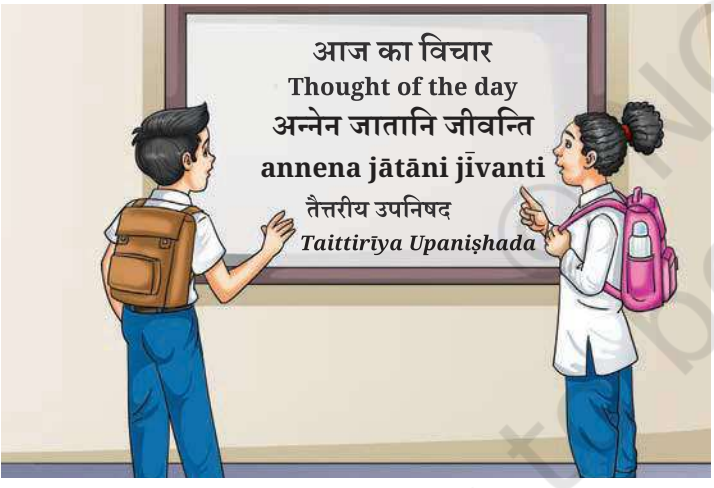
Chapter 3

Mindful Eating: A Path to a Healthy Body

> कोऽरुक्? कोऽरुक्? कोऽरुक्?
> हितभुक् मितभुक् ऋतुभुक्
>
> (सुभाषित)
>
> Who is healthy? Who is healthy? Who is healthy? One who eats food that is wholesome, in moderate quantities, and appropriate for the season, time, and place.
>
> (*Wise saying*)

0677CH03



Medu and Mishti read 'thought of the day' on the school noticeboard every day. Today's thought, *'annena jātāni jīvanti'*, makes them curious. Mishti tells Medu that it is a Sanskrit saying which means 'food gives life to living beings.'

Let us try to understand the significance of this saying.

3.1 What Do We Eat?

Activity 3.1: Let us record

All of us eat food every day. Food is an essential component of our daily life. List the food items you have consumed over the week in Table 3.1.

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Table 3.1: Food items consumed over a week

Day	Food items
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

What observations can you make about your food from the data collected in Table 3.1? Do you eat the same kind of food in every meal or do your choices vary? **Compare** your list with those prepared by your friends. Find similarities and differences in the food consumed by you and your friends. What did you find? Record your findings in your notebook. You may have noticed that there is a variety in the food eaten by you and your friends.

Do you think that such diversity in food exists in all states of our country?

3.1.1 Food in different regions

Activity 3.2: Let us explore

- Find out the types of food traditionally consumed and the crops grown in various states of India. You may refer to books in your library, search the internet, and interact with your friends, family and neighbours to collect information.

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- In Table 3.2, add more states and fill the collected data. A few examples are already given.

Table 3.2: Some traditional food items in various states of India

State	Locally grown crops	Traditional food items eaten	Beverages
Punjab	Maize, wheat, chickpea, pulses	*Makki di roti*, *sarson da saag*, *chhole bhature*, *parantha*, halwa, *kheer*	Lassi, *chhach* (buttermilk), milk, tea
Karnataka	Rice, ragi, *urad*, coconut	Idli, dosa, sambhar, coconut chutney, ragi *mudde*, *palya*, rasam, rice	Buttermilk, coffee, tea
Manipur	Rice, bamboo, soya bean	Rice, *eromba* (chutney), *utti* (yellow peas and green onion curry) *singju*, *kangsoi*	Black Tea
Any other			

Why do we see diversity in traditional food consumed in various states of our country?

Analyse the data collected by you in Table 3.2. Are there food items that are common across states? Make a list of those food items. You may find that some food items are common in many states while some are eaten only in a particular state.

What relation do you find between the traditional food items and the locally grown crops? You must have observed that the traditional food of any state is usually based on the crops grown in that state. India is an agricultural country with diverse soil and climate types. Various crops are grown in its different regions depending on the soil types and climatic conditions.

In various regions of India, the choice of food may vary according to the **cultivation** of food crops in that particular region, taste preferences, culture, and traditions.

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3.1.2 How have cooking practices changed over time?

You have learnt that food habits vary across states. Our food choices as well as practices of food preparation may differ from one another. Have our food habits and cooking practices changed over time?

Activity 3.3: Let us interact and find out

- Prepare a list of questions for gathering information from elderly people about their food habits and cooking practices. Following are some of the sample questions—
  - What kind of food do you still eat and what is new?
  - What are the changes in cooking practices over time?
  - What has caused these changes?
- Conduct interviews with some elderly people based on the questions prepared.



