

HEALTHY EATING



LITTLE EXPLORERS

# FOOD

FOOD HISTORY



LIFT THE FLAPS TO EXPLORE FABULOUS FOOD INSIDE AND OUT!

EXTRAORDINARY INGREDIENTS



DISHES FROM AROUND THE WORLD



WHERE OUR FOOD COMES FROM



CELEBRATION MEALS



CULTIVATING CROPS



ALLERGIES AND INTOLERANCES

MORE THAN 30 FLAPS!



## FABULOUS FOOD!

Food can be yummy in your tummy, but what is it really? Food is your body's fuel. It is the energy that helps you move, think and play. When you run out of fuel, you need to fill up! We all need food to live.

### VITAMINS

Vitamins help your body work as it should. There are 13 known vitamins and they all have different jobs.

Vitamin C is in fruits such as oranges. It helps keep you healthy.

### CARBOHYDRATES

This is where a lot of your energy comes from. The body breaks down carbohydrates into a substance called glucose, which acts as fuel. Carbohydrates are found in foods such as potatoes and wholegrains.

### FATS

Fats can provide energy and help the body absorb important vitamins. Healthy fats can be found in foods such as nuts and fish.

## Nutrients

Nutrients are important things found in food. Your body needs them to grow and survive. Nutrients can be vitamins, minerals, carbohydrates, proteins, fats and water.

### MINERALS

Minerals are a lot like vitamins. They help the body work well.

Iron is an important mineral found in meat and spinach.

### PROTEINS

Proteins are like building blocks that help your body grow. They can be found in eggs and beans.

I'm hungry!

Have you ever heard your stomach growl when you're hungry? This is a signal that your body needs more food! Your stomach also sends signals to the brain to tell you to eat.

GROWL

## THE DIGESTION QUESTION

How does the food you eat turn into energy inside your body? And where does it go? This process is called digestion. Together, the parts of your body that help break down and use food are called the digestive system.

### Mouth

This is where it all starts. You take a bite and crush up food with your strong teeth. Munch, crunch, munch!

### Desophagus

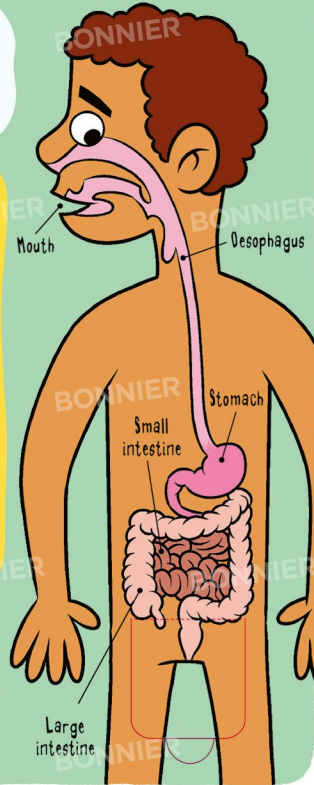
Food travels down, down, down this tube.

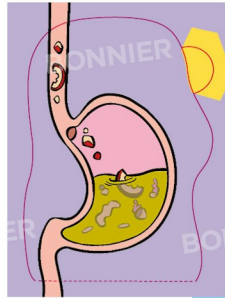
### Stomach

The stomach stores food, mixing it with acid and enzymes.

### Intestines

The slushy liquid moves through the intestines. Nutrients are absorbed into the bloodstream and taken to other parts of the body.





Parts of the  
food that  
aren't needed  
leave the  
body as poo!

If you stretched  
out an adult's  
small and large  
intestines into  
one long tube,  
the tube would  
be at least  
5 metres long.  
That's nearly as  
tall as a giraffe!

The stomach is  
a stretchy sack  
that has muscles  
that churn the  
food over and  
over until it  
becomes slush.



## FOOD AND YOU

If you ate the same food every day, it could get pretty boring. And it wouldn't be good for you either! It's important to enjoy a mix of different types of food to stay healthy.

