









Theme 6: Nutrition, Health and

Sanitation



Introduction

The objectives of the module

- Help in developing positive attitude and enhancing knowledge to demonstrate healthy nutritional and hygienic practice
- Introduce the nutritional needs of adolescents.
- Explains different food groups, locally available sources and their importance for maintaining good health
- Introduce the concept of balanced diet.
- Identify and challenge nutritional discrimination and the myths related to nutrition.
- Enhance the knowledge of the learner on the causes, prevention and management of Anemia



Activities

S. No.	Activities	Methods
I	Nutritional Needs of Children	Discussion
2	Personal Hygiene	Game
3	Healthy Habits Quiz (Healthy eating and Food hygiene)	Quiz
4	Sanitation and Health	Discussion
5	Anaemia: Causes, Prevention and Management	Group Discussion
6	National Schemes on Nutrition and Sanitation	Discussion

Activity I: Nutritional Needs of Children

Learning Outcomes

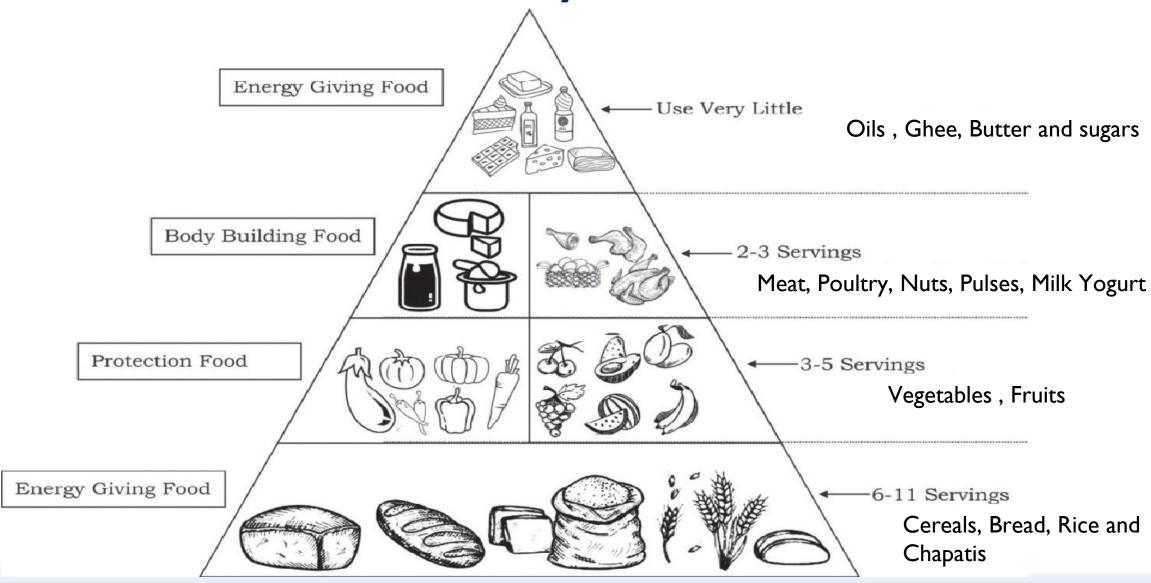
- Explains different food groups and their importance for keeping healthy
- Identifies locally available sources of the different food groups
- Explains the concept of balanced diet



Food items and Food Group

Food Items	Food Group	
I. Grains (wheat, rice, bajra, millets, ragi, etc.); white roots and tubers; plantains	Energy giving food – carbohydrates and fats	
2. Oils, fats, sweets		
3. Pulses (beans, peas and lentils)		
4. Nuts and seeds		
5. Dairy products	Body building food – proteins	
6. Meat, poultry and fish	proteins	
7. Eggs		
8. Vegetables	Protective food –	
9. Fruits	vitamins and minerals	

Food Pyramid



- Food serves many important functions in our body
- Base of the food pyramid is wide as it shows that food placed there must be eaten in more quantity in the daily diet
- Tip of the pyramid shows foods that are high in fats (oils) and sugar. These must be eaten in very less quantity in the daily diet.
- To meet all the nutrient needs, we need to have a sufficient quantity of food from each of the different food groups.
- Locally available foods and home cooked food is much healthier than packaged food and fast food.
- Packed and junk food may be tasty, but if it replaces meals on a regular basis it could result in micronutrient deficiency.
- Note: Important to critically analyze catchy advertisements promoting consumption of fast food and packaged food



Activity-2: Personal Hygiene

Learning Outcomes

- Relates personal hygiene with good health
- Describes methods to maintain personal hygiene



- Maintaining personal hygiene prevents illness and infection from bacteria or viruses
- Simple activities can be done to maintain personal hygiene:
 - Wash hands (before eating or preparing food, after playing or going to the toilet),
 - Brush teeth at least twice a day,
 - Rinse mouth after every meal,
 - Clip finger nails when long,
 - Have a bath daily,
 - Avoid biting nails or digging the nose,
 - Change undergarments daily,
 - Wear footwear when going out,
 - Cough and sneeze into your elbow



Activity-3: Healthy Habits Quiz (Healthy Eating and Food Hygiene)

Learning Outcomes

- Explains good eating habits to maintain good health
- Explains seven Cs to maintain Food Hygiene



Quiz

Eating whole grains like maize, barley, ragi, bajra, wheat, etc.

