



NUTRITIOUS FOOD



4.1. Varieties of food items

We get energy from the food we eat everyday. Food helps us to grow and maintain good health. Let us see what Navid, Aruna and Sagar eat daily.

Navid eats (takes) rice with pickle, chilli powder and oil. He rarely drinks milk, eats fruits, vegetables and leafy vegetables occasionally. Sometimes, he buys junk food from the shop and eats it.

Aruna likes to eat the food available in the market

like chips, mixture, biscuits, ice-creams, bread-jam, noodles etc., everyday. She eats these items daily. She does not prefer eating rice, vegetables, fruits, leafy vegetables and pulses (dals).



Sagar eats different varieties of food such as vegetables, cereals, eggs, leafy vegetables, fruits etc. He eats home made ground nut laddus and gingelly (sesame) laddus. Besides these, he eats

sprouts (germinating seeds) and raw vegetables. Boiled or fried groundnuts, green gram, bengal gram, jowar chapatis are taken as food in his house. Ragi malt is also used as food by him.

Group work



- ◆ Why do you think Navid eats food only with pickles?
- ◆ Are Aruna's food habits good? Why?
- ◆ Of the three children mentioned above, whose food habits are similar to you?
- ◆ Among the three, whose food habits do you think are correct? Why?

Our health depends upon the type of food we eat. Everyday, we should eat all types of food items. We should eat the food which helps us to grow, gives energy, and health and which helps develop immunity against diseases. Do you know the components present in the food we eat?

4.2. Energy giving Foods - Cereals, Millets

Paddy, wheat, jowar, maize, ragi, bajra, little millet (samalu), foxtail millet (Korralu) are called millets (chirudhanyalu). These food items give the necessary energy to our body. We need energy to grow, to work and also for our organs to function properly. The component which give energy are called carbohydrates or starch. 'Millets' contain more of starch. Nutrients like proteins, vitamins, mineral salts are also present in little quantity. Let us observe the following pictures of the millets and cereals which contain carbohydrates.



Group work



- ◆ Which of the above do you not know?
- ◆ What food items are prepared from the grains given in the picture?
- ◆ Which grains are eaten in your house?
- ◆ Why was the usage of ragi, jowar and other millets decreased?
- ◆ Why do we consume rice, wheat or jowar mostly?

