



FOOD

Know your diet

Every living being on this planet requires food to live, grow and reproduce. Food is important to us. It is fuel, and it is fire. It is the driving force that keeps us alive and alert.

While eating food is a basic necessity, what we eat is equally important to live a healthy life. German philosopher Ludwig Feuerbach once said, 'Man is what he eats.' But what is it that we eat? Noodles, pulao, and pizza?

A lot that goes into putting that plate of food in front of us. For instance, bread is made from wheat, a cereal developed from a wild grass. But most of us don't know how many trials and errors it went through and how long it took to yield the variety we now consume.

The food we eat comes from various sources. Plants are the largest group of sources and our primary food producers. You may have observed that there are many kinds of plants that give us different types of food. For example, we get mangoes or guavas from mango or guava trees—which are huge—and we get tomatoes from a tomato plant, which is far smaller. Some plants provide us with their leaves as food (lettuce, for instance), while we eat the roots of others (such as carrot and radish).

Let us find out more about the food that grows on plants.



Activity 1: Food plants

You eat different varieties of food in a day, including fruits, cereals, vegetables etc. Discuss their source with your parents or grandparents and list the trees or plants that give us these foods.

1. _____
2. _____
3. _____
4. _____
5. _____

Health, food and environment are closely related. All living beings have to eat. We eat food to keep our bodies healthy and strong so that we can go about doing our day-to-day work.

The sources of food can be as follows:

1. Plants (cereals such as wheat, maize, rice and bajra; fruits such as mangoes, apples and bananas; vegetables such as potatoes, onions and spinach; pulses like moong, arhar and urad dals)

KEY TIP

Fruits are the best 'fast' food. Their regular intake helps maintain a healthy and balanced diet. Seasonal fruits should be preferred.



2. Animals (dairy products—such as milk, curd and cheese—as well as meat, fish and eggs)

A wide variety of foods is available to us. In fact, our food can vary from region to region. For example, people living in coastal areas might eat a lot of seafood (fish, prawns, etc.).

Plants grow from seeds. You can yourself grow a plant from a seed and watch it bear fruits. Would you like to?

Let us carry out another activity of sowing a seed and watching a plant grow in a small flowerpot or a garden near in your house or school.

Activity 2: Grow a food plant

Take some seeds from the fruits or vegetables you eat. Pick out one seed at a time so that you do not damage it while extracting it. Sow the seeds in the soil—make a small hole in the soil, place the seed in it, and cover the hole with soil. Make sure that the soil is wet or add water to keep it moist. You will soon see the plant emerge out of the seed and grow taller day by day.

- Record your observations and maintain a diary entry of the changes you observe every week.
- You may include colour, size, shape etc. as the parameters for observation.
- Try to include what you did to help the plant grow (e.g. added water, removed dirt).
- Discuss the daily findings with your elders to understand the process better.
- Remember to also observe the insects, small animals or birds which visit your plant and make a note of their activity.

Organic farming

The experience of growing a plant will tell you that a lot of effort and care is needed to make sure the plant is healthy.

Farmers grow food for us in large fields. Imagine the amount of hard work and resources required to grow so many plants. There are many challenges, such as lack of nutrition in soil or attacks by harmful insects or pests.

