activity that affects your performance in your next game the most. Why? Your muscles need to refuel, repair and recover.

**Read the powerfuel tip below.**

Just as a car needs gas, your body needs energy. Your muscles burn carbohydrates for energy. Carbs give your body glucose, or blood sugar, for energy. Any extra glucose is stored in the muscles and liver—your body's gas tank—as glycogen. After sports or physical activity your body's glycogen stores or gas tank, are empty. You need to refill it and replenish your muscles' energy. If you don't have enough stored fuel you'll feel tired and won't perform at your peak.



### Powerfuel Tip

On a very active day or during a tournament, the most important meal is the one you eat after an event. Skimp on this and you won't play well tomorrow. You need to have a snack containing protein, carbohydrate and fluid within 30 minutes after an event.



## Refuel >

**REFUELLING** helps your muscles recover. Muscles soak up carbs after exercise; they are like medicine to tired muscles. Also, muscles need to be reloaded many times during the day if you're continuously active or play more than one sport in a day.

## Repair >

**REPAIR** and rebuild your muscles with protein. Protein ensures your muscles recover fully. Protein is found in lean meats, milk and cheese, eggs and legumes. Legumes are dried beans (think pork and beans) and peas. And you don't need much. Just 2-3 servings of meat, chicken or fish the size of two i-phones, one on top of each other will easily meet your needs. Don't like meat? Read on.

## Recover >

Food, fluid and rest are all necessary for you and your muscles to **RECOVER** from an activity. Make sure you get enough rest during practices, training and tournaments. Your muscles need down time too.



## Powerfuel Tip

Legumes are full of protein and carbohydrate—just what your muscles need. Try Mexican foods such as bean chili, burritos, tacos or a bean soup as meals or snacks after a game.

Vegetarian? No problem—but you need to plan carefully. If you include milk and eggs in your diet you'll easily meet your protein needs. If not, beans, lentils, nuts and seeds provide protein. A registered dietitian/nutritionist can help you plan your diet to meet your unique needs.

Carbs and protein can't do it alone. If they're the fuel, then vitamins are the spark plugs. Vitamins do not provide any energy but they make sure your body can burn carbs for energy and use protein for repair. Eat several servings of dark green and orange vegetables and fruit every day. Try oranges, cantaloupe, sweet potatoes and spinach (try it raw in salads).

# Ideas to refuel, repair and recover

## Quick snacks

(If you can, have these within 30 minutes of stopping an activity)

- Chocolate milk, trail mix, fruit cup
- Fruit with string cheese and water
- Graham crackers with peanut butter, 100% fruit juice and pudding
- Fruit smoothie (blend any flavour yogurt, your favourite fruit and milk)
- Cottage cheese, fruit, English muffin

Eat a meal or have a substantial snack within 2 hours after stopping an activity. If you still aren't hungry, try 1-2 cups of chocolate milk.

## ! Powerfuel Tip

Eat something with carbs and protein within 30 minutes after stopping an activity. As exercise may cause you to lose your appetite, try drinking chocolate milk. It has the perfect combination of carbohydrate and protein to repair muscles and replaces fluid and electrolytes for rehydration.

## ! Powerfluid Tip

Did you know that milk is about 90% water? So it's just as hydrating as water—not to mention it helps you recover after exercise too! Sports drinks are recommended for events longer than 60-90 minutes.

## Quick n' easy meals

(Eat these within 2 hours of stopping an activity)

- Pork and beans, whole wheat bun or toast and milk
- Grilled cheese sandwich, 100% fruit juice and yogurt
- Chicken stir fry, rice, milk and fruit
- Scrambled eggs and salsa in a whole wheat tortilla, with chocolate milk and fruit.

After you refuel, rest and recover you need to top off your gas tank before your next game or practice. Eat 2-3 hours before an event to allow time for digestion. Choose high carbohydrate foods such as pasta, rice or a baked potato, with small amounts of lean protein foods (sliced roast beef, chicken) and milk.

Just before the game or practice starts, choose nutrient-rich carbs like chocolate milk, fruit and yogurt for blasts of energy.



## ! Powerfuel Tip

Stick to foods you know work well for you before a game. Experiment with new foods during practice or training. Avoid fried foods such as french fries and save the whole grains such as bran muffins for after the game.



## Ideas to fuel up before the game

- Pasta with tomato sauce and a glass of milk
- Cheese, crackers and 100% fruit juice
- Turkey sandwich and a glass of milk
- Juice, cereal bar and yogurt
- Low fibre cereal such as Rice Krispies™ or Special K™ with milk and a cut up banana or strawberries
- Smoothie made with banana, yogurt and milk.

Even if your activity or practice is early in the morning you need to fuel up. Try milk and cereal. Make it portable. Take dry cereal in a baggie and sip milk on the way.

## Powerfluid guidelines

Making sure you drink enough will help you feel energized for everything you want to do. When you don't drink enough you may feel tired, headachy and fatigued.

You need 8-9 cups of fluid per day to keep hydrated. When you are playing a game or tournament you need even more.

What counts as fluid? Everything you drink counts toward your fluid intake. To keep hydrated and feeling good, drink a variety of healthy beverages including milk, 100% fruit juice and water.

Sports drinks are recommended for events longer than one hour. Why? They contain a small amount of carbohydrate and will replace some of the electrolytes you have lost during activity.

## What are electrolytes?

They are minerals such as sodium and potassium that act to keep your nerves firing and your muscles moving. They are lost when you sweat and must be replaced by food after you exercise.



## How much do I need to drink at an event or a game?

Two hours before a game or event drink 2-3 cups of fluid. This is 16-24 ounces, or 500-750 ml.

