

CLASS 6

SCIENCE

NCERT SOLUTIONS

Class 6 Science Chapter 3 Mindful Eating: A Path to a Healthy Body NCERT Solutions

NCERT Solutions for Class 6 Science Chapter 3, "Mindful Eating: A Path to a Healthy Body" from the Curiosity textbook (2026-27 edition). This chapter looks at India's rich food diversity, the components of food, simple tests to identify nutrients, deficiency diseases, balanced diets, and mindful/sustainable eating h...

Contents

- What and Why Do We Eat?
- Components of Food
- How to Test Different Components of Food
- Deficiency Diseases
- Nutritional Requirement and Balanced Diet
- Millets: Nutri-Cereals
- Food Miles and Food Wastage
- Solved Textbook Questions

NCERT Solutions for **Class 6 Science Chapter 3, “Mindful Eating: A Path to a Healthy Body”** from the Curiosity textbook (2026-27 edition). This chapter looks at India’s rich food diversity, the components of food, simple tests to identify nutrients, deficiency diseases, balanced diets, and mindful/sustainable eating habits.

What and Why Do We Eat?

Food habits vary widely across India, shaped by local crops, soil type, and climate — for example, Punjab’s makki di roti and sarson da saag, Karnataka’s idli-dosa and ragi mudde, Manipur’s rice and eromba, and Rajasthan’s bajre ki roti and gatte ki sabzi. Traditional cooking tools like the **chulha** (clay stove) and **sil-batta** (grinding stone) have gradually been joined by modern tools like gas stoves and electric grinders.

Components of Food

Nutrient	Function	Sources
Carbohydrates	Give energy	Rice, wheat, potatoes, sugarcane, bananas
Fats	Concentrated/stored energy, warmth	Ghee, oils, nuts
Proteins	Body-building and repair	Plant: pulses (dal, gram, beans). Animal: milk, paneer, eggs, fish
Vitamins & Minerals	Protect the body, support specific functions	Fruits, vegetables, dairy (varies by type)
Dietary fibre (roughage)	Not digested, but helps remove waste and prevents constipation	Fruits, vegetables, whole grains, pulses, nuts
Water	Helps absorb nutrients and remove waste	Drinking water, water-rich foods

How to Test Different Components of Food

Starch test: add a drop of iodine solution to the food sample. If starch is present, it turns **blue-black**. Sugar is a carbohydrate but not a starch, so it does **not** turn blue-black with iodine.

Fat test: rub the food sample on a piece of paper. An **oily, translucent patch** that doesn’t dry up indicates the presence of fat.

Protein test: add copper sulphate solution and caustic soda (sodium hydroxide) solution to the sample. If protein is present, the mixture turns **violet**.

Deficiency Diseases

Disease	Missing Nutrient
Scurvy (bleeding gums)	Vitamin C
Night blindness	Vitamin A
Goitre (swollen neck)	Iodine
Rickets / weak bones	Vitamin D and Calcium
Anaemia	Iron

Nutritional Requirement and Balanced Diet

The amount and type of food a person needs varies with age, gender, and physical activity level — a growing child, an athlete, and an elderly person all have different requirements. A **balanced diet** includes the right proportion of all nutrient groups — carbohydrates, proteins, fats, vitamins, minerals, fibre, and water — rather than relying heavily on just one or two.

Millets: Nutri-Cereals

Millets such as **jowar**, **bajra**, and **ragi** are rich in vitamins, iron, calcium, and fibre, earning them the name “nutri-cereals.” However, being highly nutritious does not mean any single food is nutritionally complete on its own — millets are best eaten as part of a varied, balanced diet alongside proteins, fats, and other nutrient groups.

Food Miles and Food Wastage

“Food miles” refers to the distance food travels from where it is grown/produced to where it is eaten — choosing local, seasonal food reduces food miles and the environmental cost of transport. Reducing food wastage (not throwing away edible food) is another key idea of mindful, sustainable eating.

Solved Textbook Questions

Q1. Find the odd one out: (i) Jowar, Bajra, Ragi, Chana (ii) Kidney beans, Green gram, Soya bean, Rice.

