

UNIT 1 · HEALTH AND WELL-BEING

CHAPTER 1

Food for Health & Digestion



Scan me

Learning Objectives

By the end of this chapter, I will be able to:

- trace familiar foods to plants or animals;
- explain why the body needs different foods;
- name nutrients and foods that give them;
- plan a varied meal with local foods;
- describe the journey of food in the body;
- use observations and data to choose food wisely.



Bhumi Teacher says...

SEL • Self-Management

Eat a rainbow! Try to have fruits and vegetables of three colours every day.

Fact: Amla is rich in vitamin C.

1.1 Why do we need food?

You walk to school, solve a puzzle and play with friends. Your heart beats and you breathe all the time. For all this work your body needs **energy**—even when you are asleep!

Food gives us energy. It helps us **grow**, **repairs** worn-out parts such as a scraped knee, and helps the body stay **healthy**.

Look • Talk • Notice • Understanding

Scan to watch

1. Look at the picture on page 1. Name three foods you can see.
2. Which of these foods do you eat at home?
3. Rani eats only rice for lunch. What would you add? Tell a partner why.

1.2 Where does food come from?

Most of our food comes from **plants** or **animals**. Farmers grow grains, pulses, fruits and vegetables. Animals give us milk, eggs, honey, fish and meat.

We eat different **parts of plants**:

Plant part	Foods we eat
Root	carrot, radish, beetroot
Stem	potato, ginger, sugarcane
Leaf	spinach, cabbage, mint
Flower	cauliflower, broccoli
Fruit	mango, tomato, brinjal
Seed	rice, wheat, peas, dal

1.3 Food has useful nutrients

Nutrients are useful substances in food that our body needs. Carbohydrates, fats, proteins, vitamins and minerals are nutrients. We also need fibre and water.

1.4 Foods that protect us

Protective foods

Vitamins and minerals help the body work properly and fight illness. Fruits and vegetables are rich sources. Amla and guava give vitamin C. Milk and curd give calcium for bones and teeth. **Look at Fig. 1.1.**



Fig. 1.1 Choose different seasonal fruits and vegetables—not just one colour.

1.5 Water matters

Water helps digestion, carries substances around the body, cools us through sweat and removes wastes in urine.

1.6 A balanced, varied meal

A **balanced diet** gives the body different nutrients, fibre and water in suitable amounts. No single food gives everything we need, so variety matters across the day.

1.7 Explore tastes and traditions

Indian food traditions describe **six tastes**, called **Shad Rasa**. A food may have more than one taste. Taste helps us enjoy food, but taste alone cannot tell us whether food is nourishing or safe.

Think and tell

• Critical Thinking

Why do we feel more thirsty on a hot day?

1.8 The journey of a mouthful

Digestion breaks food into simpler substances that the body can absorb and use. Food travels through a long passage called the **digestive tract**. **Look at Fig. 1.2.**

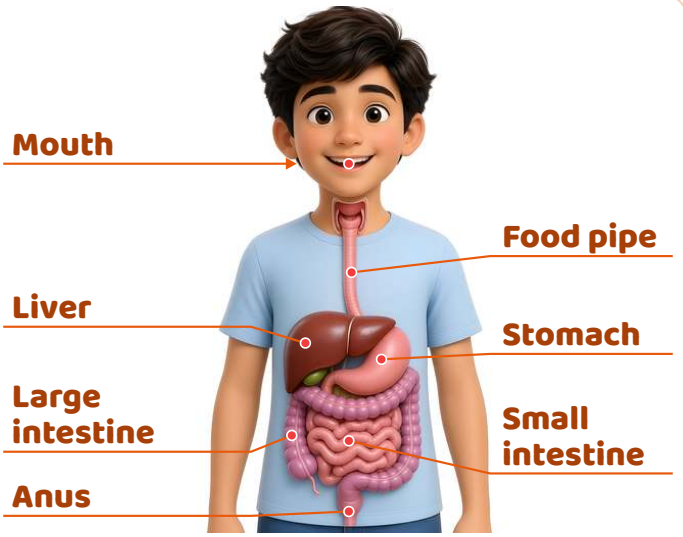


Fig. 1.2 Main parts of the digestive system (simplified, not to scale).

