Dear Parents, in this hour of WORLDWIDE CRISIS let us utilize our time at home judiciously in this unforeseen circumstances let us prepare in advance for the upcoming sessions for our children starting from today we would be sending notes as home assignments along with the summary of the chapters, kindly help your child with this assignment so that they are not missing their studies and together we can help our children in learning at home.

CLASS V

SUBJECT -SCIENCE

L – 1 Food and Health

Dear students learn all the difficult words.

You eat food to get energy to work and play, to grow and to make your body strong and healthy. Food contain special substances called nutrients.

<u>Nutrients - </u>*They are substances that the body needs to live, grow and be healthy.*

There are five main kinds of nutrients:

1. Carbohydrates 2. Fats 3. Proteins 4. Vitamins 5. Minerals

Energy giving Foods

Carbohydrates and fats give energy to your body to work and play. Sugar and starch are kinds of carbohydrates that give quick energy.

Examples-rice, wheat, potato, etc.

Fats are stored in your body. It is used by your body later to get energy. It also keeps your body warm.

Examples-butter, ghee, oil, nuts, etc.

Body-building Foods

Proteins help your body grow. They help in making muscles, blood, skin and repairing body when it is damaged.

Examples-fish ,meat, cheese, milk, eggs, pulses, nuts, etc.

Protective Foods

Vitamins and minerals are needed by your body in small amounts to stay healthy and fit. There are many kinds of vitamins and minerals .Vitamins A,B,C,D,E and K are examples of vitamins.

Examples-Fruits and vegetables are sources of vitamins.

Body also needs minerals like calcium, phosphorous and iron.

Examples-Milk and its products, beans, meat and fish are good sources of minerals.

Water and Roughage

In addition to nutrients your body also needs water and roughage. Two-third of your body is made up of water. It is the main part of the blood. You cannot live without water.

Roughage (or fibre) is the part of food that cannot be digested by the body. It adds bulk to the foods and helps your body muscles to push the food through your intestine. It helps body get rid of undigested food.

Examples-it is present in all plant foods.

A BALANCED DIET

A diet that contains the right amounts of app nutrients, as well as water and roughage is called a balanced diet.

To make it easier for you to select a balanced diet, foods have been divided in to four groups.

- 1. <u>Cereal group</u> Rice, chapatti, bread ,noodles ,etc contains carbohydrates and minerals.
- 2. <u>Vegetable and Fruit group</u> They contain vitamins ,minerals and carbohydrates.
- 3. Milk group-Milk, cheese, curd ,etc. proteins, fats and minerals.

4. Protein group-Meat, fish, eggs, beans, nuts, peas, etc contain proteins and fats

For a balanced diet, you should eat food from each group every day.

PRESERVING THE NUTRIENTS IN FOOD

Nutrients are lost because wrong methods are used to cook or store food.

Cutting and then washing fruits and vegetables washes away some of the nutrients.

Overcooking destroys several nutrients, cooking in excess water and throwing water also removes nutrients .

If we keep fruits, vegetables or cooked food for a long time, they start smelling bad. This is the sign that germs and mould have started growing on them and they are spoiled.

Eating such food can cause **food poisoning** and other stomach problems.

Methods of preserving food.

- **1.** <u>Dehydration</u>- In this method water is removed from the food to make it dehydrated. Example: to make dehydrated peas.
- **2.**Sweetening- In this method sugar is added to preserve food. Example: to make jam or preserve fruits in sugar syrup.
- **3.**<u>Salting-</u>In this method salt is used to preserve food. Example: to preserve fish, etc.
- **4.**Canning-It is a method of preserving food in which food contents are processed and sealed in an airtight containers. Examples: fruits, jams and jellies, etc.
- **5.**<u>Pickling-</u>It is the method of preserving food.
- **6.**Preservatives-It is used to preserve food. Example: vinegar or oil.

DISEASES

It is a condition in which a person feels unwell and weak and is unable to work properly.

Diseases are of two types:

1.Infectious or Communicable Diseases

These diseases are caused by germs and can spread from sick person to healthy person. These diseases can spread in many ways.

A. Through infected food and water.

Example: diarrhea, typhoid, jaundice and cholera.

B. Through air

Examples: common cold, flu, measles and chicken pox

C. Through insects

Examples: malaria, dengue and plague

- **D.** Through direct contact- Diseases like ringworm, chicken pox, common cold, measles, etc spread by touching infected person or by using items that have been used by infected person.
- **E**. Through damaged skin- Germs cannot enter your body as your skin act as a protective wall but if your skin is cut or damaged, germs can enter freely and cause diseases.

Example-Germs of diseases such as tetanus get into your body through cuts in the skin.

PREVENTION OF INFECTIOUS DISEASES

*Keep yourself and your surrounding clean.