### Food Groups

Scientists split food into different groups, depending on what it does for your body.

#### FRUITS AND VEGETABLES



#### STARCH



#### PROTEIN



#### DAIRY



#### Sugars

Sugary food like cake gives you lots of energy – sometimes too much! While they are tasty, you shouldn't have too many of these foods at the same time.



Try to drink six to eight cups of water every day!

## DIFFERENT DIETS

People around the world eat different types of food as part of their normal day. This is called their diet. There are all sorts of different diets. Here are just a few of them.



### Did you know?

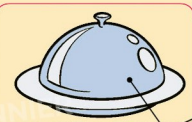
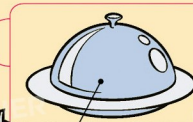
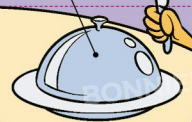
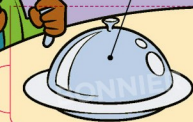
Humans are the only species on Earth that cooks their food. Animals and other living creatures just eat it as it comes!

#### Omnivore

An omnivore eats meat and plants as part of their normal food routine.

#### Vegetarian

Someone following a vegetarian diet eats no meat or fish. Veggie-tastic!

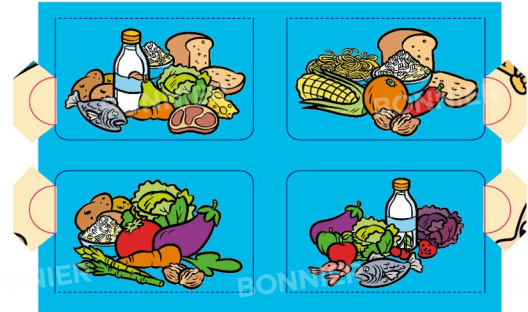
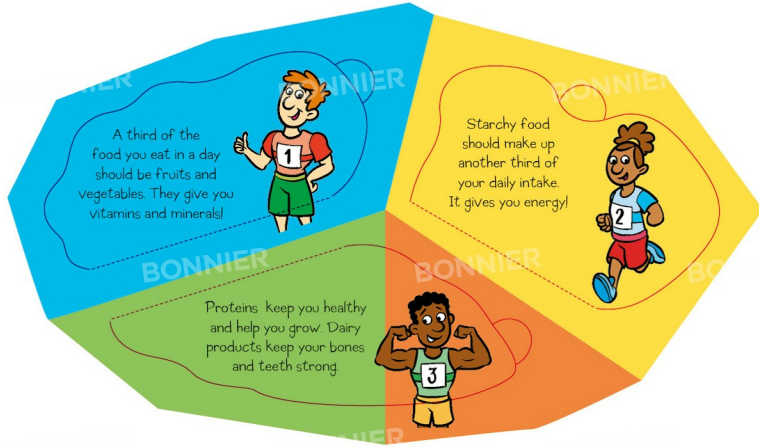


#### Vegan

A vegan does not eat anything that comes from an animal at all. This includes meat, fish, milk, eggs and honey.

#### Pescatarian

A pescatarian does not eat meat, but does eat fish.





Pescatarians can also eat dairy, which includes milk and cheese.

As well as fruit and vegetables, a balanced vegetarian diet contains grains, pulses, seeds and nuts.

Vegans follow a plant-based diet. They find protein and other essential nutrients in food such as beans, tofu and pulses.

This is the most common diet around the world.

You can find starch in food such as brown rice, wheat, bread and pasta.

Fish meat, eggs, beans and nuts are all sources of protein. Dairy products include milk, butter, cheese and yogurt.

Fruits and vegetables include strawberries, apples, oranges, broccoli and Brussels sprouts. Can you name any more?

## FOOD THROUGH TIME

In humanity's early days, humans ate what they could find in the wild. Once they learned to cook it on fire, it was a game-changer! Follow the timeline to see more exciting discoveries and find out how new inventions have changed food over time.

30,000 BCE

Let there be bread!  
Indigenous Australians created flat bread using flour made from plants and roots.