1.9 Clean food, healthy habits

Germs too small to see can reach our food from dirty hands, unsafe water and flies. Good habits lower the chance of falling ill.

- Wash hands before eating and after using the toilet.
- Wash fruits and vegetables with safe water before cutting or eating.
- Use clean plates and keep food covered.
- Eat freshly cooked food. Do not eat food that looks or smells spoiled—never taste it to check. **Look at Fig. 1.3.**

Fact: Lemon, amla and guava are rich in **vitamin C**.



Fig. 1.3 Wash hands with soap and water before eating.

1.10 Eat well, move and rest

Mindful eating means paying attention while we eat. Sit down, eat slowly and chew well. Notice the colour, smell and taste of food. Stop when you are comfortably full. **Look at Fig. 1.4.**



Fig. 1.4 Active play, good food and rest all keep us fit.

Play actively for about an hour every day—run, cycle, skip, dance or do yoga. Rest after play; good sleep helps the body recover and grow.

1.11 Investigate: smaller pieces

Question and prediction

• Critical Thinking

Why do we chew food? Does crushing change a dry cracker? Write your prediction before you begin. This activity is a **model** of chewing only.

1.12 Millets: local super grains

India grows many grains. Millets such as **jowar** (sorghum), **bajra** (pearl millet) and **ragi** (finger millet) add variety to meals. Many millets grow well with less water than rice, and they are rich in fibre and minerals. They can be cooked as roti, porridge, upma, dosa or laddoo.

1.13 Read before you eat

Chips, burgers and fizzy drinks often have too much **oil, salt and sugar** and little fibre. We may enjoy them once in a while, but not every day. Too much sugar harms our teeth, and too much salt is not good for the heart.

Packed foods have a **label**. It shows the ingredients, the date of manufacture and a **"best before"** or **"use by"** date. Read it with an adult. Do not eat food after its use-by date or from a torn or swollen pack. **Look at Fig. 1.5. Look at Fig. 1.6.**

Tip: Chew each bite slowly.



Fig. 1.5 Fresh home food (left) and packaged snacks (right).

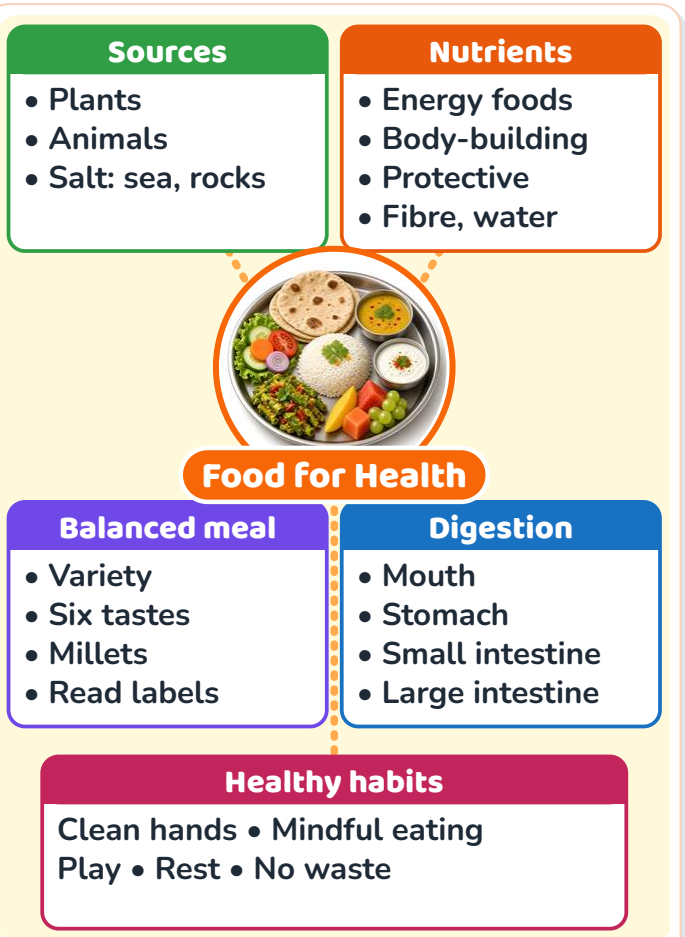


Fig. 1.6 Chapter at a glance.

