

My food, My Choice

Did you know that humans started preserving food even before the discovery of fire? Humans would freeze food on ice in colder regions and dry foods in tropical regions. Today, other than freezing and drying, we use a lot of other techniques to preserve food. Can you list some of them?

Canning, pasteurization and Irradiation.

Task 1: What spoils first?

Material needed

A slice of tomato, a slice of cooked potato, a spoonful of tomato ketchup or *chutney*, a potato chip, a spoonful of wheat flour and a piece of bread or *chapati*, petri-dishes or watch glass

What you will do?

Keep all the food items in plates or watchglasses separately and label them. Make sure you cover the plates with a lid or a beaker (in case of watch glass). Observe them everyday for change (if any) in color, appearance or smell. You can record your observations in the table below. Repeat this for 3-4 days or until your teacher asks you to record.

Table: What changes do you see in the food samples you are observing? Record in the table below

Tomato/Potato/Wheat	Day 1	Day 2	Day 3	Day 4
Colour				
Appearance				
Smell				
Ketchup/Chip/Bread or chapati				
Colour				
Appearance				
Smell				

Now that you have completed 3-4 days of observation, you can answer the following questions:

1. Which all foods have spoiled? How do you know they are spoiled?

Tomato, Potato, Bread, Aloo Sev we can know that it spoiled by its appearance and odour.

2. Which food was the first one to spoil and how did you know it was spoiled?

Tomato was the first one to spoil and I knew it by its appearance due to growth of moldy part.

3. Which foods are still fresh and why have they not spoiled?

Ketchup is not spoiled because ketchup can be kept out for 1 month to 6 months. Because ketchup is high on acidity.

Table: What is the difference between a tomato and tomato ketchup; a potato slice and potato chip; wheat flour and bread? What are the additional changes in a ketchup, a chip or bread?

Tomato It is Fresh	Ketchup/chutney It is processed
Potato slice It is a Fresh slice of potato.	Potato chip It is a fried slice of potato
Wheat flour Wheat flour is the main ingredient to make breads.	Bread/Chapati It is the product made from wheat flour.

4. Look at the table ab and answer the questions. Now, tomato ketchup/chutney, potato chip and bread/chapati are made from tomato, potato and wheat, respectively. Wheat flour stay fresh for longer compared to a tomato or potato slice? Why?

Wheat flour stays fresh for longer compared to a tomato or potato slice because it contains the grain's bran and the germ which is rich in fibre and other nutrients.

6. Do you think tomato ketchup/chutney or potato chip will stay fresh for longer? What is in these foods that they don't spoil quickly? Can you find out what all is present in preserved foods?

Yes, tomato ketchup or potato chip can stay fresh for long time. Tomato ketchup has the acidity of tomatoes, vinegar and sugar. Nitrogen gas in the chips bags, displaces oxygen. Without this step, the chips would spoil fast.

I crave...

We all crave that one delicious packed food. It may be a crisp like chips or biscuit, a chocolate, a drink, a namkeen or other packed food. Which is your favourite packed food?

My favourite packed food is biscuits.

What makes you buy that food? Tick whichever is applicable (You can tick more than one).

I like its taste ☒ My friends like it ☐ It comes with a special gift ☐

It is advertised by my favourite star/sportsperson ☐ Any other reason ☐

Please state your reason

It is a healthy option and can be had with any food at any time.

It is highly likely that the packed food of your choiced is also advertised on the television. Now, your teacher will show you a video of a packed food/drink. You will then have a class discussion. After the discussion, watch the advertisement of your favourite food again. Is there anything that surprised you about the ad. of your favourite food?

We may know something about the ingredients, nutrients and benefits from the teacher's discussion.

Task 3: Explore the labels

Have you ever CAREFULLY seen the backside of a packet of chips or namkeen or biscuit? Take a look at the backside of the packet that you have brought or your teacher gives

1. What all information does it provide?

Ingredients, Proprietary food, Nutritional information, Manufacturing details, FSSAI license, Batch no. & Best before.