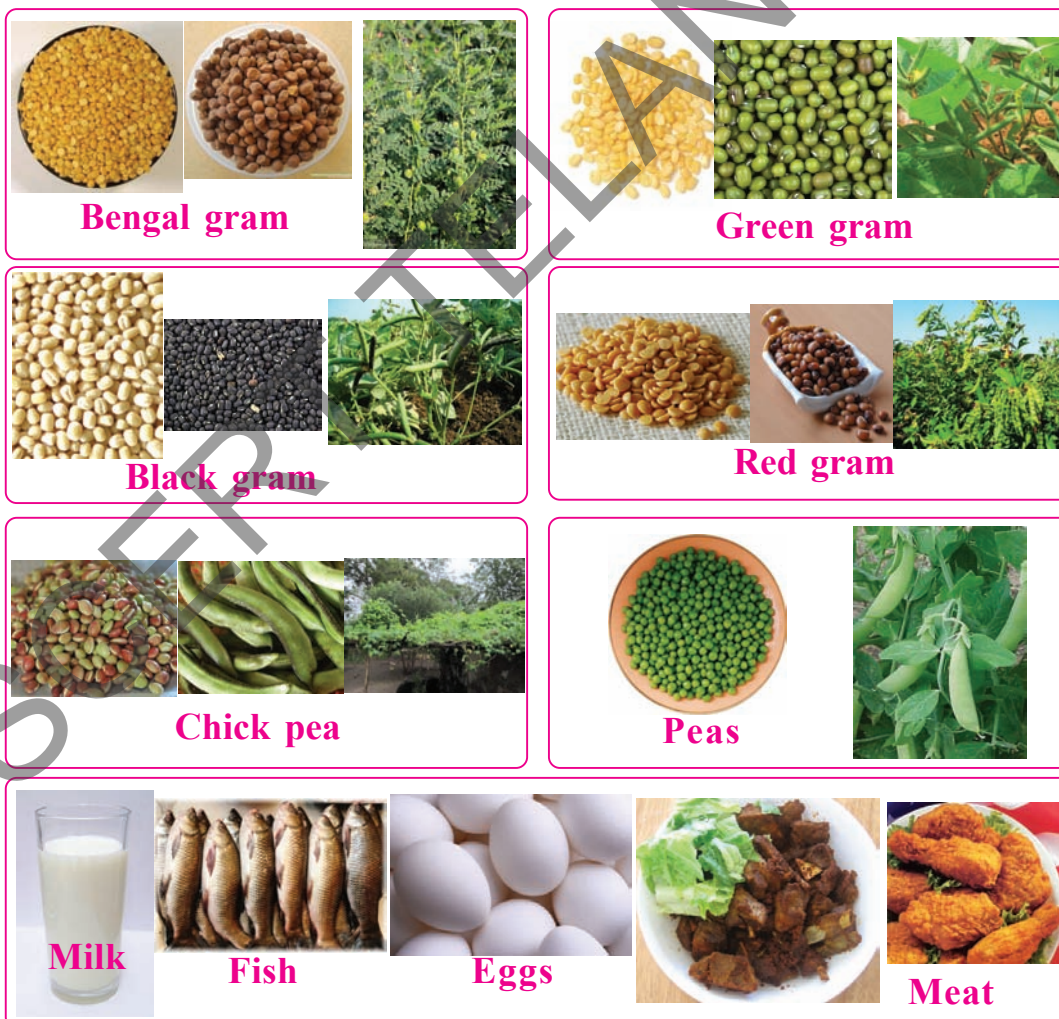


Potato, sugar, jaggery, sweet potato, some varieties of fruits also contain nutrients that give us energy. Butter, ghee and oils contain more amount of fats. Fats also give us

energy. Excess fats are stored in our body. The energy stored in the form of fats gives us extra energy when needed by the body.

4.3. Food Substances Useful for Growth - Pulses, Milk, Eggs

Bengal gram, green gram, black gram, chick pea, peas, etc. are called pulses. Along with them, milk, eggs and meat help in our physical growth. We grow well if we eat all these.



Group work



- ◆ What items from the previous page, do you know?
- ◆ What food items are prepared from them? Do you like them? Why?
- ◆ Which pulses (dals) are used in your house? What are prepared with them?
- ◆ Why can't every one take eggs, milk and curd as food daily. Why?

When some cells die they are replaced by new cells in our body. For example when we are injured, new cells are formed to heal the wound. Nutrients called 'Proteins' are essential to heal wounds. These proteins are found in pulses (dals). Apart from proteins, pulses also contain starch, vitamins and mineral salts in minute quantities. In foods like fish, eggs, meat and milk abundant proteins are available. Milk contains calcium which helps in the growth and strengthening of bones. Hence, we should see that our food includes pulses, milk and eggs.

4.4. Food that keeps us healthy - fruits, vegetables

Vitamins are necessary to make use of the carbohydrates and proteins taken by us. Mineral salts like iodine, phosphorus, calcium, iron combined with proteins form a part of our organs. Iron is found in the blood. Calcium and phosphorus are present in bones and teeth. Vitamins are found in sprouts (germinating seeds) and also in the fermented food items (idli, dosa,). Vitamins and mineral salts are necessary for our body and are found abundantly in fruits and vegetables.



Think and say...

- ◆ Which fruits and leafy vegetables did you eat during last week?
- ◆ What raw vegetables do you eat?
- ◆ Write the names of the fruits which you never ate?
- ◆ Write and discuss the reasons why you do not eat fruits, everyday ?
- ◆ Write the names of the fruits and vegetables available in your locality which you need not buy ?
- ◆ What food substances improve our resistance against diseases?

When compared to carbohydrates and proteins, vitamins and minerals are needed in a very small quantity for our body. They are essential to our body. We fall sick, if they are not taken enough in our food. They give us resistance to fight against the diseases.

4.5. Importance of food

4.5.1. Food - Health

Rashmi is 5 years old



Rashmi looks like a three - year old girl.

Her hands and legs are thin. Her stomach is swollen like a pot. She falls ill very often. She always looks tired. She cannot go to school regularly. She does not

have enough energy even to play.

Food

It is very difficult for her to get minimum meals.

Kailash is 7 years old

Kailash appears to be older than his age.

He is obese. It is difficult for him to run and walk. He can not do his routine work actively. He spends most of his time watching television.

