

TOPIC : COMPONENTS OF FOOD

<u>Pre-content/ Content / Post-Content</u>	<u>Learning outcomes / Objectives</u>	
<u>PRE-CONTENT</u>	<u>General</u>	<u>Specific</u>
Brainstorming and interactive session will be taken up and their previous knowledge will be tested by asking simple questions like Q. What is the basic requirement of life and why do we need food ?	Students will be able to • recall food and its importance	Students will be able to • apply the knowledge of importance of food in daily life
<u>CONTENT</u>		
• Components of food Carbohydrates , Fats , Vitamins , Minerals , Proteins – their functions and their source • Classification of food • Testing of Nutrients • Dietary fibre and water • Deficiency diseases • Balanced Diet	• recall and identify the components of food. • appreciate the functions and significance of different nutrients. • classify the foods on the basis of its nutrients • analyze the presence of nutrients in food stuff • identify the importance of roughage and water • recall deficiency diseases and their causes. • compare why eating fast foods in large quantities may be unhealthy.	• recall the science facts to define the term nutrients • enumerate the different nutrients present in common foods. • compare and contrast the foods on the basis of its nutrients in common food items and develop healthy eating habits. • demonstrate test for the presence of particular nutrient like carbohydrates , fats , proteins in food stuff. • discuss the role of roughage and water • relate the deficiency diseases and their causes. • analyse likes and dislikes and be able to plan balanced and healthy diet.
<u>POST CONTENT</u>		
• Eating habits in daily life	• correlate balanced diet with the diet they eat in their daily routine.	• correlate and apply in daily life situations like what to eat and what not to eat.

HOMEWORK / ASSIGNMENT

1. Work exercises from the “ N.C.E.R.T Science Textbook “
2. Practice assignments from assignment booklet.

Teacher's Activity	Student's activity	Teacher's observation and Remedial
Teacher will introduce the topic by a healthy discussion in which choices of students will also be asked and importance of food will be told to them.	Students will actively participate in the discussion and will tell their food choices to the teacher along with the importance.	
- ask students to draw different food items in which the different nutrients are present in their notebooks. They will further be asked to write few lines about it too. - explain students that food has been divided into three groups and a video related to it will be shown to students. ANNEXURE 2 (A) - demonstrate test for the presence of following nutrients in the food stuff : carbohydrates , fats ,and proteins. - explain the role of roughage and water in our body. - divide the students into groups and will ask them to prepare a ppt on nutrients , deficiency diseases and balanced diet (Multiple assessment)	- draw pictures of various food items in which the different components of food are present and write about them in their notebooks. - do their worksheet related to nutrients sources and classification of food. ANNEXURE 2 (a) - be given a chance to perform the experiments and record their observations. - complete the worksheet related to it . - perform a group activity of ppt and questions will be asked from the audience as well.	
ask students to prepare a poster on healthy food v/s junk food	draw the poster on the same and will paste them in their notebooks.	

Teaching Aids –, Active Inspire , ICR , coloured sheets , material related to the experiment mentioned in the annexures.

Methodology/Innovative Methods : Deductive Activity Method , Known to Unknown , Brainstorming sessions

Interdisciplinary Links- Linked with Real life : **English** - It will improve the power of expression while explaining the activity and also vocabulary.

HOD

COORDINATOR

HEADMISTRESS

PRINCIPAL

ANNEXURE 2 A& a
HOW TO TEST THE PRESENCE OF SUGAR IN FOOD ITEMS?

Subject	Science
Class	VI
Chapter/Unit	Components of food
Topic	Test for sugar
Time	40 mins
Nature of Activity	Individual/Group

What will I learn ?(Learning Outcome)?

To explore that nutrient is a substance that provides nourishment essential for the maintenance of life , for growth ,to reproduce and to lead a normal healthy life. Sugar is a form of carbohydrate that givesus energy.

Skills: Applying,Evaluating

What I have to do? ?

To test the presence of sugar in the given sample of food

What do I require? :

Test tubes, tongs, water bath, water, apple, potato,Benedict's solution,dropper.

What do I need to know?

We all should eat a balanced diet in order to live a healthy life. The components of a balanced diet are - carbohydrates, fats, proteins, vitamins and minerals. The presence of each component in our food can be tested using various methods.[Benedict's solution](#) is used to test for simple sugars, such as glucose. It is a clear blue solution of sodium and copper salts. In the presence of simple sugars, the blue solution changes color to green, yellow, and brick-red, depending on the amount of sugar.

➤ **Teacher's Activity:**

Teacher will

- (1) explain how do we test the presence of sugar in a given food sample
- (2) ask students to wear lab coats and arrange the material required for the activity
- (3) divide the class into different groups.

How will I proceed?

➤ **Student's Activity:**

Students will

- (1) mix small amount of each food sample(potato and apple) with distilled water in two different test tubes to make a test liquid.
- (2) add 40 drops of each liquid to be tested in test tubes A and B.
- (3) further add 10 drops of Benedict's solution to each test tubes A and B.
- (4) carefully heat the test tubes(in the presence of teacher) by suspending in a hot water bath at about 40-50 degrees Celsius for five minutes.

What have I observed?

S. No.	Name of the food item	Colour of the liquid initially	Colour of the liquid (after adding Benedicts solution)
1	Crushed apple solution(Test tube A)		
2.	Crushed potato solution(Test tube B)		

What have I learnt?

If sugar is present in the food item, then the solution will turn_____

What am I curious to learn?

Let us find out whether we use same reagent to test the presence of carbohydrates , fats and proteins?
Why or why not ?

Let me evaluate myself

Q1.List any five food items that contain sugar ?

Q2.What is the importance of balanced diet ?

Q3.Fats are important for our body. Do you agree with this statement? Give reason to support your answer.

Q4.What is the difference between healthy food and junk food ?

Q5. Radhika loves to eat sweets and chocolates. She asks her mother for the same before and after every meal. Explain if this is an example of bad eating habit or healthy eating habit ?