Carry a refillable water bottle. One gulp is equal to one ounce.

During intense activity like long distance running, etc., drink 5-10 ounces, or take 5-10 gulps every 15-20 minutes.

After the game it's all about replacing what you have lost. Not sure how much to drink? You will likely need 2-3 cups of fluid (16-24 gulps) to rehydrate.

### Girl power!

Girls need more iron than boys because girls lose more. Not enough iron will make you look pale and leave you tired and fatigued. You'll never look or perform your best this way. Try foods high in iron: lean red meats, dried fruit (e.g. raisins, dates, figs) and legumes (try pork and beans). To help you get enough iron from plant sources, eat them with a source of vitamin C, such as oranges, grapefruits, strawberries and green or red peppers.

### Think about your bones!

Boys build most of their bones between the ages of 13-17 and girls between 11-14. Strong bones will decrease your risk of stress fractures from repetitive activity. Build your bones with calcium, protein, phosphorus, magnesium, vitamin A and vitamin D. Milk gives you everything you need for your bones, without having to think about it. 3-4 cups each day will keep you in the game.



### Powerfuel Tip

Food gives you power. Eat a variety of foods to play your best.

## Top Ten Powerfuels

<b>Oatmeal</b>	▶ It's rich in carbs, healthy fibre, B vitamins and iron. Use instant, add hot water, sprinkle with dried fruit and you have a power snack or meal.
<b>Oranges</b>	▶ One of nature's best sources of vitamin C. They're portable and always available.
<b>Bananas</b>	▶ A great source of the electrolyte potassium and rich in carbs.
<b>Milk</b>	▶ The natural sports recovery beverage. Contains carbs, protein and 6 bone building nutrients including calcium. Try flavoured milks - they're a change in taste with all the nutrients of milk.
<b>Sweet Potatoes</b>	▶ Try sweet potatoes for a carb and vitamin-packed energy boost. Cook it in the microwave to save time.
<b>Pasta</b>	▶ Contains lots of carbs for energy. Buy enriched to ensure you are getting B vitamins and iron.
<b>Bagels</b>	▶ Perfect for a pre or post-game snack. Spread with jelly before your game for energy. After your game, top with cheese, sliced meats or peanut butter for protein.
<b>Pizza</b>	▶ Choose thick crust for extra carbs and load the top with extra veggies for vitamins. Add lean meats and cheese for protein.
<b>Greek Yogurt</b>	▶ The nutrition of milk with as much protein as a chicken breast.
<b>Hamburgers</b>	▶ Choose lean ground beef, a whole wheat bun and top with cheese and veggies. You get all four food groups!

## Ask a registered dietitian

**I know that I am supposed to drink 2-3 cups of water 2 hours before my games. I find I can't drink that much all at once without getting cramps and feeling awful. Do you have any suggestions?**

Drinking 2-3 cups of water at once can be challenging for anyone. The reason for drinking so much so long before your game is to give you time to be well hydrated and lose any extra fluid. That way you won't have to make emergency pit stops. But you don't have to gulp it all at once. Start sipping water 2 hours before the game. Drink cool water rather than ice cold to avoid cramps and headaches. Experiment with different drinking schedules before your practices to find out what works best for you.



## Powerfuel Tip

Combine the top 10 powerfuels. For example make a smoothie with milk, yogurt and a banana.

**My swim practices used to be after school but now they are at 6 am. My coach says we should always eat before practice!! What can I eat early in the morning that won't sit in my stomach and that I don't have to get up early to make?**

Try drinking a glass of milk or juice and eating cereal. Or, mix some of your favourite dry cereals together in a baggie the night before. Try a sandwich, cold pizza, a container of yogurt, or grab milk to sip on the way to practice.

### How do I know I am eating and drinking enough?

It's hard to know exactly how much food and fluid your body needs. Everyone's body is slightly different. But you will know when your body is getting the energy and water it needs because you will feel good and play all of your sports well.



# EAT WELL, DO WELL: A DAY'S WORTH OF FOOD FOR TEENS



## BREAKFAST:

60 g wheat squares;  
1 cup milk;  
½ cup blueberries;  
1 medium banana

QUENCH YOUR  
THIRST WITH WATER.

INCLUDE A  
SMALL AMOUNT  
(2-3 TBSP) OF  
OIL, SALAD DRESSING  
AND/OR MAYONNAISE.



## LUNCH:

1 large whole wheat tortilla;  
75 g grilled chicken;  
½ cup lettuce and tomato;  
½ cup carrot sticks;  
1 cup chocolate milk

## SNACK FOR BOYS:

¼ cup hummus;  
½ cup bell peppers;  
30 g whole  
grain crackers

## SUPPER:

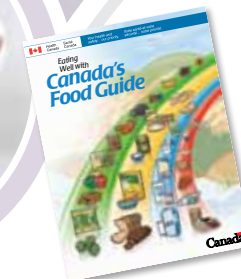
75 g grilled salmon;  
1 cup brown rice;  
1 cup romaine lettuce with  
½ cup cucumbers and  
tomatoes; 1 cup milk

## SNACK:

½ cup strawberries;  
¼ cup yogurt

## RECOMMENDED NUMBER OF FOOD GUIDE SERVINGS PER DAY

Age in Years	TEENS	
	14-18	
Sex	FEMALES	MALES
Vegetables and Fruit	7	8
Grain Products	6	7
Milk & Alternatives	3-4	3-4
Meat & Alternatives	2	3



People who are very active may need extra servings from the four food groups.

Source: Health Canada  
www.healthcanada.gc.ca/foodguide

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