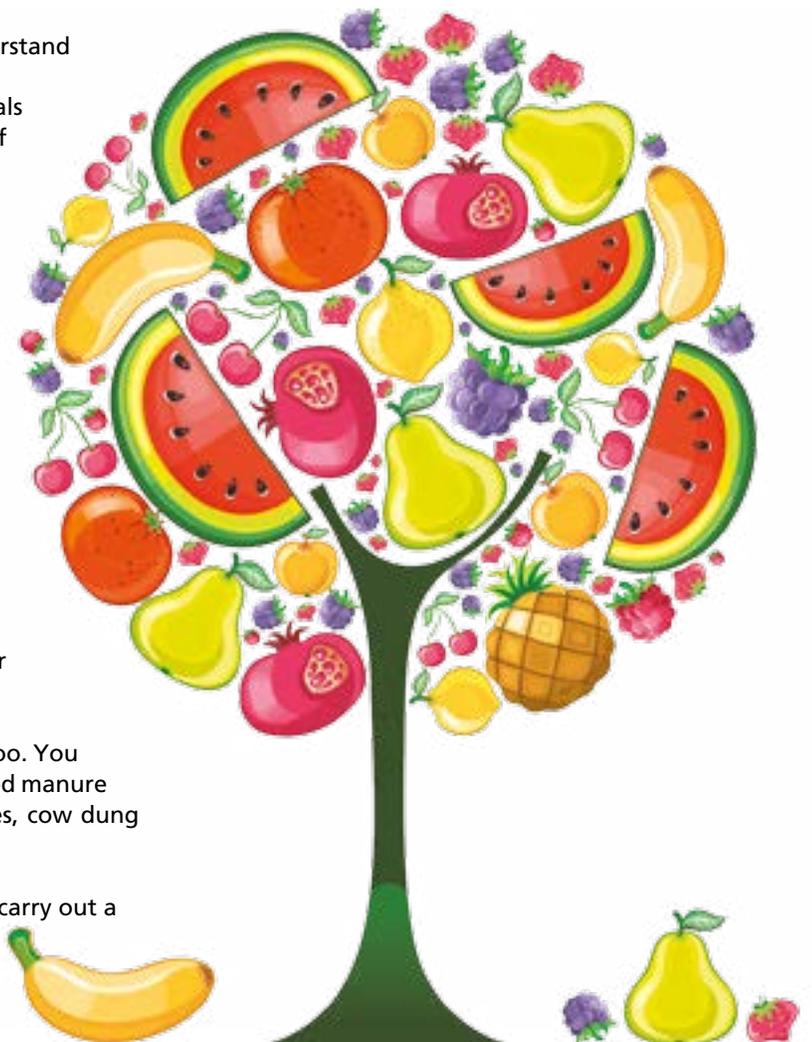
To keep the soil fertile and prevent insects and pests from harming crops and plants, farmers use chemical fertilisers and pesticides. These chemicals, which are toxic, can usually be very dangerous for our health and environment.

But there is a natural way (chemical-free) of farming too. You guessed right—it is organic farming! Naturally prepared manure (from various sources such as food waste, dried leaves, cow dung etc.) is added to the soil to build its fertility.

Have you heard of the term 'organic farming'? Let us carry out a small survey and generate awareness about it.

KEY TIP

Protein: Is there enough protein on your plate? You can increase your protein with fish, meat, poultry, eggs, pulses, nuts and milk.



Activity 3: Organic farming

Meet a few neighbours or teachers and ask questions (such as those in the following table—you can add more questions) about organic farming. Record the responses and discuss them in your class.

S. No.	Name of the person surveyed	Have you heard of organic farming? (yes/no)	Do you eat organic food? (yes/no)	Reason for your response

Seeing the benefits of organic food products, many farmers now practise organic farming. As these farmers do not need to handle chemical fertilizers, it helps them stay healthy.



KEY TIP

Carbohydrates: Grab the good ones. Prefer complex carbohydrates such as wholegrain-based foods and millets. Avoid simple sugars such as those found in soft drinks.

Have you heard any one telling you at home that growing children should be eating healthy food for good growth? This is right.

It is important to be aware of what we are eating. Eating healthy is important for us to get our daily requirement of nutrients that keep us healthy.

Different types of food help us in our daily functioning. People of different age and occupation need different kinds of food. For example, a football player needs food that is rich in energy.



Let us now explore different types of foods.

Activity 4: Types of food and their sources

We have many kinds of food. Try and match the types of food with their sources:

S. No.	Types of food	S. No.	Sources of food
1.	Energy-giving foods (give us energy to do our work)	(a)	Fresh fruits, green leafy vegetables, meat, eggs
2.	Body-building foods (help the body grow, acquire strength and repair damage)	(b)	Milk, cheese, curd, paneer, meat, pulses, fish, eggs
3.	Protective foods (help us develop the strength and stamina to fight diseases and function healthily)	(c)	Cereals rich in fibres, fruits, vegetables
4.	Dietary fibre or roughage (helps our body get rid of undigested food)	(d)	Wheat, rice, pulses, sugar, butter, oil, ghee

Answers 1 (b), 2 (d), 3 (a), 4 (c)

Water is important for our health as it helps our bodies absorb food and throw out the waste.

Balanced diet

Our body is incapable of making sufficient amount of certain nutrients that are vital for disease prevention, growth and good health. Therefore, these nutrients must come from the food we eat.

These nutrients are carbohydrates and fats (energy-giving foods), proteins (body-building foods), and vitamins and minerals (protective foods).

If your food contains these nutrients in adequate amounts, you are eating a balanced diet. A balanced diet contains all the nutrients in right amounts for our growth and development.

Nowadays, we eat a lot of packaged and processed foods such as chips and chocolates, which are not good for our bodies. Packaged foods (also called ultra-processed packaged foods) have very high contents of salt, sugar and fats. They cause many health problems such as hypertension and obesity in children as well as adults.