(a) Chulha (Traditional stove)



(b) Modern gas stove



(c) Sil-batta (Stone grinder)



(d) Electrical grinder

Fig. 3.1: Change in cooking tools over time

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What are your findings from the interviews you conducted? Cooking practices, also called **culinary practices**, have changed over time. There is a significant difference between traditional and modern culinary practices. Earlier, most cooking was done using a *chulha* (Fig. 3.1a). Nowadays, most of us cook using a modern gas stove (Fig. 3.1b). Earlier, most grinding was done manually using a *sil-batta* (Fig. 3.1c). These days, we use an electrical grinder for ease of grinding (Fig. 3.1d). Find out what were the other ways of cooking and grinding. Why have these culinary practices changed over time? These changes may be due to factors such as technological development, improved transportation and better communication.

3.2 What are the Components of Food?

Medu and Mishti visit the 'Traditional Food Festival' organised in their school. The theme of the festival is 'Eat Healthy, Live Healthy'.



The festival features various stalls displaying different kinds of traditional dishes. Dr Poshita, a nutritional expert, explains to students that 'Health is the Ultimate Wealth'.

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Let us understand what Dr Poshita means by this statement.

Have you ever missed a meal? How do you feel when you miss a meal?

We feel tired and less energetic when we do not eat for some time. Why do you think a marathon runner drinks glucose water during and after a race?

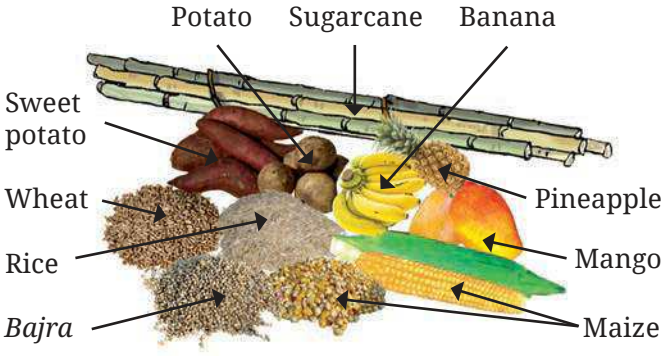


Fig. 3.2: Some sources of carbohydrates

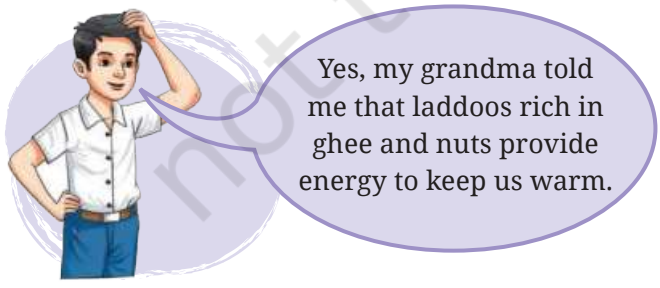
Glucose provides instant energy. Glucose is an example of a carbohydrate. **Carbohydrates** are one of the primary sources of energy in our diet. Cereals like wheat, rice, and maize, vegetables like potato and sweet potato, and fruits like banana, pineapple, and mango are some sources of carbohydrates (Fig. 3.2).

Do you know that common sugar is also a type of carbohydrate?

Why do you think we prefer to have *laddoos* as a part of our traditional diet in winters?



Besan or wheat flour (*aata*) and ghee are among the main ingredients of laddoos along with *goond* (edible gum), nuts, and seeds. Ghee and various kinds of oils are grouped under another kind of food component, which is called **fat**.



Sources of fats can be from plants or animals (Fig. 3.3). Nuts, such as groundnuts, walnuts, coconuts, and almonds, and seeds, such as pumpkin seeds and sunflower seeds, are some sources of fat. Fat is a source of stored energy.

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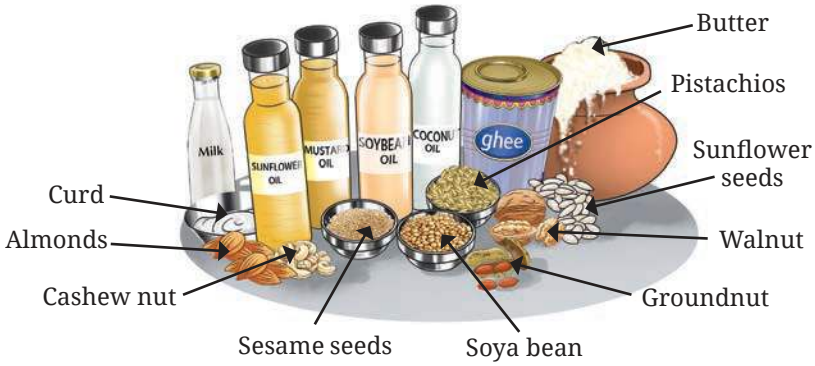


Fig. 3.3: Some sources of fats

Carbohydrates and fats provide us energy for performing various activities. Therefore, they are called **energy-giving foods.** Identify more food items that are rich sources of carbohydrates and fats .

