

## We shall learn :


- Why we eat food
- Food groups
- Balanced diet
- Advantages of cooking
- Preservation of food

# 1








## Unit-I : Our Body and Its Needs

# Health and Food



### WARM UP

Tick (✓) the food items that give us energy :

				
rice	oil	wheat	apple	potato
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Why We Eat Food

Food is very important for us. We have breakfast, lunch and dinner. We need food for a number of reasons, such as :

- to get energy to work and grow.
- to get energy for the functioning of our internal organs.
- to grow and repair damaged cells and tissues in our body.
- to keep the body warm.
- to keep the body fit, healthy and disease-free.

## Food Groups

We eat different kinds of food. This not only suits our tastes but also provides us with all the types of nutrients. We know that **carbohydrates, proteins, fats, vitamins and minerals** are called **nutrients**. Different nutrients have different functions and are found in different food items.

### Types of food

Body-building food

Energy-giving food

Protective food

### Nutrients

Proteins

Carbohydrates and fats

Vitamins and minerals



## Proteins

Foods like milk, eggs, cheese, fish, meat, beans and all kinds of pulses are rich in proteins. These are needed for growth and to repair damaged cells and tissues. Food rich in proteins is called **body-building food**.



foods rich in proteins



foods rich in carbohydrates

## Carbohydrates

Foods like fruits, vegetables, cereals, bread, sweets, chocolates, etc give us a lot of energy. They contain carbohydrates. Food items like rice, *chapati*, bread and potato have starch. They burn up slowly to provide energy to the body. Food rich in carbohydrates is called **energy-giving food**.

## Fats

Foods like butter, *ghee*, nuts, oil-seeds and oils contain fats. They too burn up inside the body to give energy. They give more energy than the same amount of carbohydrates.

Children and people who do physical work need larger amount of carbohydrates and fats. Excess starch and fat get stored in the body under the skin. It makes people fat not fit.



foods rich in fats

## Vitamins

Vitamins help our body to fight against diseases. We must have foods which contain vitamins though our body needs a very small amount of them.

Vitamins keep our bones and skin healthy. They help our eyesight, give us energy and prevent infections. They also help wounds to heal. We have vitamins A, B, C, D, E and K. Vitamin D is also made by the skin in sunlight.



foods rich in vitamins

### Foods rich in Vitamins

Vitamins	Functions	Sources
A	It is necessary for proper functioning of skin and eyes.	Ripe fruits, milk, butter.
B	Required for healthy cells, nerves and skin.	Green leafy vegetables, soyabean, milk.
C	Needed for proper functioning of blood vessels, gums and healing of wounds.	Oranges, lemon, amla, tomato, fresh green vegetables.

D	Required for healthy bones and teeth.	Milk, butter, sunlight.
E	Helps in maintenance of muscles.	Vegetable oils.
K	Helps in clotting of blood.	Spinach, coriander leaves.

## Minerals

Minerals help in the formation of bones, teeth and blood. Different types of minerals also form an essential part of our diet. These are:

- Calcium — Present in milk
- Phosphorus — Present in milk, eggs, green vegetables, fish
- Iron — Present in pulses, spinach, nuts
- Iodine — Present in iodised table salt
- Sodium — Present in salt



foods rich in minerals

## Roughage

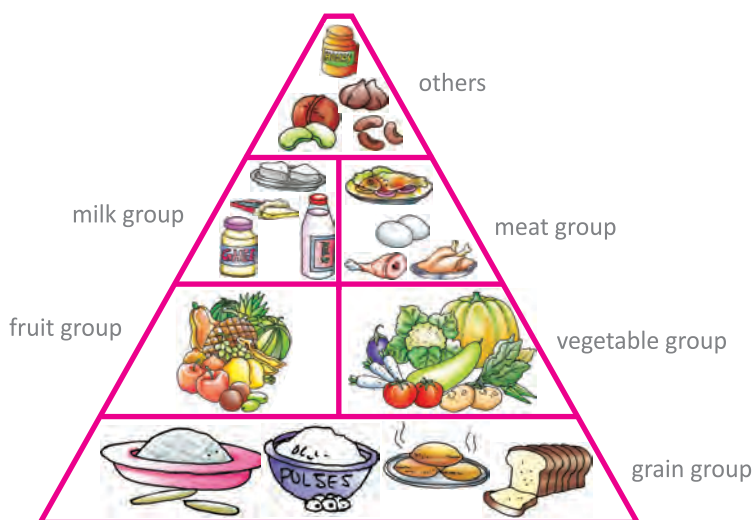
The part of food that cannot be digested is called **roughage**. It is the fibre present in our food. It is necessary for the proper functioning of the digestive system. It adds bulk to the food. It helps to remove waste material out of our body.

## Water

Water is a very important part of our **diet**. Our body needs it for all its functions. About 70% of our body is made of water. We should drink at least 8 to 10 glasses of water everyday.

## Balanced Diet

A balanced diet contains the right amount of nutrients to keep us healthy. To illustrate a balanced diet, scientists use a **food pyramid**.



food pyramid

**Wisdom Corner**

Our body needs proteins to make saliva and other digestive juices.



The food pyramid shows how much of different types of foods you should eat.


- Bread and cereals should make up the major part of your diet.
- You should eat lots of vegetables and fruits.
- You should eat some meat (but not too much) if you are non-vegetarian. A vegetarian should include pulses and beans in the diet. Dairy products should be consumed everyday.
- You should eat as few fats, oils and sweets as possible.