Removing fiber from wheat flour to make chapattis

Drinking tea/coffee immediately before or after eating food

Cooking food in iron utensil

Cooking greens in an open vessel

Consuming cooked food stored in room temperature after two days

7 Cs for food hygiene to prevent food contamination

Check: Select food that is fresh. When buying packaged food, check the 'best before date'.

Clean: Wipe all packages, tins, bottles before storing food. Wash whole fruit, vegetables and other food before cooking or consuming raw.

Cover: Keep all food and drinking water covered in a storage area that is free of pests and dust. Food stored in refrigerators must also be covered to avoid drying and absorbing of odors.

Cross contamination avoided: Keep raw and cooked food apart.

Cook: Cook food thoroughly and ensure it is freshly cooked especially if there is no refrigerator to store it.

Cool/Chill: Freeze meat, poultry, refrigerate eggs and other perishables as soon as you get them home from the market.

Consume: Serve food in a clean environment. Use clean vessels, plates, spoons for serving food and wash them well after using

- Lack of food hygiene is a common cause of illness and death among infants and children in our country, which can be easily reduced if we take care of hygiene and sanitation at a personal and community level.
- Good eating habits and maintaining food hygiene is essential for maintaining good health. For example, eating whole grains, sprouts, drinking local drinks (instead of packaged drinks), moderating street and junk food, cooking in iron dishes.
- It is important to maintain food hygiene by following the seven Cs.



Activity-4: Sanitation and Health

Learning Outcomes

- Explains connection between personal and food hygiene, sanitation and good health
- Explains the five modes of faeco-oral transmission (five Fs) of infectious diseases
- Explains ways to maintain hygiene and sanitation to prevent infections



Video

Case Study

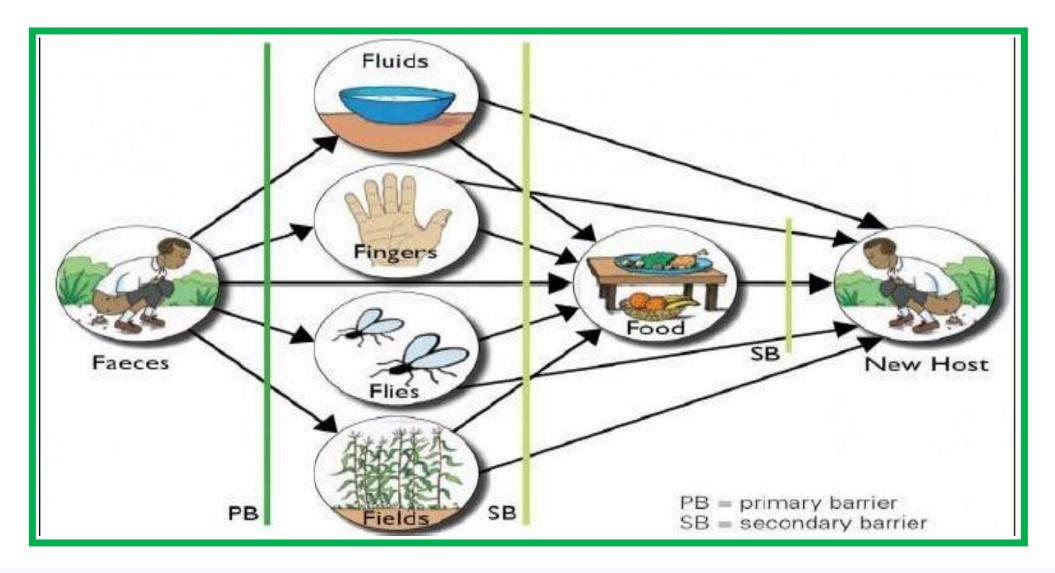
Hema is a mother of three young children who are 8, 4 and 2 years old, respectively. Her husband is a daily wage labourer who goes to work early in the morning. She does not have any help at home and finds it difficult to manage the children and her household work of cooking, cleaning, washing clothes and vessels. Usually, she is able to cook only once in the day. They do not have a fridge and the cooked food lies outside. There are lots of house flies in and around Hema's house that often sit on the food. In the hurry to finish several chores, she often forgets to cover the food and keep it out of the reach of the children who eat without washing their hands.

Hema and her family defecate in the nearby field making it harder for Hema to go after her two younger children and clean them each time they go to the toilet. They also play in the same field bare feet. Hema sometimes forgets to wash her hands after cleaning her children. She finds it hard to clean and bathe her two younger children every day and their nails often remain unclipped and dirty. In the absence of tap water she sometimes uses water from the pond next to the field in kitchen.

Hema and her family often have abdominal pain and loose stools. Recently her younger child has been complaining of nausea and she has noticed blood in the stool. Hema has herself been feeling very weak.