When did farming start?



10,000 BCE

3000 BCE

Egyptians feasted on fluffy breads, fish and fruit.



2700 BCE

The Chinese emperor Shen Nung discovered that tea could be made from adding leaves into boiling water.



World travellers

The potato has travelled the world through its time on Earth. Potatoes were first grown in South America as early as 10,000 BCE. Thousands of years later, European countries discovered these small yet tasty vegetables.

1900 BCE

It's unclear when cacao was discovered, but traces were found in Olmec pots from 1500 BCE. It's thought they created a ceremonial cacao drink. It later became part of Mayan culture.



Today and beyond

Today, all these foods are easily accessible. Bread, peanut butter, tea, chocolate, pizza... what will we eat next?

1500

The Aztec people of Central America crushed nuts into something they could spread, and early peanut butter was born.



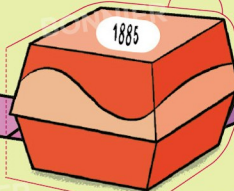
1000

1834

English inventor James Sharp built a gas cooker that could be used inside homes. By the 1920s, many families were using these handy small ovens, rather than cooking over a fire or larger coal oven.

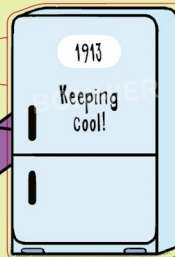


1885

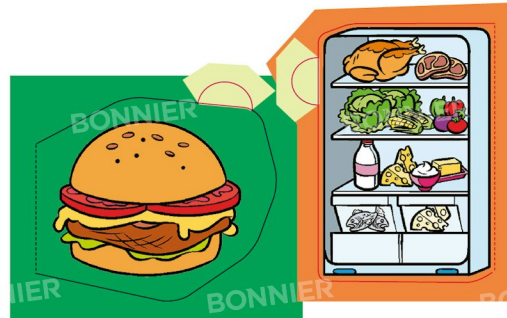
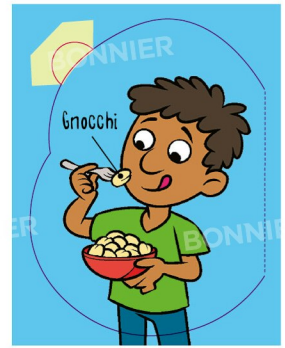


1913

Keeping Cool!







Now, potatoes  
are eaten across the  
world as chips, gnocchi,  
hash browns, rosti,  
croquettes, mash,  
soup and more!

POTATO POWER!

About 10,000 years ago, people started using animals such as goats, sheep, chickens and cows on their own land. Early farming began to take off around the world, with people growing their own crops too.

In 1913, American Fred W. Wolf invented the first refrigerator that could be used in the house. This meant people could keep their food cool and fresh for longer.

Hamburgers became available in restaurants across the United States. Before buns were invented, they were eaten as a steak burger between slices of bread.

The very first pizza was eaten as far back as the year 1000. That's over 1,000 years ago!

Today, pizza is more popular than ever and it comes served as everything from street food to gourmet – there's even dessert pizza!



## FINDING FOOD

Usually, food appears in front of you at the dinner table. But how did it make its way there? Where does food come from? Many foods go on a journey from farm to factory to finished feast. Some food comes from much closer to home too!

### Fantastic farms

A farm is a place where animals might be used to produce food, and crops are grown there too. Some farms grow all sorts of fruits and vegetables. Some grow wheat. Others raise cows for milk and hens for eggs.

### Combine harvester

These machines cut and collect crops. They also separate the parts that can't be eaten from the parts that can.

### Orchard

An orchard is an area of land where lots of trees are planted to grow fruit.

### Tractor

The tractor is the most important machine on the farm. Different attachments can be added for different jobs.

### factory stop

Food grown in farms might go to a factory to be packaged up. It then travels to a supermarket, for people like you to buy and enjoy.

### In the garden

Some food is grown in your very own garden! People can grow delicious vegetables, such as carrots and cucumber, and fruits, such as cherries and plums, at home. Local farms might grow food you like too.