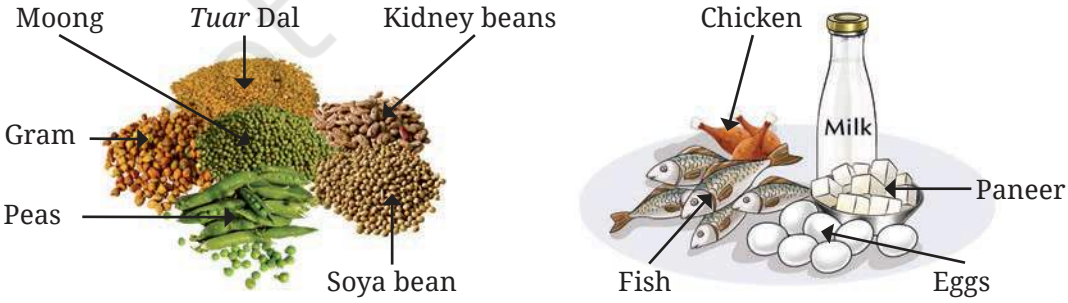


Polar bear

Polar bears accumulate a lot of fat under their skin. This fat serves as an energy source. It supports them during their months-long winter sleep (hibernation), enabling them to survive without eating.

More to know!

Proteins are also an important part of our food. Milk products and pulses are good sources of protein. Sportspersons need proteins in larger quantities to build their muscles. People get proteins from plants as well as animals. Some excellent plant sources of protein are pulses, beans, peas and nuts (Fig. 3.4a). Animal sources of protein are milk, paneer, egg, fish and meat (Fig. 3.4b). Protein-rich foods help in growth and repair of our body. These are, therefore, called **body-building foods**.



(a) Plant sources *(b) Animal sources*

Fig. 3.4: Some sources of proteins

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The right amount of protein must be included in the diet of growing children for their proper growth and development. Which of these food components are part of your daily diet?

More to know!

Have you ever seen mushrooms? They grow mostly in dark and moist places. Edible mushrooms are good sources of protein.



Mushroom

Why do you think we are advised to include servings of fruits, vegetables and other plant-based foods in our daily diet? Let us understand the importance of some other **food components** by reading the following two cases—

Case 1

In earlier times, during long voyages, sailors often suffered from bleeding and swollen gums. During a voyage in 1746, Scottish physician James Lind observed that sailors who consumed lemons and oranges recovered from these symptoms. Bleeding and swollen gums are symptoms of a disease called **scurvy**.

What do you **interpret** by reading Case 1? What cures scurvy? Lemons and oranges help in curing scurvy. Scurvy is caused due to deficiency of Vitamin C. **Vitamin C** present in citrus fruits like lemons and oranges helps in curing this disease.

Case 2



In the 1960s, Indian scientists found that among the human population in the Himalayan region and the Northern plains of India, symptoms of swelling at the front of the neck were prevalent. As per norms of the Government of India, an effort was made to supplement common salt with iodine for preparing **iodised salt**. Consumption of iodised salt visibly reduced the above symptoms. These symptoms were due to a deficiency of iodine in the soil of this region resulting in a lack of iodine in the local food and water supply. Swelling at the front of the neck is a symptom of a disease called **goitre**.

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What do you **infer** from Case 2?

You may have learnt about iodised salt through newspapers, advertisements or by reading about it on a salt packet. What does it mean? Iodised salt is simply common salt mixed with required quantities of salts of iodine.



Salt farming is a traditional practice of a tribal community named *Agariyas*. They practice salt farming in the Little Rann of Kutch and other parts of Gujarat. For eight months, they live in the extreme heat of the desert and work very hard to get salt from seawater.

More to know!

How would you find out more about other food components that protect our body from various diseases?

Activity 3.4: Let us conduct a survey

- Study the chart given in Fig. 3.5 to explore the functions and sources of various food components. Find out more sources of vitamins and minerals. Also, understand the symptoms of the diseases caused by the lack of these food components.
- Visit your neighbourhood, interact with people and find out if any individual shows the symptoms listed on the chart (an investigatory project of this kind can be taken by the students under the guidance of a teacher).
- Correlate these symptoms with their diet and identify the deficiency disease(s) or disorder(s).
- Suggest the possible cause(s) for the symptoms observed and changes required in the diet for improvement.
- Suggest them to visit a doctor for further advice.