*Always put garbage in covered dustbins.

*Use disinfectants to clean floor, drains, bathroom etc.

*Use antiseptics to clean wounds, cuts or insect bites.

- *Use insecticides to kill insects.
- *Use mosquito repellents and nets to prevent mosquito bites.
- *Stay away from infected person.
- *Boil drinking water for 10 15 minutes or use water purifier to kill germs.

IMMUNISATION

People especially children are given vaccination to prevent them from getting serious diseases.

Vaccination is the process in which special substance called vaccine that is made of small quantity of dead or very weak germs of a particular disease is injected into the body of a person to develop immunity against a particular disease.

Example: typhoid, tetanus, polio and mumps(controlled through vaccines).

2.NON INFECTIOUS OR NON COMMUNICABLE DISEASES

Some diseases do not spread from one person to anothers

Deficiency diseases	Other non communicable diseases
They are caused due to the deficiency of nutrients in the food	Allergy, diabetes, arthritis, asthma.
	Some are caused by bad habits like smoking.

EXERCISE

Exercise makes your muscles strong. It also helps people lose weight and lower the risk of some diseases. Regular exercise keeps you healthy and fit.

REST

Your body requires proper rest. You should sleep atleast for 8 hours every night so that you can wake up fresh.

POSTURE

Posture is the position in which you carry your body while standing, sitting or lying down. You sand walk should always sit, stand and walk straight. This is good for your bones and muscles.

As you all know that exercise, rest and posture are very important in keeping your body healthy and fit, so exercise regularly and take proper rest.

Dear students read this chapter and make a table showing important vitamins and minerals, sources, functions and their deficiency diseases in your science notebook.

Looking Back(pg no. 8)

TO BE DONE IN TEXTBOOK

Fill in the blanks

- 1.Plague
- 2.Insecticides
- 3. Non-infectious/non-communicable
- 4.Beriberi
- 5. Anaemia.

EXERCISES

A.Multiple choice questions:

1.bread 3.dengue

2.baking 4.goitre

B.Match the words in the two columns:

1.energy giving food

2.cannot be digested

3.mosquitoes

- 4.lack of vitamin A
- 5. Vitamin C

6.lack of vitamin D

FROM Q.C ONWARDS TO BE DONE IN SCIENCE NOTEBOOK .WRITE IN GOOD HANDWRITING AND DO NEAT WORK.

C. Give one word for the following:

1. Proteins 2. Preservatives 3. Conjunctivitis 4. Disinfectants

D. Unscramble the letters to form words:

- 1.CARBOHYDRATE 2.COMMUNICABLE
- 3.DISEASE 4.IMMUNISATION

E. Answer the following questions:

Ans 1. The five types of nutrients in food that keep you healthy and fit are-

i.Carbohydrates ii.Fats iii.Proteins iv.Vitamins v.Minerals

Ans 2.Roughage adds bulk to food and helps your muscles to push the food through your intestines. It also helps your body get rid of undigested food.

Ans 3.A diet that contains the right amount of all the nutrients, water and roughage is called a balanced diet.

Ans 4.Foods have been divided into four groups because it makes you easier to select a balanced diet.

Ans 5. Chickenpox spread from an ill person to healthy person by directly touching infected person, by using items that have been used by the infected person like towel, handkerchief or toys, etc. Chickenpox virus (germs) can also spread through the air by coughing and sneezing.

Ans 6.Vaccines are special substances made up of small quantities of dead or very weak germs of a particular disease or substances produced by these germs.

Vaccine is injected into the body of a person. When it enter the body, produces substances that can fight the germs. Thus, the body become capable of fighting any future attack from the germs of that disease.

Ans 7.

Infectious Diseases	Non-Infectious Diseases
1. They spread from infected person to healthy	They do not spread from infected
person	person to healthy person
2. They are caused by germs	They are caused by the deficiency
	of nutrients or malfunctioning of the
	body part
3. They can be prevented by not using items	They can be prevented by having a
that are used by infected person or by avoiding	balanced diet, regular exercise
direct contact with the infected person	
4.Example:Common cold, flu, chickenpox,	Example: Beriberi, scurvy, asthma,
Measles, etc.	Allergy, etc.

Ans 8.Lack of exercise makes your muscles weak and flabby. Extra fat will accumulate in your body that makes you overweight and unhealthy.

Higher Order Thinking Skills (HOTS)

The reason is that street vendon's does not cover the food properly which in turn spread diseases. Street food is also unhygienic and unhealthy .

Draw four sources of all the 5 nutrients.

Ex.Fats - oil, butter, nuts, cheese.....and so on

Note- some activities we will perform in the class.

Children those who have not purchased book set, they can write in their old notebooks and diagrams you can draw after the puchasing of book set.

stay home.... stay safe