Food

He does not prefer to eat home-made food like rice, vegetables, dals and chapati. He eats chips, burger, pizza and likes cool drinks.



Think and say...

- ◆ Why are Rashmi and Kailash unhealthy? What kind of food should they eat if they have to become healthy?

4.5.2. Nutritious Food

We have seen Rashmi and Kailash. Kailash does not like the food cooked at home. On the other hand, it is difficult for Rashmi to get food. More than half of the children across India do not get required nutritious food, necessary for their proper growth. Think, why is their condition so? These children are weak and frequently fall ill. Every child has a right to get the proper nutritious food. For this purpose, the government is implementing, 'Mid-day-meals' program in all the government schools providing nutritious food to all the school going children. Every child must have mid-day meals in the school. Government has given the 'menu' which contains the food items to be supplied daily. Parents and teachers should see that the lunch is provided as per menu.

Think and say...

- ♦ What food items are served for lunch in your school?
- ♦ Are you getting all types of food, with nutrients in your school?
- ♦ What is your opinion about the Mid-day-meals programme?

Group work



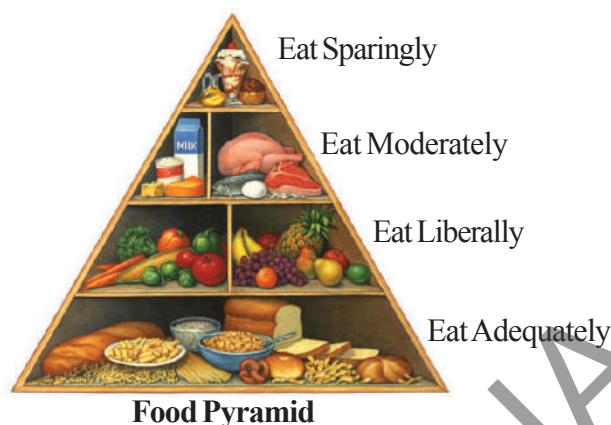
- ♦ Write about the food items you had last week at your home in the table given below.

Day	Food items taken in your house	Energy giving	Help in growth	Healthy food
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

- ♦ Which food items are served very often?
- ♦ Which food items have nutrients that give us energy, help in growth, make us healthy?
- ♦ Do you think that the food you have taken is nutritious? Why?

We feel hungry everyday. That means our body is reminding us that we need to take food. Our body needs carbohydrates, proteins, vitamins and mineral salts. We need to take food that contains all the nutrients. Such food or diet is called a balanced diet. We should eat food that contains various types of cereals, millets, pulses, vegetables and fruits everyday as each one is a source of different nutrients. The

food that is eaten is digested in the body. The useful part of the digested food reaches the blood. This digested food reaches all parts of our body through the blood. Hence, the body gets energy. This helps in body building (growth of the body) and also in maintaining good health. We become healthy. That is why, we should eat food that contains all the necessary nutrients.



Think and say...

- ♦ What happens if we do not eat all types of food?

Do you know?

A medium sized tomato contains 1.08 gms. of proteins, 1.5 gms. of fibre. Minerals like potassium, phosphorus, magnesium, sodium etc. are available abundantly. Along with these, Vitamin A, Vitamin B₂, B₆, Vitamin C, Vitamin E, Vitamin K and other Vitamins are



also present in plenty. It gives 22 calories of energy.

Our body and face, swell, if the nutrients required for the growth of the body are not taken. Children can not remain active in studies and also while playing games. They look tired. Their hair falls off.

Hands and legs become thin if we do not eat the food that gives us energy and helps in growth. Belly swells and ribs can be seen clearly.

Body growth and development is retarded if the necessary nutrients are not taken. Brain does not develop properly. Thus, physical and mental development is retarded. Neither we can study nor play well.

Some children throw away the pieces of vegetables and curry leaves from the curry or dal served to them. Most of the children prefer to eat their food with pickles brought from home. These children are thin and weak. Such children fall ill very often. They do not grow properly and remain short and weak.



Some children do not like to eat the food cooked at home. They eat junk food (unhealthy snacks) and they become obese. They suffer from health problems. A three - legged stool can not stand even, if one of its legs is broken or missing. In the same way, energy giving foods (carbohydrates, fats, oils), growth foods (proteins) and foods that help in maintaining good health (vitamins and minerals) must be present in the food we take. Lack of any of the above makes

people unhealthy.