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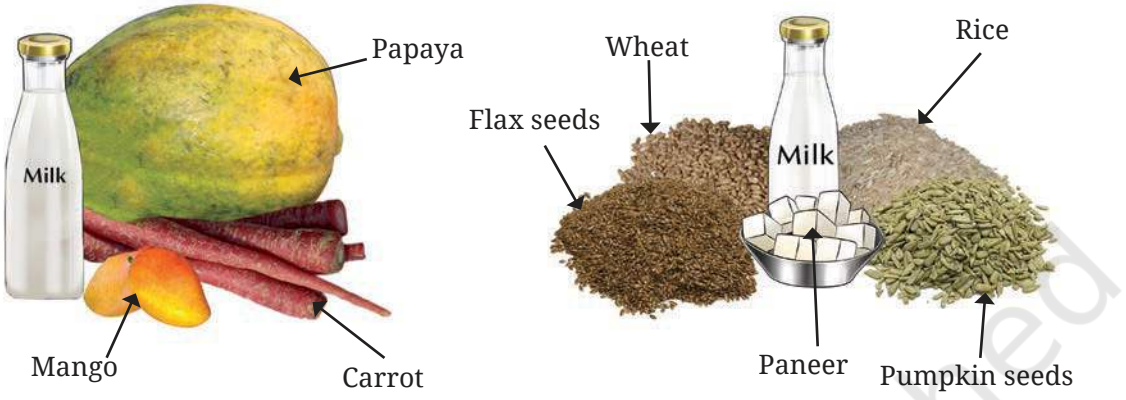
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Food component (Vitamin/ Mineral)	Functions	Some sources	Deficiency disease/ disorder	Symptoms
Vitamin A	Keeps eyes and skin healthy	Papaya, carrot, mango, milk	Loss of vision	Poor vision, loss of vision in darkness (night blindness), sometimes complete loss of vision
Vitamin B_1	Keeps heart healthy and supports body to perform various functions	Legumes, nuts, whole grains, seeds, milk products	Beriberi	Swelling, tingling or burning sensation in feet and hands, trouble in breathing
Vitamin C	Helps body to fight diseases	*Amla*, guava, green chilli, orange, lemon	Scurvy	Bleeding gums, slow healing of wounds
Vitamin D	Helps body absorb calcium for bone and teeth health	Exposure to sunlight, milk, butter, fish, eggs	Rickets	Soft and bent bones
Calcium	Keeps bones and teeth healthy	Milk/soya milk, curd, cheese, paneer	Bone and tooth decay	Weak bones, tooth decay
Iodine	Helps to perform physical and mental activities	Seaweed, water chestnut (*singhada*), iodised salt	Goitre	Swelling at the front of the neck
Iron	Important component of blood	Green leafy vegetables, beetroot, pomegranate	Anaemia	Weakness, shortness of breath

Fig. 3.5: Chart of vitamins and minerals, their functions, some sources, related deficiency disease(s)/disorder(s) and symptoms

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From Fig. 3.5, you have learnt that **vitamins** (A, B_1, C and D) and **minerals** (calcium, iodine, and iron) are two groups of food components that protect our body from various diseases. But, how can we overcome vitamin and mineral **deficiency diseases** or disorders?



(a) Some sources of Vitamin A

(b) Some sources of Vitamin B_1

(c) Some sources of Vitamin C

(d) Some sources of Vitamin D

Fig. 3.6: Some sources of different vitamins

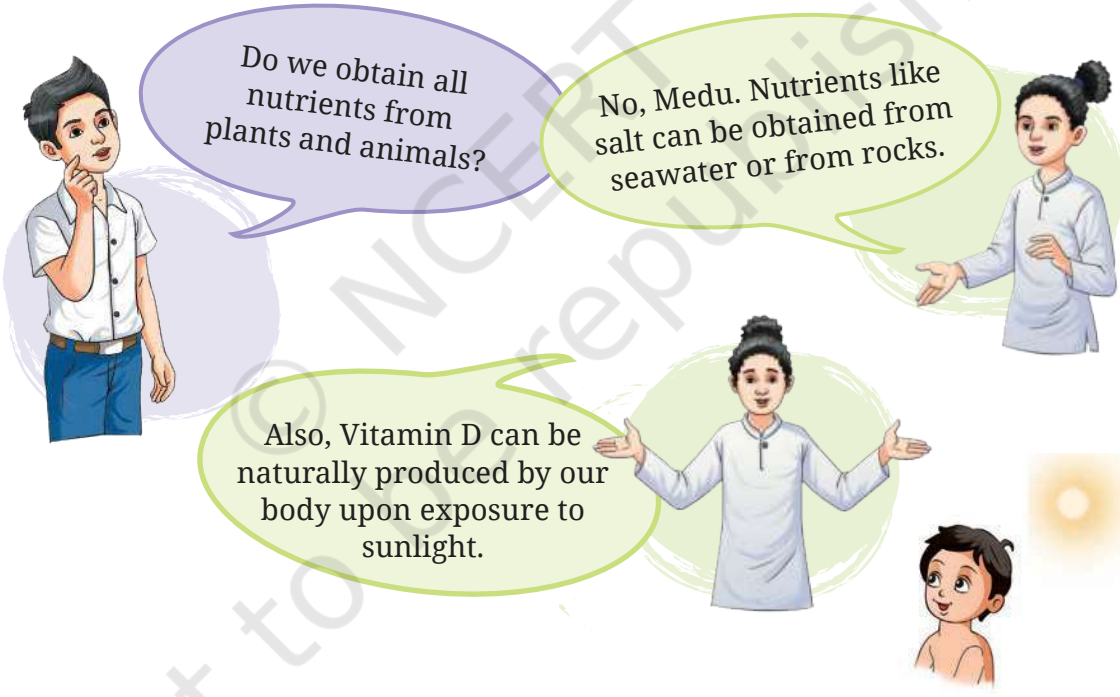
Food components that provide energy, support growth, help repair and protect our body from diseases, and maintain various bodily functions are called **nutrients**. The major nutrients in our food include carbohydrates, proteins, fats, vitamins and minerals.

