

CHAPTER – 3

FROM TASTING TO DIGESTING

Page No 23:

Question Discuss and Write:

- Jhoolan's mouth started watering when she heard the word *imli*. When does your mouth water? List five things you like to eat and describe their taste.
- Do you like only one kind of taste or different ones? Why?
- Jhoolan put a few drops of lemon juice in Jhumpa's mouth. Do you think we can make out the taste with just a few drops?
- If someone were to put a few seeds of *saunf* (aniseed) on your tongue, would you be able to tell with your eyes closed? How?
- How did Jhumpa make out the fried fish? Can you guess the names of certain things only by their smell, without seeing or tasting them? What are these things?
- Has anyone ever told you to hold your nose before taking a medicine? Why do you think they tell you to do this?

Answer:

- My mouth waters on seeing, smelling, hearing or even thinking of the food items I like to eat.

Five things that I like to eat and their respective tastes are:

Sl. No.	Food	Taste
1.	Pickle	Sour
2.	Ice cream	Sweet
3.	Potato chips	Salty
4.	Chocolates	Sweet
5.	Banana shake	Sweet

Disclaimer: The second part of the question aims to encourage children to be creative and explore their vocabulary in describing different kinds of tastes. The answer for the same is based upon a student's own observation. Hence, it can vary from various students.

- We like different kinds of tastes. This is because if we keep eating food with similar taste, we will get bored of that taste very soon. Moreover, to stay healthy we need a diet with proper quantity of all kinds of food that have different tastes.
- Yes, I think we can make out the taste of lemon juice with just a few drops of it. This is because lemon juice is very sour and our tongue has tiny bump-like structures that can recognise the taste of even a few drops of lemon juice.
- We will not be able to judge that it is *saunf* (aniseed) until we start chewing it. Once we start chewing it, it starts getting mixed with the saliva present in the mouth. We are then able to recognise its sweet taste.

- Jhumpa might have made out the fried fish by its smell. There are several other things we can make out using their smell. Few of them are

(i) *Halwa*

(ii) Coffee

(iii) Jackfruit

(iv) Orange

(v) *Sambar*

Disclaimer: The second part of the question aims to develop imagination and recognition skills of the students. The answer for the same can vary from one student to another.

- Nose is a sense organ of smell. Holding the nose while taking medicines enables us to take in the medicine without sensing its bad smell. The two senses, smell and taste are closely related. Hence, on blocking the nose we are able to neither smell nor taste the medicine properly.

Page No 24:

Question Close Your Eyes and: Collect a few food items having different kinds of taste. Play a game with your friends like Jhumpa and Jhoolan did. Tell your friend to taste the food and ask–

- How did it taste? What was the food item?
- On which part of the tongue could you get the most taste – in front, at the back, on the left or right side of the tongue?
- Which taste could be made out on which part of the tongue? Mark these parts on the



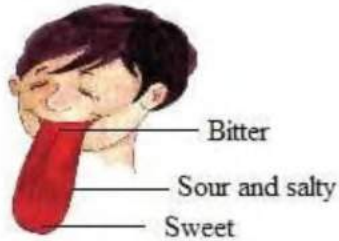
- One at a time put some things to eat in other parts of your mouth – under the tongue, on the lips, on the roof of the mouth. Did you get any taste there?

Answer:

- **Disclaimer:** *The purpose of this question is to make the students participate in day-to-day activities, based upon which they can make logical deductions. Keeping the importance of this process of observation in mind, the answer to this question has not been provided.*
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- Our tongue is capable of recognising four basic kinds of tastes. These are sweet, salty, sour and bitter. The following table lists the tastes and the regions of the tongue showing these tastes.

Taste	Region of the tongue
Front	Sweet
Side	Sour and salty
Back	Bitter

The following figure shows a tongue marked with different taste regions.



- Portion of mouth under the tongue, on the lips, and hard parts such as the roof of the mouth and teeth do not sense any kind of taste as they do not have any taste bud.

Page No 25:

Question Tell:

- If someone asks you to describe the taste of amla or cucumber, you might find it difficult to explain. How would you describe the taste of these – tomato, onion, saunf, garlic. Think of words that you know or make up your own words to describe the taste.
- When Jhumpa tasted some of the things, she said “Sssee, sssee, sssee...” What do you think she may have eaten?
- Why don't you make sounds that describe some tastes? From your expressions and sounds ask your friends to guess what you might have eaten?

Answer:

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Food Item	Taste
Tomato	Sweet and tangy
Onion	Tangy and hot
<i>Saunf</i>	Sweet
Garlic	Sharp or hot

This is a sample answer. The question aims to encourage children to be creative and explore their vocabulary in describing different kinds of tastes. The answer for the same is based upon a student's own observation. Hence, it can vary from various students.

- Jhumpa might have eaten chillies or something hot and spicy which made her to sound “Sssee, sssee, sssee...”
- **Disclaimer:** *The purpose of this question is to make the students participate in day-to-day activities, based upon which they can derive logical conclusions. Keeping the process of participation in mind, the answer to this question has not been provided.*

Page No 26:

Question Discuss:

- Has anyone at home told you to eat slowly and to chew well so that the food digests properly? Why do you think they say this?
- Imagine you are eating something hard like a green guava. What kinds of changes take place in it – from the time you bite a piece and put it in

your mouth to when you swallow it? Think what does the saliva in our mouth do?