Answer: (i) **Chana** is the odd one out — it is a pulse (protein source), while jowar, bajra, and ragi are all millets (carbohydrate sources). (ii) **Rice** is the odd one out — it is a cereal (carbohydrate source), while kidney beans, green gram, and soya bean are all pulses (protein sources).

Q2. Compare traditional and modern culinary practices.

Answer: Traditional practices use tools like the chulha (clay stove) for cooking and sil-batta (stone grinder) for grinding spices/masalas. Modern practices use gas stoves or induction cooktops and electric mixer-grinders — driven by advances in technology, easier availability, and convenience, though many households still use traditional methods for certain dishes.

Q3. What questions could you ask to explore the idea that “good food can act as medicine”?

Answer: Which specific foods are known to help prevent or manage certain health problems? If we eat such health-supporting foods regularly, does that reduce how often we need medicines?

Q4. Give examples showing that “delicious” food isn’t always healthy, and “healthy” food isn’t always delicious to everyone.

Answer: Foods like burgers, fried chips, and sugary snacks are delicious to many people but not particularly healthy if eaten often. On the other hand, foods like boiled vegetables, pulses, and whole grains are very healthy but some people don’t find them as tasty as fried or sugary snacks.

Q5. Medu often eats biscuits, noodles, and white bread and complains of constipation and stomach aches. What is happening, and what should Medu do?

Answer: These foods are low in dietary fibre (they are mostly refined/maida-based), so Medu’s digestive

system lacks the roughage needed for smooth digestion, causing constipation. Medu should add more fibre-rich foods — green leafy vegetables, fresh fruits, whole grains, pulses, and nuts — to the daily diet.

Q6. Reshma has trouble seeing clearly at dusk (night blindness). What is the likely cause, and what foods should she eat?

Answer: This is likely caused by a **Vitamin A** deficiency. Reshma should eat more Vitamin A-rich foods such as carrots, milk, papaya, and green leafy vegetables like spinach.

Q7. Why might someone prefer eating fresh fruit over drinking canned or packaged fruit juice?

Answer: Fresh fruit retains its natural dietary fibre and full range of nutrients, while canned or packaged juices often lose fibre during processing and may contain added sugar or preservatives, making fresh fruit the healthier choice.

Q8. Gourav fractured his arm. The doctor first gave him calcium tablets, and later added Vitamin D. Why both?

Answer: Calcium is essential for bone repair and strength, but the body needs **Vitamin D** to properly absorb and use calcium. So Vitamin D was added to help Gourav's body make effective use of the calcium supplement for healing.

Q9. When iodine solution is added to sugar, there is no colour change. Why?

Answer: Iodine only turns blue-black in the presence of **starch**. Sugar is a carbohydrate, but it is not a starch, so it does not produce this colour change.

Q10. Explain the statement: "All starches are carbohydrates, but not all carbohydrates are starches."

Answer: Starch is one specific type of carbohydrate. Other types of carbohydrates, such as sugars, exist too. So while every starch does belong to the broader carbohydrate group, not every carbohydrate (like sugar) is a starch — which is exactly why the iodine test can tell starchy foods (like rice) apart from sugary foods, since only starch reacts with iodine to turn blue-black.

Q11. When iodine drops fell on a starched saree, it turned blue-black, but iodine drops on a pair of socks caused no change. Why?

Answer: The saree fabric had been treated with starch (a common practice to stiffen fabric), so the iodine reacted with the starch and turned blue-black. The socks were not starched, so there was no starch present for the iodine to react with, and no colour change occurred.

Q12. Millets are very nutritious. Does that mean eating only millets is enough for a person's full nutritional needs?

Answer: No. Millets like jowar, bajra, and ragi are rich in vitamins, iron, calcium, and fibre, but a truly balanced diet still requires proteins, fats, and other nutrients from a variety of food groups. Millets are a valuable and nutritious staple, but not a nutritionally complete food on their own.

Q13. How could you test an unknown clear liquid to check if it is iodine solution?

Answer: Add a small amount of starch (such as a pinch of starch powder or a starchy food) to the liquid. If the liquid is iodine solution, the mixture will turn blue-black, confirming its identity.

See also: [Extra Questions](#) | [Revision Notes](#) for this chapter.