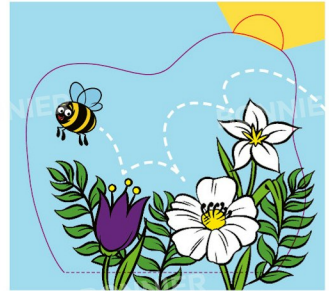
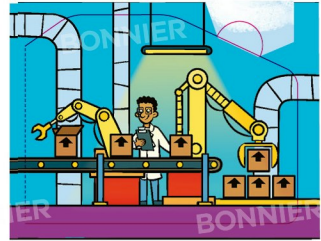


Buying food locally helps the environment. It cuts down on the kilometres the food needs to travel to get to its destination.



### Busy bees

Bees are one of the planet's greatest helpers. Here's why...



Some foods, such as boxed biscuits, are made in the factory itself, then sent out to shops.

Bees are pollinators: when they visit plants to drink their sweet nectar, they collect pollen too. The pollen travels to other plants the bees land on and helps new seeds to grow. This is called fertilisation! Thank you, bees!

The combine harvester is a mighty multi-tasking machine. It can cut, sort and clean crops as it goes.

Have you ever been to an orchard? It's not just apples that are grown in orchards – plums, pears and cherries are too! What would you grow in your orchard?

A plough is attached behind a tractor. When the tractor pulls it across the field, the plough's blades turn the soil ready for planting seeds. A harrow is attached to smooth out the soil. Finally, a grain drill is added to pop the seeds evenly into the land.

## AROUND THE WORLD

Today we can buy food from all around the world thanks to aeroplanes and boats that bring different ingredients to our country. But each country has its own specialities, which are often influenced by the seasons and what is available nearby.



### The season reason

Many foods grow only during certain months of the year. For example, pears are picked in the autumn in the UK. When they are out of season, other fruits are available fresh – such as strawberries in the summer!

### Wet and dry

In ancient Egypt, people planned their planting around the wet and dry seasons. For parts of the year, the area next to the river Nile flooded and couldn't be used at all. But after the water drained away, the soil was perfect for growing crops such as wheat, onions, figs and melons.



### Western diets

The Western diet started in Europe and the United States. It is high in meats, fats, salts and sugars, and low in vegetables and whole grains.



LONDON

### Eastern diets

Many people in places such as India and Japan have an Eastern diet. These are much lower in meat and higher in spice and flavour. Vegetables such as aubergines and pak, choy are made into full dishes, rather than sides.



TOKYO

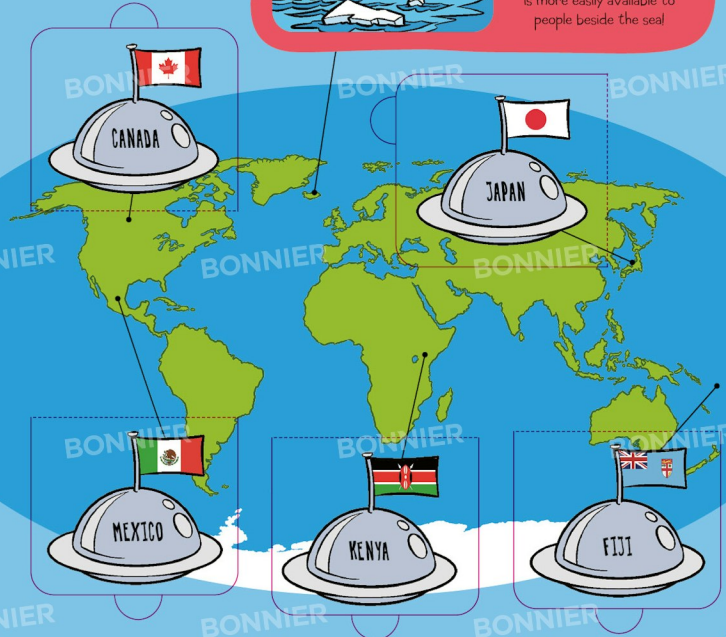
### Different delicacies

Places around the world have their own favourite foods and dishes. Here are just a few:

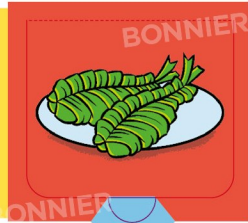
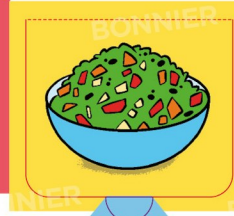
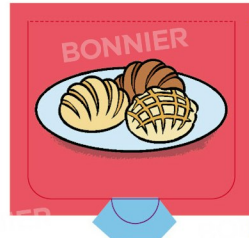
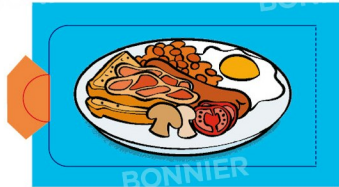
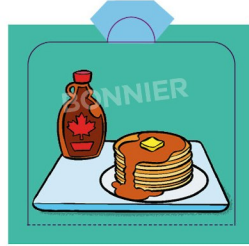


### Coastal living

People who live along coasts often eat more fish than people who live inland. This is because seafood is more easily available to people beside the sea!







Soy sauce is the most commonly used seasoning in Japan. It is made from soybeans, wheat, water and salt.

Sushi is often served with soy sauce as a dip.

Maple syrup, which is often used as a pancake topping, comes from the sticky sap of maple trees. In one year, Canada can make enough maple syrup to fill 20 full-sized swimming pools!

Once the crops were ready, the Egyptians picked them and stored them in large quantities, ready to get them through the flood season again.

On special occasions, Fijians enjoy a love meal: fish, meat and vegetables wrapped in banana leaves, cooked in an underground oven.

Kenyans and other East Africans enjoy a spiced greens dish called sukuma wiki. Its name is based on the Swahili phrase 'stretch the week'. Not expensive to prepare, it can feed families all week long.

Filled or plain sweet buns shaped like seashells are sold in Mexico. They are called conchas.

Breakfast in Japan might include steamed rice, miso soup, a protein such as grilled fish and a side such as dried seaweed or soybeans.

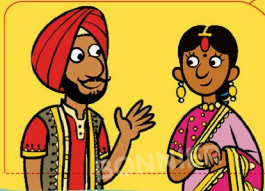
A typical English breakfast includes sausages, bacon, eggs, mushrooms, grilled tomatoes, toast and baked beans. Dig in!

## LET'S CELEBRATE!

Although food is important for our survival, it has become so much more than that. It is something that we enjoy. Food has even become a big part of many celebrations around the world.

### Diwali

Diwali is a festival of lights celebrated by Hindus, Sikhs and Jains. Special meals are eaten throughout the five days of the festival.



### Lunar New Year

The beginning of a new lunar year is celebrated with food that is said to bring luck, health and happiness.



### Eid al-fitr

During the holy month of Ramadan, Muslims around the world do not eat during daylight hours. To celebrate this month coming to an end, they have a feast!



### Day of the Dead

In Mexico, the Day of the Dead is a time to honour and celebrate loved ones who aren't around any more. It is full of joy – and delicious food!



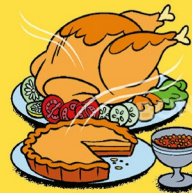
### Passover

The Jewish festival of Passover is celebrated in early spring. During the eight days of the festival, people do not eat anything made with chametz – food mixed with a grain that makes bread rise.



### Thanksgiving

In the United States, Thanksgiving is a day to give thanks for the good things in your life.



But it has also become a day to celebrate with lots of food. Turkey, stuffing, potatoes... and don't forget the pie for dessert!