Vitamins and minerals are also called **protective nutrients.** These nutrients protect our body from diseases and keep us healthy. Your parents may have advised you to have

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milk, green vegetables, fruits and wholegrains regularly. These food items are some sources of vitamins (Fig. 3.6) and minerals. Although vitamins and minerals are required in small amounts, they are essential to keep our body healthy.

What differences do you **observe** in raw and cooked vegetables? Have you ever noticed that vegetables sometimes lose their bright colour, or become softer and less crisp when cooked? Some nutrients like vitamin C and others are lost during cooking due to high heat. Would it not be wise to include fruits and uncooked vegetables into our diet? Washing cut or peeled vegetables and fruits may also result in the loss of some vitamins. However, it is highly recommended that all fruits and vegetables be thoroughly washed before consumption.



Fruits and vegetables are rich in dietary fibres. Let us see how dietary fibres are beneficial for us.

In addition to the essential nutrients, our body needs dietary fibres and water. Dietary fibres, also known as **roughage**, do not provide any nutrients to our body. However, they are an essential component of our food. They help our body get rid of undigested food and ensure smooth passage of stools. Roughage in our food is provided mainly by suitable plant products.

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Green leafy vegetables, fresh fruits, wholegrains, pulses and nuts are good sources of roughage.

Eating food that is locally grown and plant based, to the extent possible, is not only healthy for the body but is also good for our environment and our planet.



Water is also an essential part of our diet. It helps the body absorb nutrients from food. It removes waste from the body through sweat and urine. We should drink sufficient water regularly to keep ourselves healthy.

What are the food sources that provide water to our body? List a few of them. ?

Know a scientist



Coluthur Gopalan (1918–2019) initiated nutrition research in India. He analysed more than 500 Indian foods for their nutritional value and recommended an appropriate diet in the Indian context. He led surveys on the nutritional status of the Indian population, identifying widespread deficiencies in protein, energy, and other food components. This led to the implementation of the Mid Day Meal Programme in 2002, now a 'PM POSHAN' initiative, to provide balanced food in the government-run and government-aided schools of our country. This scheme has played a role in improving the health and nutrition of millions of children nationwide.

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3.3 How to Test Different Components of Food?

Let us find out which nutrients are present in various food items.

Some nutrients like **starch** (a type of carbohydrate), fat and protein can be detected using fairly simple tests, while others can be detected only in a well-equipped laboratory. Let us explore how we can detect the presence of starch, fat and protein in some food items.

3.3.1 Test for starch

Activity 3.5: Let us investigate

- Take a small quantity of the food items such as a slice of potato, cucumber, bread, some boiled rice, boiled gram, crushed peanuts, oil, butter and crushed coconut. You can take other food items too for testing.



Fig. 3.7: Testing for the presence of starch in various food items

- Place a small piece of each item on a separate dish.
- With the help of a dropper, put 2–3 drops of diluted iodine solution on each food item (Fig. 3.7).
- Observe if there are any changes in the colour of the food items. Have they turned blue-black? Record your observations in Table 3.3.

A blue-black colour indicates the presence of starch.

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3.3.2 Test for fats

Activity 3.6: Let us investigate

- Take a small part of the food items that you tested for the presence of starch in Activity 3.5.
- Place each food item on a separate piece of paper.
- Wrap the paper around the food and press it. Be careful not to tear the paper.
- If a food item contains a little water, allow the paper to dry.

Does the paper develop an oily patch? What do you think is the reason for this patch? If oil or butter is present in the food item, it leaves an oily patch on the paper. Now, hold the paper against light. Can you see the light faintly shining through this patch? An oily patch on the paper shows that the food item contains fat. Which of these items contain fats?

Record your observations in Table 3.3.

3.3.3 Test for proteins

Activity 3.7: Let us investigate

This activity may be demonstrated by the teacher.

- Take the food items tested in previous activities.
- Make a paste or powder of the food item using pestle and mortar (Fig. 3.8).
- Put about half teaspoon of each food item in a separate clean test tube.

Precautions

- These chemicals are harmful and need to be handled with care. Do not touch any of these chemicals unless asked to do so.
- If any chemical gets spilled on your body, immediately wash the affected area with water.
- Do not put any of these chemicals into your mouth, or try to smell them.

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- Add 2–3 teaspoons of water to each test tube and shake them well.
- Add two drops of copper sulfate solution to each test tube using a dropper.
- Now, take another dropper and add 10 drops of caustic soda solution to each tube (Fig. 3.8).
- Shake well and leave the test tubes undisturbed for a few minutes.

