

MODEL LESSON PLAN (5 E Based)

(Real Teaching)

Subject: Home Science

Class: 12th

Unit/Chapter: 2nd /3rd

Duration: 40Min.

Topic: Iron Deficiency Anaemia

Date: / /

1. INSTRUCTIONAL OBJECTIVES / LEARNING OUTCOMES (From all the 3 Domains) -:

After completion of the topic, Students will be able to

- ❖ Get knowledge about causes, symptoms and prevention of Iron Deficiency Anaemia.
- ❖ Students able to recognise symptoms of Iron deficiency Anaemia and can apply knowledge how to prevent and dietary cure themselves.
- ❖ Enumerate Terminologies and concepts related to IDA.
- ❖ Recall various major sources of Iron.
- ❖ Practically apply knowledge of various strategies to prevent him/herself from anaemia.
- ❖ Establish relationship between Good nutrition and Good Health.
- ❖ Use the knowledge of various Programmes run by the Government to combat the problem of Anaemia.

2. INSTRUCTIONAL AIDS-:

- Chalk Board/ Smart Board
- Duster
- Pictorial Chart
- Practical Demonstration
- Live examples

3. TEACHING METHODS-:

1. Explanation Method
2. Discussion Method
3. Question-Answer Method

4. **PREVIOUS KNOWLEDGE ASSUMPTION-:** Students may have some knowledge about various nutrients of food and a important micronutrient Iron.

I. ENGAGE

Previous Knowledge Testing –:

Sr. No.	Teacher's Activity	Student's Response
1.	What are the Basic needs of life?	Food, Water and Air.
2.	What are the different Nutrients of Food?	Carbohydrates, Proteins, Fats, Vitamins and Minerals.
3.	Do you know about Minerals?	Micronutrients.
4.	Which Minerals are essential for our body?	Iron, Calcium, Phosphorus, Iodine and Sodium etc.
5.	Which disease is caused by deficiency of Iron?	Anaemia.
6.	What are the Symptoms of Anaemia?	No response

5. **ANNOUNCEMENT OF THE TOPIC-:** Well students, today we will discuss about Iron Deficiency Anaemia in detail.

II & III EXPLAIN & EXPLORE

6. PRESENTATION-

Teaching Points	Teacher Activities	Student Activities and Response	Writing Board Summary
Iron	Iron is a complex Haemoglobin compound. It is an essential micronutrient for motor and cognitive development.	Students listen carefully and show curiosity	Iron is an essential Micronutrient and complex Haemoglobin compound.
Iron Deficiency Anaemia (IDA)	IDA is the most common nutritional disorder in the world and is prevalent in both developed and developing countries. The vulnerable groups are women in child-bearing age, adolescent girls, pregnant women and school age children.	Students listen carefully and show interest in the topic.	Anaemia is a most common Nutritional disorder and prevalent among both developed as well as in developing countries.
Causes of IDA	1. IDA occurs due to reduced count of red blood cells caused by	Students listen carefully and write causes of	Causes of Anaemia- 1. Reduction in RBC's count.

	<p>deficiency of Iron. That's why haemoglobin production is considerably reduced and it results in Anaemia.</p> <p>2. Due to inadequate intake of associate nutrients which helps in the absorption of iron like Vitamin A and C also cause Anaemia.</p> <p>3. Iron loss due to Accident, excessive bleeding during menstruation, excessive blood donation, Tuberculosis, obstruction in intestine, blood cancer etc. causes Iron deficiency.</p>	<p>Anaemia in their notebooks.</p> <p>Students ask various questions related to causes of Anaemia.</p>	<p>2. Low Haemoglobin count.</p> <p>3. Due to less intake of associate nutrients like Vitamin A and C.</p> <p>4. Excessive blood loss due to menstrual period or accidents.</p> <p>5. Due to diseases like Tuberculosis blood cancer, Intestinal obstruction and excessive blood donation, etc</p>
--	---	--	--

<p>Vulnerable Groups</p>	<ul style="list-style-type: none"> ▪ Most common among pregnant women due to increased demands of iron for foetal growth. ▪ Growing Children are more vulnerable due to Increase demands of iron at the growing age. ▪ Adolescent girls are also more vulnerable due to loss of Iron during menstrual period. 	<p>Students listen carefully and note down the important points.</p>	<ol style="list-style-type: none"> 1. Pregnant Women 2. Growing age children. 3. Adolescent Girls.
<p><u>EXPLORE</u></p> <p>Symptoms of Anaemia</p>	<ul style="list-style-type: none"> ● Fatigue ● Laziness ● Blurred vision. ● Pallor eyes tongue and nail beds. 	<p>Students listen carefully and asked various questions about</p>	<p>Symptoms of Anaemia-:</p> <ul style="list-style-type: none"> ● Fatigue ● Laziness ● Blurred vision.