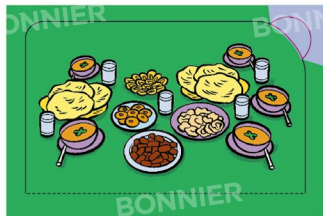
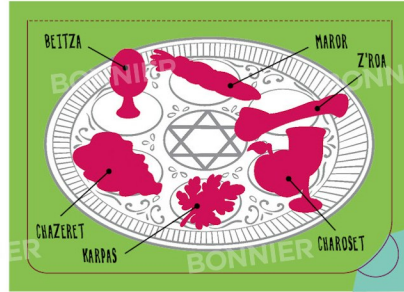
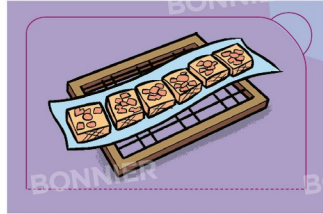
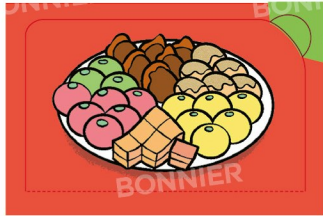
### Happy birthday!

People celebrate birthdays in different ways around the world. In many countries, there are birthday cakes with candles to blow out. Other countries such as Russia have a birthday pie. In Ghana, birthday feasts include spiced rice, beans and doughy balls called fufu, made from boiled cassava root, yams or other starches.



In Cuba and Mexico, people burst open a treat-filled pinata.







### What's cooking?

During Ramadan, Muslims usually eat a full breakfast early in the morning, before the Sun comes up. This is called *sahri* or *suhoor*, depending on the country.

### What's cooking?

Sweets called *mithai* might be made of a mix of grains, vegetables, milk or yogurt, nuts, sugar and spices, with delicate decorations to finish them off.

### What's cooking?

Skulls made out of sugar, called *calaveras*, honour the souls of loved ones. They are decorated with bright colours.

### What's cooking?

In Korea, *yaksik* is a sweet rice dessert made with dried fruit and nuts. It is named after one of its main ingredients – honey, which was used as a medicine in Korea's past.

**Beitza** – A roasted egg

**Karpas** – A green vegetable (often parsley)

**Chazeret** – A second bitter herb (often lettuce)

**Charoset** – A sweet paste made from fruit and nuts

**Zroa** – A roasted lamb shank bone

**Maror** – A bitter herb (often horseradish)

Traditionally, the six items are:

A feast called *Seder* takes place near the beginning of Passover. Every item on the plate (called a *Karah*) has a special meaning in the story behind Passover.

## NOT FOR ME!

Some people's bodies can become sensitive to certain foods. Their bodies react to try to get the food out of their system.

### Which foods cause an allergic reaction?

Different people can react to different things. Some common foods that can cause allergies are.

?

?

?

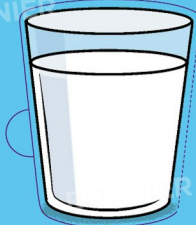
?

?



## Allergies

With an allergic reaction, the body fights the food, thinking it's an intruder. The person might get a rash, runny nose, itchy eyes and a swollen tongue. In very serious cases, the person might have trouble breathing.



## Intolerances

Sometimes a person's body isn't able to break down certain foods. These are called food intolerances. They can cause bad tummies and runny poo.

## FOOD PROBLEMS

The production of food can have an impact on our planet. With more and more people in the world, there are lots of tricky challenges to make food that feeds everyone but keeps the planet healthy at the same time.



### The plastic problem

Plastic packaging is everywhere. After a food or drink has been enjoyed, the plastic ends up in bins, landfills or as litter on the ground. Some plastic even makes its way to oceans, where it can harm sea creatures, who might get tangled in it or eat it.



### Gone to waste

Over one third of the food produced around the world is wasted! And yet, millions of people do not have enough food to eat.

### Got gas?

Animals on farms eat lots of grass. They then burp out lots of gas! This gas, called methane, gas floats into Earth's atmosphere and causes Earth to heat up faster than it should.