4.5.2. What should we eat?

The food habits followed in our houses for years are good and helpful in maintaining our health. Now-a-days people are getting used to eat instant food. This leads to less intake of nutrition. Jowar corns (popcorns), boiled or fried Ulavalu (horsegram), bengal gram, round gram cowpea (bobbarlu), semi fried jowar spike, ground nuts are beneficial (helpful) for health. Like wise, ragi or jowar chapathis, hand-pounded rice, boiled jowar, laddus made of black gram, groundnuts gingelly, cooked ragi etc., contain good nutritive values. They are tasty too! We should take care that the food we eat is enriched with them. Intake of fresh and low cost leafy vegetables, vegetables and fruits is necessary for good physical and mental development.

Think and say...

- ♦ What type of food do you take very often ? Why ?
- ♦ What type of food do you take meagrely ? Why ?

4.6. Junk food

While going home from school, children purchased some eatables from a shop. They purchased some other eatables from another shop and went home eating. Discuss about the eatables purchased and eaten by the children.

Group work



- ◆ Write the names of the junk food available in the shop.
- ◆ What do you like to buy and eat? Why do you like them?
- ◆ How many days can these items be stored for?



Think and say...

- ◆ List out the items which you do not know from the above picture ?
- ◆ Do you know the method of preparation of any of the above?
- ◆ How long can they be stored?
- ◆ Junk food, cool drinks are harmful to our body. Then why are they available in the market?
- ◆ Is junk food healthy?

Cool drinks are harmful to our body - Try to know how they spoil your health. It is healthy to drink lemon juice, butter milk, coconut water, fruit juices and milk.

Machines are used to prepare the items given in the above picture. In order to store them (preserve them) for longer duration, chemicals are used. They add salt, chilli powder and sugar to make them tasty. To make them attractive they add artificial colours. In the process, they lose their natural nutrients. These are wrapped

and packed in colourful packages. Many people like them as they are tasty, attractive and supplied in beautiful packets. We do not get the required nutrients from these junk foods. Generally, junk and fried foods contain high calories (carbohydrates) more salt and oil which harm our body. So, it is better to avoid them rather than suffer from health problems like obesity as faced by many people all over the world.

Keywords

nutritious food	traditional food	resistance
carbohydrates or starch	energy	children's right
proteins	growth	obesity
junk food	immunity	mid-day meal
	maintain good health	food pyramid



1. Conceptual Understanding

- What is meant by nutritious food? Why should we take nutritious food?
- Write two examples for each of the foods that give us energy, health and help in the growth of the body.
- What is the difference between carbohydrates and proteins?
- Why should we avoid eating junk food??

2. Questioning and Hypothesis

- Raju's mother prepared Vadas with bajra (Sajjalu). Raju wanted to know about bajra. What questions do you think he asked his mother?
- Kiran is lean (thin) and weak. He does not participate actively in games and studies, he falls ill very often. Why does this happen?

3. Experiments - Field Observations

- Learn about the preparation of fruit salad from your elders and write the method of its preparation.

4. Information Skills, Projects

- ♦ Ask 5 of your friends about the food they eat, what nutrients does it contain. Put a tick '✓' below

S.No.	Name of your friend	Food Taken	Nutritive substances received			
			Proteins	Carbohydrates	Fats	Vitamins
1.						
2.						
3.						
4.						
5.						

5. Communication through Mapping Skills, Drawing Pictures and Making Models

- Draw the diagrams of the food items from which we get proteins, carbohydrates and mineral salts.
- Draw a food pyramid

6. Appreciation, Values and Creating Awareness towards Bio-diversity

- Neelima went to the bakery with her uncle. He said that she could buy a burger or a pizza or a curry puff. But, Neelima said that they were not good for health and she did not want them. Write a few lines appreciating Neelima.
- Why should we preserve / protect all types of millets.

I can do this

- I can explain the need for taking nutritious food. I know what nutrients are present in different food substances. Yes / No
- I can question about food items. Yes / No
- I can explain the method of preparation of fruit salad. Yes / No
- I can talk about the food items taken by my friends and the nutritive substances present in them and I can also write and explain these facts in a tabular form. Yes / No
- I can draw and explain the food pyramid. Yes / No
- I can highlight the importance of millets and also give information about the harm caused by junk foods. Yes / No