Do you know?

Tomato, brinjal, cucumber and ladyfinger are **fruits** to a scientist, because they grow from flowers and hold seeds.

Healthy swaps

SEL • Responsible Decision-Making

Instead of…	Try…
chips	roasted chana or makhana
fizzy drink	lemon water or buttermilk
sweets every day	fresh seasonal fruit
fried snacks	sprouts chaat or corn

Let's Recall

• Remembering

- Food gives energy, helps growth and repair, and keeps the body healthy.
- Most foods come from plants or animals. Most foods contain several nutrients.
- Carbohydrates and fats give energy. Proteins build and repair the body. Vitamins and minerals protect it.
- Fibre helps waste move through the intestine. Water is needed for many body processes.
- A balanced diet has variety in suitable amounts.
- The six tastes add variety; taste alone cannot tell us whether food is safe.
- Digestion starts in the mouth. Most digestion and absorption happen in the small intestine.
- Millets are local, hardy grains. Read food labels with an adult.
- Clean hands, safe food, active play and rest keep us well.

Fact: A grain of rice is a **seed** of the rice plant.

Key Words

Word	Meaning
Nutrient	useful substance in food that the body needs
Balanced diet	varied food in suitable amounts
Fibre (roughage)	part of plant food we cannot fully digest
Saliva	liquid in the mouth that wets food
Digestion	breaking food into simpler substances
Absorption	passing of digested food into the blood
Millets	small, hardy grains like jowar and ragi

Project: my food diary

• Experiential Learning

For three days, record one meal each day. Tick the groups it had.

Day	Foods	Energy	Protein	Fruit/veg
1		☐	☐	☐
2		☐	☐	☐
3		☐	☐	☐

Which group did you miss most often? Suggest one easy, low-cost change.

Fact: Cauliflower and broccoli are **flowers** we eat.

Exercises

Remember • Understand

A Tick (✓) the correct answer

• Remembering

1. Which nutrient mainly helps growth and repair?
   ☐ protein ☐ water ☐ fibre
2. Which part of a plant is the potato?
   ☐ root ☐ stem ☐ leaf
3. Most digested food is absorbed in the
   ☐ stomach ☐ small intestine ☐ food pipe
4. Which of these is a millet?
   ☐ ragi ☐ rice ☐ wheat
5. Which food tastes bitter?
   ☐ jaggery ☐ karela ☐ lemon

B Fill in the blanks

• Remembering

fibre | saliva | energy | large intestine | fungi

1. Rice and roti mainly give us _____.
2. _____ wets food in the mouth.
3. Whole grains and fruit give us _____.
4. Water is taken back from undigested food in the _____.
5. Mushrooms belong to a group called _____.

My gratitude chart

SEL • Relationship Skills

For one week, write the name of one person who helped bring food to you each day—a farmer, a vendor, a cook or a family member—and how you thanked them.

C Write T for true and F for false

• Understanding

1. Our body needs energy even during sleep. ( )
2. Every food contains just one nutrient. ( )
3. Digestion begins in the mouth. ( )
4. Fibre is fully digested by our body. ( )
5. Taste alone tells us whether food is safe. ( )

Correct the false statements in your notebook.

D Match the columns

• Remembering

Column A	Column B
1. Mouth	a. squeezes food down
2. Food pipe	b. churns food with juices
3. Stomach	c. absorbs digested food
4. Small intestine	d. chews food, adds saliva
5. Large intestine	e. takes back water

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

E Odd one out—give a reason

• Analysing

1. carrot · radish · potato · beetroot
2. milk · egg · honey · spinach
3. dal · paneer · chips · rajma
4. jowar · bajra · ragi · mango

F Put the journey in order (1–6)

• Understanding

___ stomach ___ anus ___ mouth
___ large intestine ___ food pipe
___ small intestine

Q. Name one millet: _____

Competency-Based Assessment

Case • Data • Real life

J Case study: the food-fair lunch

• Applying

Leela takes plain rice and water. She can add **two** items from: dal, mixed vegetables, a sweet drink and extra rice. **Look at Fig. 1.7.**

1. Look at the picture. Which stall would you visit for protective foods?
2. Which two additions make Leela's meal more balanced?
3. Give one benefit of each addition.
4. A friend offers her a food she is allergic to. What should she do?