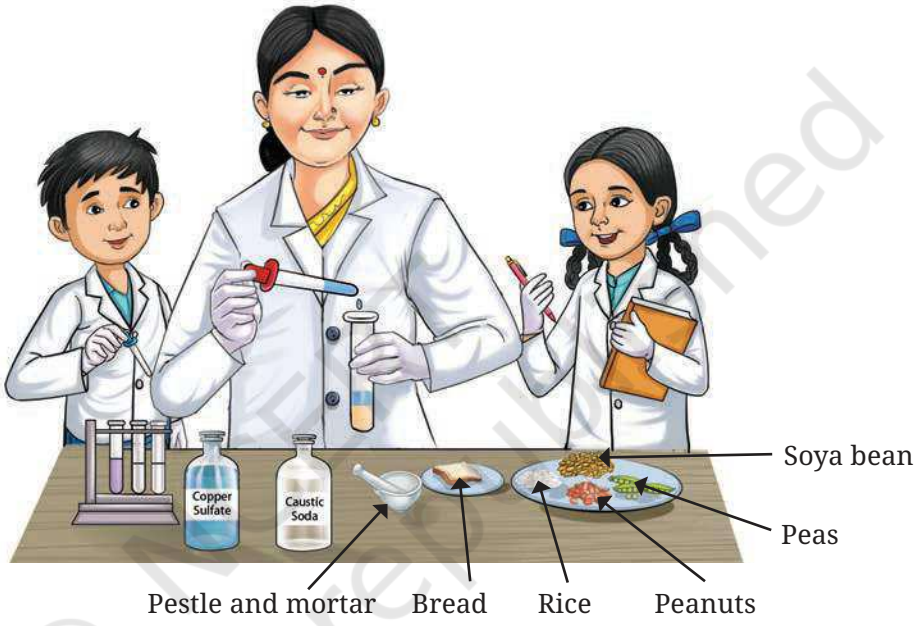


Fig. 3.8: Testing for the presence of protein in various food items

What did you observe? Did the content of some test tubes turn violet? This violet colour indicates the presence of proteins in the food item. Write your observations in Table 3.3.

What conclusions can you draw from Table 3.3? Which food items show the presence of more than one nutrient? Which food items show the presence of both proteins and fats? Peanuts show the presence of both proteins and fats. This indicates that any food which we eat may contain multiple nutrients. Is there a food item that lacks any of these nutrients? Which of these foods do you consume daily? Try to find out other foods that are good sources of starch, fats, and proteins.

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Table 3.3: Exploring nutrients present in various food items

Name of the food item	Colour of the food item for starch test		Oily patch for fat test		Colour of the food item for protein test		Starch present (Yes/ No)	Fat present (Yes/ No)	Protein present (Yes/ No)
	Before iodine test	After iodine test	Predic-tion (Yes/No)	Observa-tion (Yes/No)	Before protein test	After protein test			
Potato									
Cucumber									
Boiled rice									
Boiled gram									
Peanuts									
Bread/ Chapati									
Butter									
Coconut									
Any other									

3.4 Balanced Diet

Are nutritional requirements the same for everyone? Do you and your grandparents need the same type or the same amount of nutrients? Requirements of the type and amount of nutrients in a diet may vary according to age, gender, physical activity, health status, lifestyle, and so on.

Activity 3.8: Let us find out

You have listed food consumed by you during the week in Activity 3.1. Check whether your food contains all the nutrients and other essential components necessary for growth and development. If not, check which nutrients or other food components need to be added.

A diet that has all essential nutrients, roughage, and water in the right amount for proper growth and development of the body is known as a **balanced diet**. What changes would you make in your diet to make it a balanced diet?

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Activity 3.9: Let us compare

Read the nutritional information given below for a packet of potato wafers and a packet of roasted *chana* shown here.



(a) Potato wafers



(b) Roasted chana

Nutritional Information (per 100 g)	
Energy	536 kcal (kilocalories)
Fats	35.0 g
Carbohydrates	53.0 g
Proteins	7.0 g
Dietary Fibre	4.8 g

Nutritional Information (per 100 g)	
Energy	355 kcal (kilocalories)
Fats	6.26 g
Carbohydrates	58.58 g
Proteins	18.64 g
Dietary Fibre	16.8 g

Based on the nutritional information on the food packets given above, which food would you choose? Why?

Some foods have high calories due to high sugar and fat content. Moreover, they contain very low amounts of proteins, minerals, vitamins, and dietary fibres. These foods are called junk foods. These foods include potato wafers, candy bars and carbonated drinks. Consuming these foods frequently is not good as these are not healthy for our body. They make a person obese. Such a person may suffer from several health problems. You should always remember Dr Poshita's statement that 'Health is the Ultimate Wealth.' We should take care of our body to stay healthy. Eating a balanced diet and avoiding junk food contribute towards

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a healthy body. Good health is essential for leading a happy life.
Which of the two foods you studied in Activity 3.9 could be labelled as junk food?