Group		Questions for discussion
I and 2		Do you think the personal hygiene practices of Hema and her family led to the family's frequent illnesses? Please provide reasons for your response. What advice would you give Hema and her children for maintaining personal hygiene?
3 and 4	1.	Do you think Hema's cooking and food storage practices led to her family's frequent illnesses? Please provide reasons for your response. What advice would you give Hema and her husband for maintaining food hygiene?
5 and 6	1.	around Hema's house led to the family's frequent illnesses? Please provide reasons for your response.

Chain of five Fs that can cause infections



- Poor personal hygiene can result in the transmission of harmful germs from the surroundings into one's body.
- Contaminated food and water are common mediums of transmission of harmful germs into a person's body.
- Sanitation is important to avoid growth of harmful organisms in surroundings and their transmission
- Open defecation can lead to worm infestations and must be avoided (discussion about how)



Activity-5: Anaemia: Causes, Prevention and Management

Learning Outcomes

- Describes the common causes, symptoms of anaemia in children.
- Lists risk factors for iron deficiency anaemia Identifies locally available sources of food rich in iron, folic acid and vitamin B12.
- Explains how anaemia can be prevented and managed.



Group Work

Group I: Causes of anaemia

Group 2: How do you recognize if a person has anaemia?

Group 3: Sources of iron

Group 4: What advice would you give people in your community to prevent iron deficiency anaemia?

Group 5: Children at risk for anaemia – reasons

- Anaemia is a condition of deficiency of hemoglobin in the red-cells in our blood. It is caused due to lack of iron.
- Any adolescent who has hemoglobin below 12gm% is anaemic.
- The body develops rapidly during adolescence. Hence, the overall nutrition and iron requirements also increase.
- Iron deficiency interferes with a person's ability to work, play or study. If left untreated, it can have long-term negative consequences.
- Importantly, anaemia can easily be prevented and can also be treated.
- We need to eat iron rich food to keep healthy and fit.
- We should watch out for symptoms of anaemia and get timely treatment.
- Children should consume iron and folic acid under the WIFS scheme of the government to prevent anaemia.



Activity-6: National Schemes on Nutrition and Sanitation

Learning Outcomes

 Describes the key provisions and benefits of government programs including Weekly Iron Folic Acid Supplementation, National Deworming Day and Swachh Bharat Abhiyan



Scheme: Weekly Iron Folic Acid Supplementation

- Ministry of Health & Family Welfare is implementing the Weekly Iron and Folic Acid Supplementation (WIFS) programme since 2012 to meet the challenge of high prevalence and incidence of anaemia in adolescent girls and boys (56 percent of girls and 30 percent of boys as per National Family Health Survey 2015-16)).
- There are many causes of anaemia, of which iron deficiency accounts for about 50 % of cases in school children and among women of reproductive age-group (15-45 years), and 80 % in children 2-5 years of age.
- Under WIFS iron-folic acid tablets (pink/blue tablets) are given to children studying in Classes I-XII. This service is delivered through school teachers.
- The tablets should be consumed after the main meal of the day to prevent side effects such as nausea and pain abdomen

Scheme: National Deworming Day (NDD)

- This programme is implemented by the Ministry of Health & Family Welfare to reduce the risk of worm infestation causing anaemia, malnourishment leading to impaired mental and physical development.
- India has the highest burden of intestinal worms infecting humans that are transmitted through contaminated soil .Parasitic worms in children interfere with nutrient uptake, and contribute to poor health.
- The National Deworming Day (NDD) programme was started on 10 February 2018.
- It is conducted twice a year on 10 February and 10 August every year. On these days, mass deworming for children in the age groups between 1 and 19 years is carried out by giving them the recommended dose of Albendazole tablets.
- National Deworming Day is conducted through schools and Anganwadi centres

Scheme: Swachh Bharat Abhiyan

Swachh Bharat Abhiyan is also called the Clean India Mission or Swachh Bharat Campaign. It is a national campaign to cover all the backward statutory towns to make them clean. This campaign involves:

- Construction of latrines for households below the poverty line or converting dry latrines to low cost sanitary latrines.
- Promoting sanitation programmes in the rural areas use of hand pumps for water, safe and secure bathing facilities, sanitary marts, construction of drains, disposal of solid and liquid wastes, cleaning streets and roads.
- This intends to reduce the risk of diarrhoea through clean sanitary practices and the construction of latrines will reduce the risk of worm infestation through open field defecation
- Enhance health and education awareness.
- This campaign was launched by the Hon'ble Prime Minister, on the 145th birth anniversary of Mahatma Gandhi on 2 October 2014 at Rajghat, New Delhi.
- More information: http://swachhbharatmission.gov.in/SBMCMS/about-us.html

- Government of India is implementing many programmes to enhance people's health and protect them from prevalent diseases.
- Weekly Iron Folic Acid Supplementation, National Deworming Day and Swachh Bharat Abhiyan are three national level programmes that try to tackle the issues of widespread anaemia, parasitic worm infections and lack of sanitation, respectively.
- It is important to have information and participate in these schemes to ensure that its benefits reach us and people in our community.



Thank You