- Use up leftover food.
- Ask your parents to buy only what they need.
- If you buy foods in soft plastic packaging take it to a suitable recycling point near you.
- Buy funny-shaped fruit and vegetables to help reduce waste at the supermarket.

Next time you buy food in plastic packaging, think about where it goes. Plastic can stick around for hundreds of years on Earth. It takes that long to break down naturally. See if any shops near you can help you recycle it.

More people are intolerant to lactose, a sugar found in cow's milk, in East Asia than in Europe and North America. This is because they haven't been drinking it as long, so their bodies aren't used to dealing with it.

Food that contains egg includes cake or brownies and battered food such as chicken nuggets.

## Egg

Nuts or traces of nuts are found in unexpected places such as chocolate, energy bars and crackers.

## Nuts

Shellfish include oysters, shrimp and prawns.

## Shellfish

Many dairy and meat replacements, such as tofu and vegan yogurt, contain soy.

## Soy

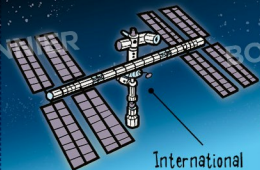
Wheat is found in everything from bread to soy sauce and even some ice creams.

## Wheat



## THE FUTURE OF FOOD

The ways of growing and preparing food are constantly changing. What will food be like in the future? Here are just a few things that might be different in the years to come.



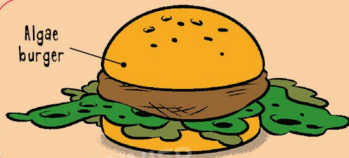
International Space Station

### Out of this world

If there isn't enough land for farming on Earth, where can we go? How about all the way to space! Scientists have discovered that the soil on Mars could be good for growing crops. Greenhouses could be built to protect them.

### Plant power

More and more people are turning to a diet without any meat in it. This is better for the environment. Food is being developed that looks and feels like meat, but is totally plant based!



Algae burger

### Insect delights

In some parts of the world, insects and grubs are sometimes part of a meal. These tasty treats are now spreading as a replacement to meat. Creatures such as crickets and worms are likely to enter more people's diets in the future.

There is more protein in a serving of crickets than there is in a piece of steak!

Crickets



### What else?

What other foods might make a move into more diets in the future? Many are cutting down on meat or processed food and opting for plant-based diets, which are more sustainable.



Fungi



Cactus



Forio (Grass)



Seaweed

### Perfect packaging

Would you ever eat your crisp packet? Not now, but you might be able to in the future! New packaging could be made of food such as seaweed. This way it can be eaten or broken down into the soil, with no rubbish left to pollute the planet at all!



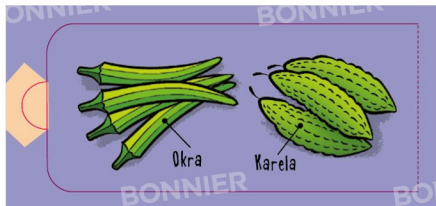
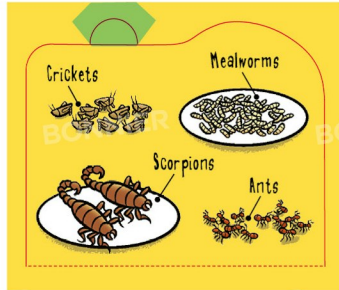
### The new fast food

What if you could cook up whatever you wanted - without having it in the fridge? In the future, there might be machines that can produce food with the touch of a button. Can you imagine a 3D food printer in your home? Maybe one day...



Dinner will be printed in 10 minutes!





In Thailand and China, you can eat deep-fried scorpions. In Colombia, ants known as leafcutter ants are served as a toasted snack. In Cambodia, Mexico and Thailand, crickets are eaten boiled, fried or roasted.

Astronauts are already growing food in space – on the International Space Station! They have grown lettuce, cabbage, chilli peppers and more.

There are 300,000 different plant species that we can eat. So far humans have tasted only about 200 of them! Vegetables such as okra and karela are full of nutrients that are good for your body.