Packaged food items must have information about the nutrients on their cover. The information should list the amount of each nutrient. Sometimes, more nutrients are added to the food during processing (fortification) to improve its nutritional quality. Iodised salt and some baby foods are examples of fortified foods. The Food Safety and Standard Authority of India (FSSAI) is a government agency that regulates food quality in India.

More to know!

3.5 Millets: Nutrition-rich Cereals

You may have heard of *jowar*, *bajra*, *ragi*, and *sanwa* (Fig. 3.9). These are native crops of India (Fig. 3.9). These can be easily cultivated in different climatic conditions. These highly nutritious grains are also called **millets**. Have you ever had food items made from these millets?



Fig. 3.9: Sanwa (Barnyard millet)

Millets are small-sized grains and have been an integral part of the Indian diet for centuries. They have regained popularity due to their numerous health benefits. They are good sources of vitamins, minerals like iron and calcium, and dietary fibres as well. That is the reason they are also called nutri-cereals. They contribute significantly to a balanced diet required for the normal functioning of our body.

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3.6 Food Miles: From Farm to Our Plate

How does food reach from a farm to our plate? What are the steps involved in this process? Who are the people involved in this process? Do you know how much time and effort is required to get the wheat flour once seed grains germinate in the farm? Let us look at Fig. 3.10 to understand the entire process of making the chapati that we eat.

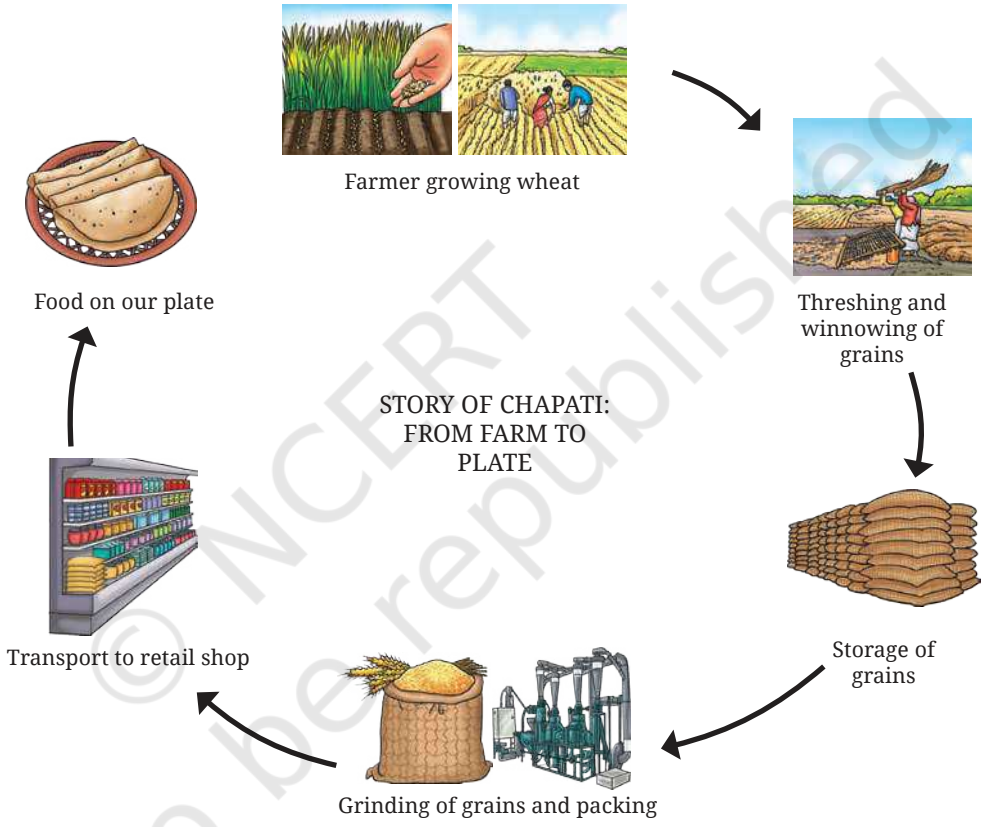


Fig. 3.10: From farm to plate

The entire distance travelled by a bag of wheat or any other food item, from the producer to the consumer, is known as its **food miles**. Reducing food miles is important because it helps to cut down the cost and pollution during its transport; it helps support local farmers; and it also keeps our food fresh and healthy.

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Many people waste food, leaving it unconsumed on their plates. One must remember the time and effort put by our farmers and other community members in getting the food from the farm to our plate. We must take only as much food as we can consume. It would reduce food wastage. Try to find the timeline for the various processes involved in getting the food from farm to plate (Fig. 3.10).

How would eating local food help reduce food miles?

Eat healthy, share, and respect food. Support local producers!

Keywords

Carbohydrate	Millets	Analyse
Culinary practices	Minerals	Compare
Deficiency diseases	Nutrients	Infer
Fats	Proteins	Interpret
Food components	Rickets	Investigate
Food miles	Roughage	Observe
Iodized salt	Scurvy	Prediction
	Vitamins	Survey

Summary

Key Points

- People across India eat diverse types of food, containing various food components.
- Choice of food may vary according to the cultivation of food crops in a region, taste preferences, culture and traditions, and so on.

