

# LITTERA PUBLIC SCHOOL

**CLASS V**

**SCIENCE**

## **CHAPTER 3**

### **FOOD AND HEALTH**

- Health is the state of complete physical and mental well being. It is very important to be healthy.

#### **Nutrients in food:**

- Carbohydrates
- Fats
- Proteins
- Vitamins
- Minerals
- Roughage and water

#### **Carbohydrates**

It is main energy giving food. They release energy quickly.

Sources – whole grain, bread, cereal, corn, beans, peas, potato etc.

#### **Fats:**

It gives more energy than Carbohydrates.

It keeps the body warm.

Sources - butter, ghee, oil, cheese.

#### **Proteins:**

It is responsible for building our body. It helps in growth and repair worn out cells.

Sources - milk, milk products, beans, peas, fish, pulses, eggs, meat etc.

**Vitamins:** It prevents and cure certain diseases.

Vitamin A- Keeps the skin and bones healthy and help good vision.

Sources - liver, egg, carrots and milk.

Vitamin B- enables us to get energy

Sources - cereals, beans, meat, peas.

Vitamin c - helps seal wound.

sources - citrus fruit, amla, plums,lemon, tomato etc.

vitamin D.- helps the body to absorb calcium.

Sources- milk, fish, eggs etc.

**Minerals:** → They are needed in small amount. They help in proper functioning of our body and it's development.

Sources- green vegetables, fruits, seafood

Some of the minerals needed by our body are Calcium, iron and iodine.

**Roughage:** The rough part of plants which cannot be digested by the body. It helps to throw waste products out of the body.

Sources- fruits, vegetables, cereals.

**Water:** It maintains the body temperature. It helps the body to digest nutrients.

### **Balanced diet:**

- A diet with all the five nutrients in the right quantity along with Roughage and water is called a balanced diet.
- We need a well balanced diet to remain healthy and keep ourselves free from diseases.

### **Causes for disease**

Germs are the main cause of diseases.

Bacteria- cholera, plague, tetanus, typhoid, tuberculosis and pneumonia.

Viruses- common cold, chicken pox, influenza, measles, rabies AIDS and polio.

Protozoa- malaria and dysentery.

Fungi- athlete's foot and ringworm.

### **Types of diseases**

Communicable or infectious disease:

Diseases which spread from one person to another communicable microbes. They are generally caused by germs or microbes.

Ways of spread	Description	Diseases
Direct contact with the infected person	By using sheets, towel, utensils, etc. of the infected person	Cold, TB and measles
Through dirty food and water	Food which is not covered and exposed to flies and unclean water	Typhoid and cholera
Through insect bites	Female <i>Anopheles</i> mosquito and <i>Aedes</i> mosquito	Malaria and Dengue
Through the air we breathe	By germs, when a patient coughs and sneezes without keeping a handkerchief to cover the mouth and the nose	Chicken pox, whooping cough, diphtheria, influenza and scarlet fever

Prevention of communicable diseases:

1. Cleanliness prevents breeding of germs so it must be observed.
2. Children suffering from communicable diseases should stay away from attending school till they are fully recovered.
3. Report all cases of infectious diseases to civic authorities so that precaution can be taken to prevent their spread.
4. Control the breeding of mosquitoes by keeping the surroundings clean.
5. Fresh air and sunlight should be allowed into the house. Clothes and mattresses should be aired and put in the Sun.
6. Drink clean and germ free water.
7. Use wire screens in windows and doors to not let mosquitoes and flies in.
8. Do not gather garbage in and around the house. Flies breed in the garbage and carry germs to our food.

9. Disinfect toilets and bathrooms regularly.

Non communicable disease:

The diseases caused by deficiency of nutrients in our diet is called non communicable diseases.

Deficiency disease	How it affects the body	Caused due to lack of	Food which have these vitamins/minerals (sources)
Night blindness	Person cannot see in dim light	Vitamin A	Green leafy vegetables, mango, carrots, papaya, egg yolk, pumpkin and milk
Beri-beri	Affects eyes, skin growth and formation of blood and muscles	Vitamin B	Cereals, beans, brown rice, yeast, meat and peas
Scurvy	Bleeding gums and swollen joints	Vitamin C	Citrus fruits, amla, plums, lemon, tomato and strawberries
Rickets	Bones become soft and bend easily	Vitamin D	Milk, fish, cod liver oil and eggs
Goitre	Swelling of neck region	Iodine (in salt)	Iodized salt and sea food
Anaemia	Patient becomes tired easily	Iron	Green leafy vegetables, raisins, dates, apple, meat and mango