Answer:

- Yes, parents usually advice their kids to eat slowly and to chew well so that the food digests properly.

The process of chewing breaks down larger food particles into smaller ones. This has two advantages:

- (i) Moistening of food that enables its easy swallowing
- (ii) The process of chewing initiates the process of digestion in the mouth
- As we bite a substance such as the green guava, we take in a small piece of that substance in our mouth. Inside the mouth it starts mixing with the saliva. Now, as we start chewing it, it gets more and more mixed up with the saliva. In this manner, the process of digestion begins in the mouth. This saliva mixed with the food substance is also easy to swallow.

Page No 27:

Question Discuss:

- How do you feel when you are very hungry? How would you describe it? For example, sometimes we jokingly say, “I am so hungry I could eat an elephant!”
- How do you come to know that you are hungry?
- Think what would happen if you do not eat anything for two days?
- Would you be able to manage without drinking water for two days? Where do you think the water that we drink goes?

Answer:

- When we are hungry we feel empty in our stomach. The walls of our stomach give us a feeling as if they get collapsed. Our stomach and intestine start making noises as if they are demanding food.

Disclaimer: This question aims to encourage children to be creative and explore their vocabulary in describing different signs of hunger. The answer for the same can vary among students.

- When I am hungry my stomach starts making noises. Other signs of hunger that I get are:

(i) Desire to eat food

(ii) Anger and irritation

(iii) Feeling tired and drained out of energy

Disclaimer: This question aims to encourage children to be creative and explore their vocabulary in describing different signs of hunger. The answer for the same can vary from one student to another.

- If we do not eat anything for two days, we will start feeling tired, drained out, angry and irritated. We would not be able to concentrate on any physical or mental activity. We may also fall ill.
- It would be very difficult for me to stay without water for two days. The water we drink goes to food pipe and then to the stomach, in the same way as food moves in our body. Excess of water is expelled out of the body in the form of urine.

Page No 28: Question Talk and Discuss:

Do you remember that in Class IV you made a solution of sugar and salt? Nitu's father also made this and gave her. Why do you think this is given to someone who has vomiting and loose motions?

- Have you heard the word 'glucose', or seen it written anywhere? Where?
- Have you ever tasted glucose? How does it taste? Tell your friends.
- Have you or anyone in your family been given a glucose drip? When and why? Tell the class about it.
- Nitu's teacher used to tell the girls to have glucose while playing hockey. Why do you think she did this?
- Look at Nitu's picture and describe what is happening.

How is the glucose drip being given?

Answer:

***Disclaimer:** The purpose of this section is to make the students participate in day-to-day activities, based upon which they can make logical deductions. Keeping the importance of this process in mind, it is strongly recommended that the students prepare the solutions on their own.*

Page No 31: Question Think and Discuss:

Imagine if you had been in place of Dr. Beaumont, what experiments would you have done to find out the secrets of our stomach? Write about your experiments.

Answer:

***Disclaimer:** The purpose of this section is to introduce the children to the method of science and the passion with which the scientists pursue their experiments. This involves certain prior imagination followed by experimentation and logical deductions. Keeping the process of imagination and experimentation in mind, it is strongly recommended that the students prepare the solutions on their own.*

Page No 33: Question Discuss:

- Why do you think Rashmi could eat only one roti in the whole day?
- Do you think Kailash would like games and sports?
- What do you understand by 'proper' food?
- Why do you think that the food of Rashmi and Kailash was not proper?

Answer:

***Disclaimer:** The purpose of this section is to make the students interact actively with the people around them and their surroundings. The process calls for critical observance based upon which they can draw certain conclusions. Keeping the importance of the process of interaction in mind, the answers to the same have not been provided.*

Question Find Out: Talk with your grandparents or elderly people and find out what they ate and what work they did when they were of your age. Now think about yourself – your daily activities and daily diet. Are these similar or different from what your grandparents did and ate?

Answer:

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Page No 34:**Question Think and Discuss:**

- Do you know any child who does not get enough to eat in the whole day?

What are the reasons for this?

- Have you ever seen a go down where a lot of grain has been stored? Where?

Answer:

***Disclaimer:** The purpose of this section is to make the students interact actively with the people around them and their surroundings. The process calls for critical observance based upon which the students can draw certain conclusions. Considering the sustenance of this process of interaction the answer to this question has not been provided.*

Question What we have learnt:

- Why can you not taste food properly when we have a cold?
- If we were to say that “digestion begins in the mouth”, how would you explain this. Write.

Answer:

- We are not able to taste food properly when we have a cold because the senses of smell and taste are very closely connected and since our nose gets blocked when we have cold we are not able to smell and taste food.
- It is said that digestion starts in the mouth because the saliva present in the mouth helps to breakdown the food into smaller units and it also helps in digesting the sugars present in food.