The food pyramid suggests that we should eat a varied diet.

### Advantages of Cooking

Raw food such as fresh vegetables and fruits have to be washed well before they are eaten. Many foods are cooked. Cooking makes food soft, tasty and easy to digest. Cooking kills germs in food. Over-cooking can spoil its taste. All the minerals and vitamins are destroyed if it is over-cooked. There are many ways of cooking :

- You can boil some foods, like vegetables.
- You can steam some foods, like rice and *dhoklas*.
- Many foods are fried, like samosas and chips.
- Peanuts and cashew nuts are roasted.
- Cakes and cookies are baked.

 **Wisdom Corner**  
Food should not be over-cooked as it destroys all the nutrients.



boiling



steaming



frying



roasting



baking

### Preservation of Food

When exposed to air, food can go mouldy and germs begin to grow in it. We have ways of preserving food to keep it fresh. Canning after boiling, dehydration, salting, sugaring and freezing are common methods of food preservation. Food that is put into cans and bottles is kept free from air. Certain chemicals are also added to the food to preserve it. These are called **preservatives**.



Common ways of preserving different kinds of food are :

1. Drying (dehydrating) the food (drying grapes to get *raisins*).
2. Pickling (mango, lime, vegetable pickles).
3. Refrigerating (keeping food in the fridge to preserve it for a short time).
4. Deep freezing (keeping food in the freezer to preserve it for a longer time).
5. Canning and bottling (sauces, jams, etc.)
6. Heating food or baking it. (a hard corn-flour biscuit remains edible much longer than a bowl of fresh corn).
7. Converting food into a long-lasting form. For example, cow's fresh milk can be converted into cheese or yoghurt which lasts much longer than fresh milk.



pickling and canning



## Glossary

Nutrients

Food substances that our body needs for proper health and growth

Roughage

The part of food that cannot be digested

Balance diet

A diet that contains the right amount of all nutrients

Preservation

Saving food from getting spoiled for a longer time

## Question Hour-I



A Tick (✓) the correct answer :

1. Which of the following give us energy?  
(a) fats  (b) minerals  (c) vitamins
2. Which of the following help our body to fight against diseases?  
(a) minerals  (b) vitamins  (d) fats
3. What helps to remove waste materials out of our body?  
(a) fat  (b) protein  (c) roughage
4. Cooking makes our food :  
(a) tasty  (b) sour  (c) tasteless
5. We use ways of preserving food to keep food :  
(a) sour  (b) fresh  (c) spoiled



**B** Fill in the blanks with the correct words from the box :

*vitamins, warm, overcooked, nutrients, carbohydrates, minerals, roughage*

1. We eat food to keep the body \_\_\_\_\_ .
2. Balanced diet provides us with all types of \_\_\_\_\_ .
3. Children and people who do physical work need larger amount of \_\_\_\_\_ .
4. \_\_\_\_\_ help our body to fight diseases.
5. \_\_\_\_\_ help in the formation of bones, teeth and blood.
6. The part of food that cannot be digested is called \_\_\_\_\_ .
7. Food should not be \_\_\_\_\_ as it destroys all the nutrients.

**C** Match the following :

- |                 |   |
|-----------------|---|
| 1. Fibres       | (a) needed for healthy eyes and skin    |
| 2. Fats         | (b) found in green vegetables           |
| 3. Vitamin A    | (d) found in potatoes and rice          |
| 4. Preservation | (e) give more energy than carbohydrates |
| 5. Starch       | (f) makes food last longer              |

**D** Answer the following questions :

1. Why do we need food?
2. What do proteins do for the body?
3. Why do we need carbohydrates?
4. How does roughage help us?
5. Why do we need to drink water everyday?
6. Name any four methods of cooking food.
7. Name the various methods of preserving food. Give one example of each.

**Think Beyond** HOTS 

1. A piece of bread tastes sweet after chewing. Why?
2. A new-born baby sleeps most of the time. Think and tell why it needs milk?

## Question Hour-II

**A** One day's menu for morning, noon and evening for two families is as follow :

Time	Family 1	Family 2
Morning	chapati, butter, milk	sprouted gram, milk, guava
Noon	chapati, <i>dal</i>	chapati, <i>dal</i> , spinach, <i>salad</i>
Evening	rice, curd	rice, <i>dal</i> , beans, curd

Which family in your opinion takes a better diet and why?



**B** Which nutrient am I?

1. I help you to grow and repair damaged parts of your body.
2. If you need quick energy, I am the one your need.
3. I keep you warm.
4. My name starts with 'V' and I help you to fight against diseases.
5. I am a mineral you should take to make your bones and teeth strong.

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**C** Write the name of vitamin/vitamins which each of the following contains :



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**Fun to Drill**



Help the boy show a balanced diet on Jinie's plate.

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**Fun to Act**



1. Make a tasty and nutritious yoghurt :  
Add chopped pieces of apples, pineapples, cucumber and tomato to a cup of beaten curd. You can also use fruits like grapes, oranges or pomegranate seeds. Add a pinch each of salt and pepper. Mix well. Your yoghurt is ready.
2. Collect the labels from jars containing pickle, sauce, ketchup, etc. Read the preservatives written on them. Stick these labels in your scrapbook.