<p>Iron rich Foods/ Rich Sources of Iron</p>	<ul style="list-style-type: none"> • Headache • Shortness of breath on slight exertion. • Abnormal heart-beat. • In children cognitive functions like memory, attention span and concentration are adversely affected. <p>Teacher shows the pictorial chart of various sources of iron and explains that Intake of Iron rich foods like Green leafy vegetables Bathua, Spinach, Mustard leaves,</p>	<p>symptoms of Anaemia.</p> <p>Students look at the black board and note down the symptoms of Anaemia.</p> <p>Students focus on the chart, see and know the sources of Iron and listen carefully.</p>	<ul style="list-style-type: none"> • Pallor eyes tongue and nail beds. • Headache • Shortness of breath on slight exertion. • Abnormal heart-beat. • In children cognitive functions like memory, attention span and concentration are adversely affected. • Green leafy vegetables like Bathua, Spinach and Mustard leaves etc. • Lotus-stem vegetable. • Fruits like watermelon, Pomegranate, apple, guava. • Rice flakes • Jaggery
---	---	---	---

<p>Prevention and Treatment Strategies of Anaemia</p>	<p>Lotus-stem vegetable, fruits like watermelon, Pomegranate, apple, guava and other food items like Rice flakes, Jaggery, Black grams, Grains, Pulses and Legumes etc. Non -veg food sources like Kidney, Liver and egg yolk etc. are rich sources of Iron.</p> <p>Two types of strategies are adopted to combat the public Nutrition problems like Anaemia.</p> <p>1. Diet Based Approach- these strategies used food as a tool to overcome nutritional</p>	<p>Students share what foods they have taken normally in diet and what they don't.</p> <p>Students listen carefully, share their experiences and note down important points and keywords in their notebooks.</p>	<ul style="list-style-type: none"> ● Black grams ● Pulses and Legumes ● Whole Grains ● Non-veg. Sources Liver, egg yolk etc. <p>Prevention and Treatment Strategies-</p> <ol style="list-style-type: none"> 1. Diet Based Approach 2. Medicinal approach
--	--	--	--

<p>Programmes run by the Government to eradicate the problem of Anaemia</p>	<p>deficiencies. It will have long term benefits.</p> <p>2. Medicinal approach- In this approach nutrient supplements are given to vulnerable group. It is a short term strategy mainly used for Iron, Folic acid and Vitamin A in India.</p> <p>There are various Programmes which are run by the Government to combat the problem of Anaemia-</p> <ol style="list-style-type: none"> 1. Prophylactic Iron and Supplementati on including Adolescent girls. 	<p>Students discuss their views and experience with teacher and asked the questions.</p> <p>Students said Mam, we have learnt how we can prevent ourselves from Anaemia and which govt. schemes help us in this regard.</p>	<p>Programmes run by the Government to eradicate Anaemia -:</p> <ol style="list-style-type: none"> 1. Prophylactic Iron and Supplementati on Programme. 2. (NNACP) 3. (WIFS) 4. Anaemia MukT Bharat
--	--	---	---

	<p>2. National nutritional Anaemia Control Program (NNACP)</p> <p>3. Weekly Iron and Folic acid Supplementati on (WIFS)</p> <p>4. Anaemia MUKT Bharat Program.</p>		Program.
--	--	--	-----------------

IV. ELABORATE

Government has taken so many steps and initiatives to overcome the problem of Anaemia but still the problem remains the same. So, students we found that knowledge of Anaemia and dietary sources of Iron requires to tackle with the problem of Anaemia and helps us a lot to reduce the chances of this nutritional deficiency disorder.

V. EVALUATE

1. Which disease is caused by deficiency of Iron?
2. What are the causes of Anaemia?
3. Do you know about the various sources of Iron?
4. What are the symptoms of Anaemia?
5. How many types of prevention strategies are used to combat Anaemia?
6. What is the full form of IDA?

7. RECAPITULATION:- Well, students today we learnt about Iron Deficiency Anaemia, symptoms and causes of it. We also came to know about rich sources of Iron, prevention and treatment strategies and initiatives taken by Indian Government to eradicate the problem of Anaemia. This will help us a lot to prevent ourselves from this Disease.

8. HOME ASSIGNMENT:-

1. Write a short note on Anaemia?
2. Describe the strategies that can be used to tackle with the problem of Iron deficiency Anaemia.
3. Establish connection between Good nutrition and Good health.
4. Describe the various sources of Iron.
5. Iron is anutrient.
6. Which type of nutrients helps in the absorption of Iron?
7. Name some Programmes run by the Govt. to tackle with the problem of Anaemia.