2. Which nutrients are present in the food label you explored?

Energy, protein, carbohydrates, fat, sodium.

3. After reading the food labels, is there anything that surprised you?

Yes, now I know that my all time snack contains so many nutrients and energy.

4. Which food would you prefer out of the ones displayed? Why?

I would prefer the freshest of the lot and also consider health point of view.

5. When you go out for buying packed food, how will you make a choice, now that you can explore a food label?

I have learnt the particulars of the label so I will check best before use and prefer healthy food.

6. Any other information on the label that you consider equally important?

The symbol of veg (green dot) and the FSSAI standard. There is also a feed back no. for complaints. Very important is the mention of the Allergen advice.

7. Any other information which is NOT on the label but you think it should be added to the label?

1. If the packed food is not suitable for infants.
2. They must show the real time photos.

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PHYSICS EXPERIMENT

MY FOOD, MY CHOICE

BY SALLA TEJESH 9 B 40M

ITEM 1 - TOMATO SLICE

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	Orange Red	Orange Red	Orange Red	Orange Red	Orange Red	Orange Red
2	APPEARANCE	Fleshy	Dry	White Cottony	Cottony, black spots	Shrink, Fungus	Shrink, Fungus
3	SMELL	Earthy, spicy odor	Earthy	Earthy	Earthy	Earthy	Earthy

ITEM 2 - POTATO SLICE

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	Yellowish	Yellowish brown	Yellowish brown	Yellowish brown	Yellowish brown	Yellowish brown
2	APPEARANCE	Firm	Firm	White particles	Shrunked, dry	Shrunked, dry	Shrunked, dry
3	SMELL	Earthy	Earthy	Earthy	Earthy	Less Earthy Smell	Less Earthy Smell

ITEM 3 - WHEAT FLOUR

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	Off White	Off White	Off White	Off White	Off White	Off White
2	APPEARANCE	Powder, fresh	Powder	Powder	Powder, dry	Powder, dry	Powder, dry
3	SMELL	No odour	No odour	No odour	No odour	No odour	No odour

ITEM 4 - TOMATO KETCHUP

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	Shiny Red	Shiny Red	Dark	Darker	Darker	Even Darker
2	APPEARANCE	Moist	Thick, dry surface	Thicker	Thicker	Thicker	Thicker
3	SMELL	Stinky Tomato	Stinky Tomato	Tomato	Tomato	Less smell Tomato	Less smell Tomato

ITEM 5 - ALOO SEV / CHIPS

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	Yellowish brown	Yellowish brown	Yellowish brown	Yellowish brown	Yellowish brown	Yellowish brown
2	APPEARANCE	Crispy	Less Crispy	Whitish surface	Whitish surface	Whitish surface	Whitish surface
3	SMELL	Spicy smell	Spicy smell	Spicy smell	Less Spicy smell	Less Spicy smell	Less Spicy smell

ITEM 6 - BREAD SLICE

	PARTICULARS	DAY 1 (14/9/22)	DAY 2 (15/9/22)	DAY 3 (16/9/22)	DAY 4 (17/9/22)	DAY 5 (18/9/22)	DAY 6 (19/9/22)
1	COLOUR	White	White	Off White	Off White	Off White	Off White
2	APPEARANCE	Sponge like	Sponge like, dry	Sponge like	Sticky dry	Sticky dry	Sticky dry
3	SMELL	Sweetish	Sweetish	Less Sweet	bland	off	off

Note : This Experiment has been conducted on real time 14, 15, 16, 17, 18 & 19 September 2022 and observations recorded

Salla Tejesh 9-B , KV ONGC Ahmedabad

**My Food, My Choice Experiment conducted by
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Day 1
Date : 14/09/2022



Day 2
Date : 15/09/2022



Day 3
Date : 16/09/2022



Day 4
Date : 17/09/2022



Day 5
Date : 18/09/2022



Day 6
Date : 19/09/2022