Fig. 1.7 A school food fair.

Recipe card: a millet dish

• Creativity

Ask an elder for a simple millet recipe such as ragi malt or bajra roti. Write the ingredients and steps on a card. Note one food group and one taste in it. Never cook without an adult.

Q. Saliva is made in the _____.

K Label detective

• Analysing

RAGI COOKIES

Net weight: 100 g
Ingredients: ragi flour (40%), wheat flour, sugar, vegetable oil, milk solids, salt
Date of manufacture: 05/2026
Best before: 6 months from manufacture
Store in a cool, dry place.

1. Which millet is in these cookies?
2. Until which month are they best?
3. Ingredients are listed from the largest amount to the smallest. Which is the largest?
4. Name one ingredient we should eat less of.
5. Rahul finds this packet in January 2027. Should he eat the cookies? Explain.

My Learning Check

SEL • Self-Awareness

I can…	Yes	Not yet
trace food to its source	☐	☐
name nutrients and their work	☐	☐
plan a balanced meal	☐	☐
describe the journey of food	☐	☐
read a label and a data table	☐	☐

Write one habit

SEL • Responsible Decision-Making

that keeps food clean: _____

Olympiad Practice

12 questions • choose the correct option

Skills: Q1–4 • Remembering Q5–8 • Understanding Q9–10 • Applying Q11 • Analysing Q12 • Critical Thinking

1. The body needs food even during sleep mainly to _____.
(A) get energy for life processes (B) stop breathing (C) change the taste of food (D) make more teeth

2. Which of these is a stem that we eat?
(A) Carrot (B) Spinach (C) Ginger (D) Peas

3. Proteins in food mainly help the body to _____.
(A) cool itself through sweat (B) give only energy (C) grow and repair itself (D) take back water

4. Rani eats only rice for lunch every day. Her meal mainly lacks _____.
(A) carbohydrates (B) a variety of nutrients (C) all energy (D) water in rice

5. A banana is a good snack before a race because it is rich in _____.
(A) calcium for bones (B) bile juice (C) fibre only (D) carbohydrates that give energy

6. Most digestion and absorption of food take place in the _____.
(A) mouth (B) stomach (C) small intestine (D) large intestine

7. Which is the odd one out?
(A) Jowar (B) Bajra (C) Ragi (D) Barley

8. Which is not a rich source of vitamin C?
(A) Rice (B) Amla (C) Guava (D) Lemon

9. Saliva in the mouth begins the digestion of _____.
(A) fats (B) starch (C) fibre (D) minerals

10. A whole fruit is a better everyday choice than fruit juice mainly because it has more _____.
(A) colour (B) fibre (C) salt (D) oil

11. A: Digestion begins in the mouth. R: Saliva starts changing starch into sugar.
(A) Both true, and R explains A (B) Both true, but R does not explain A (C) A true, R false (D) A false, R true

12. A: Taste alone tells us whether food is safe to eat. R: A food may have more than one taste.
(A) Both true, and R explains A (B) Both true, but R does not explain A (C) A true, R false (D) A false, R true

OMR answer strip Fill one bubble for each question with a dark pencil.

1. (A)(B)(C)(D)	2. (A)(B)(C)(D)	3. (A)(B)(C)(D)	4. (A)(B)(C)(D)	5. (A)(B)(C)(D)	6. (A)(B)(C)(D)
7. (A)(B)(C)(D)	8. (A)(B)(C)(D)	9. (A)(B)(C)(D)	10. (A)(B)(C)(D)	11. (A)(B)(C)(D)	12. (A)(B)(C)(D)

Scan for answers