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- Culinary practices have changed over time. There is a significant difference between traditional and modern methods of cooking food.
- Food provides us energy, support growth, repairs our bodies and protects us from diseases.
- The major nutrients in our food are carbohydrates, fats, proteins, vitamins, and minerals. In addition, food also contains dietary fibres and water.
- Carbohydrates and fats are primary energy sources, while proteins are body-building nutrients.
- Vitamins and minerals strengthen our body, protect us from infections, and keep us healthy.
- A balanced diet provides all the essential nutrients in the right quantities, along with adequate roughage and water.
- Deficiency of one or more nutrients in our diet for a long time can lead to deficiency diseases and disorders.
- Junk foods are unhealthy as they contain high levels of sugar and fats but little protein, minerals, vitamins, and dietary fibres.
- Millets are known as nutri-cereals as they provide most of the nutrients required for the normal functioning of our bodies. They can be easily cultivated in different climatic conditions.
- Eating food that is locally grown and plant-based, to the extent possible, is not only healthy for our bodies but is also good for our environment and our planet.
- The distance travelled by a food item, from the place of its production to the consumer, is called food miles. We must aim to minimise food miles.
- We should never waste food and only take as much as we can consume.

Let us enhance our learning



1. Pick the odd one out and give reasons:
   (i) *Jowar*, *Bajra*, Ragi, Chana
   (ii) Kidney beans, Green gram, Soya bean, Rice

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2. Discuss traditional versus modern culinary practices in India.

3. A teacher says that good food may act as medicine. Ravi is curious about this statement and has some questions for his teacher. List at least two questions that he can ask.

4. Not all delicious foods are necessarily healthy, while not all nutritious foods are always enjoyable. Share your thoughts along with a few examples.

5. Medu does not eat vegetables but enjoys biscuits, noodles and white bread. He often has stomach ache and constipation. What changes should he make in his diet to get rid of these problems? Explain your answer.

6. Reshma had trouble seeing things in dim light. The doctor tested her eyesight and prescribed a particular vitamin supplement. He also advised her to include a few food items in her diet.

   (i) Which deficiency disease is she suffering from?

   (ii) Which food component may be lacking in her diet?

   (iii) Suggest some food items that she should include in her diet to overcome this problem (any four).

7. You are provided the following:

   (i) Canned fruit juice

   (ii) Fresh fruit juice

   (iii) Fresh fruit

   Which one would you prefer and why?

8. Gourav got a fracture in his leg. His doctor aligned the bones and put on a plaster. The doctor also gave him calcium tablets. On the second visit, the doctor gave him Vitamin D syrup along with calcium tablets. Refer to Fig. 3.5 and answer the following questions:

   (i) Why did the doctor give calcium tablets to Gourav?

   (ii) On the second visit, why did the doctor give Vitamin D syrup along with calcium tablets?

   (iii) What question arises in your mind about the choices made by the doctor in giving the medicines?

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9. Sugar is an example of carbohydrates. Sugar is tested with iodine solution but it does not change to blue-black colour. What can be a possible reason?

10. What do you think of Raman's statement, "All starches are carbohydrates but not all carbohydrates are starches." Describe the design of an activity to test your answer.

11. While using iodine in the laboratory, a few drops of iodine fell on Mishti's socks and a few fell on her teacher's saree. The drops of iodine on the saree turned blue-black while the colour on the socks did not change. What can be a possible reason?

12. Why are millets considered a healthy choice of food? Can eating just millets suffice for the nutritional requirements of the body? Discuss.

13. You are given a sample of a solution. How would you check the possibility of it being an iodine solution?

Learning further

- Help your mother in unpacking the packets of various food items after shopping for grocery next time. Read the nutritional information of at least three fortified food items and analyse those.
- The Apatani tribe of Arunachal Pradesh produces a salt called *tapyo* to fulfil their dietary requirements. Collect more information from the internet about their salt making process and the need to make their own salt. Collect pictures and paste them on a chart paper. Also, write a paragraph about the process of making this salt and its usefulness.
- Vegetables or fruits that grow naturally in the forest or nearby fields without being cultivated by farmers are considered wild varieties. Traditionally, many tribal groups in India depend on these wild varieties, which form a part of their food. Read about *ranbhajis* from Maharashtra and edible mushrooms from Himachal Pradesh. Are you aware of any such wild varieties of food from your region? Discuss in class.

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- List junk foods you eat frequently. Ask your friends also to make such lists. On the basis of these lists, write a letter to your principal requesting to ban certain junk foods inside the school campus. Suggest some healthy options.
- Find out the variation in nutritional requirements of different individuals based on age, physical activity and health conditions. Record your observations. Discuss and analyse.
- Prepare a diet chart to provide a balanced diet to a twelve-year-old child. The diet chart should include food items that are not expensive and are commonly available in your area.

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Notes

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