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12

GENDER AND ACCESS TO FOOD

Food is essential for the survival of human life. We, productive beings, need food to live and perform. However, all humans are not seen as adequately fed and nourished. The signs of imbalance between food intake and body needs may be explicitly seen through frequent illnesses, fatigue and exhaustion. Therefore, the question is, why are all humans not adequately fed when it is so basic for survival?

Our health status is directly related to food intake in quantity and quality. Looking around, we find the most obvious distinction between the health status of men and women. The health indicators such as birth rate, mortality and life expectancy are better for men than for women at most ages except in old age. On the other hand, the low health status of women may indicate that their food intake is inadequate in quantity and inferior in quality. This may point to factors that vary in nature from personal to social and economic and have a direct and indirect link with the food intake of men and women. To understand it in-depth, each factor needs to be analysed in the context of gender within the food availability, access, and consumption framework.

In this lesson, we explore the relationship between gender and food access and consumption, particularly with reference to the Indian context.

OUTCOMES

After studying this lesson, learner:

- discusses the concepts of food availability, food access and food use;
- describes the economic factors that determine differential access to food;
- explains the socio-cultural practices that lead to disparity in access to food;
- identifies the major deficiency diseases for children and women in India and discuss their impact on health, viz. Anaemia and PCM (Protein, Calorie Malnutrition).

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12.1 THE FOOD CYCLE: FOOD AVAILABILITY, ACCESS, AND USE

Women are an integral part of the Food Cycle. They work in agriculture production, from sowing and weeding to harvesting various crops, and are actively involved in processing, distributing, and marketing food products. However, their work is largely on family land, which keeps their economic role in agriculture hidden and unnoticed. Their work neither fetches them ownership of resources such as land, credit, technologies, finance, and other services nor any decision-making powers. Empirical studies suggest that if women have the same access to productive resources as men, they can boost their yields by 20–30%, leading to an increase in the overall agricultural output. Therefore, to improve agriculture production in the country, we need to close the gender gap in agricultural operations and ownership of resources.

12.1.1 From Production to Consumption

Food reaches us after passing through several stages: production of food, distribution of food, It grows at one place, is processed at another and is made available at another.

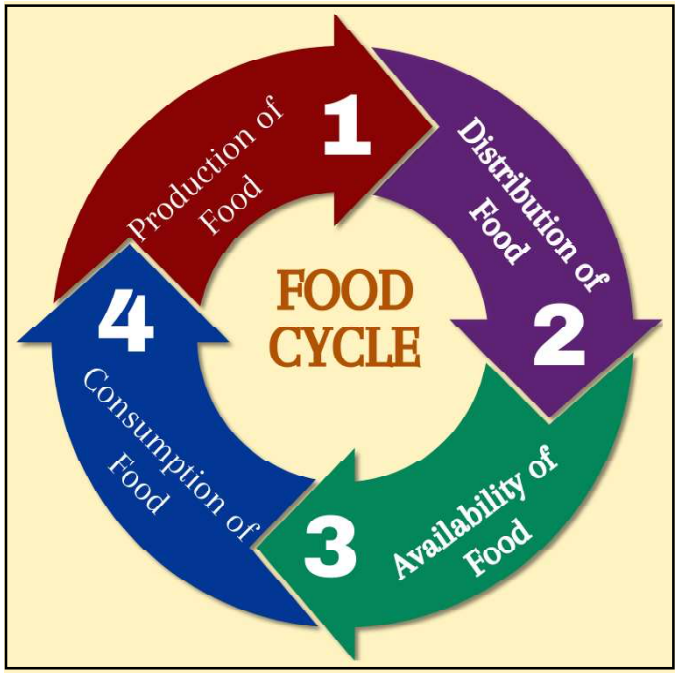

Fig 12.1: Stages of Food Cycle

There is value addition at every stage of the food cycle to make it palatable, likeable, and worthy of direct consumption. The various stages may be summed up as follows:

1. Production of Food

India has a rich agriculture industry. The production of food grains and other agri-produce has steadily increased.

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Food is grown on farms in different parts of the country. Around 70% of the people are engaged in agriculture and allied sectors. The main activity is to grow food such as wheat, cereals, pulses, vegetables, fruits, and nuts. The food grown in fields is raw and inedible. Therefore, it is processed in factories to make it edible. After food is processed, it is ready for packaging and labelling with product details. It is then made available in the market for direct consumption.

Food Safety and Standards Authority of India (FSSAI) regulates the manufacture, storage, distribution, and sale of food and ensures that safe and wholesome food is available to people. It also creates an information network nationwide so that the public, consumers, etc, receive rapid, reliable, and accurate information about food safety and hygiene and related issues (Visit: http://www.fssai.gov.in).

2. Distribution of Food

Food is distributed across the country after it is processed and packaged in manufacturing units. The processed food is stored in proper storage facilities, which maintain the optimum temperature and moisture levels required to maintain the shelf life of different items.

Food is transported safely in covered vans and trucks for distribution. The food in an open market is priced considering factors like labour, equipment, machinery and other resource inputs. Food costs vary from place to place as per the quality and quantity of food packaged in a packet. However, the Maximum Retail Price (MRP) printed on packaged food is meant to keep the selling price of an item under check.

3. Availability of food

Food availability relates to food supply through production, distribution, and exchange. Food availability is defined as sufficient quantities of foods available consistently. Food is made available in two ways:

- **Open Market Sale** – Food is available in the market, and people can purchase it from shops at prevailing rates for different items.
- **Public Distribution System** – This is the food security measure of the Government to make food available at subsidised rates. The Ministry of Consumer Affairs, Government of India, has ensured food security for people through Public Distribution System (PDS). The aim is to distribute subsidised food and non-food items to the country's poor. A network of PDS outlets provides food such as cereals, oil, and wheat at a rate much subsidised than the market. A ration card is issued to the family to access food under the PDS. To avail food under this category, the total family income must be under a certain amount decided on the parameters of the poverty line defined by the Government.

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4. Consumption of Food

The last stage of the Food Cycle is the most important of all. After going through several stages, food reaches our table. It is at this stage that we get to eat food which has a direct implication on our health and capacity to work. There are 3 main factors that operate at this stage:

a. **Purchase of food:** The household is the unit for food procurement, preparation, and consumption. It is usually the Head of the family or the person who handles money in the home who purchases/procures food for all. They visit the market to buy food as per the money allocated for it and the likes/dislikes of the household members. Multiple factors determine the choice of food purchased by a family for consumption.

Fig 12.2: Purchase of Food

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b. **Cooking and Distribution:** The food is cooked at home and is distributed among the members. One person, usually the woman of the house, is tasked with preparing meals for all. She cooks the meals and distributes them among the members. At this stage, social and cultural norms and beliefs intervene and control the food distribution mechanism within the family. Therefore, women are responsible for cooking, but social norms affect the distribution and consumption of food.

c. **Share of women in the family:** There is enough empirical evidence to say that the woman of the house is the last one to eat in the family. She eats food only after distributing it among the family members. This practice has a very adverse effect on their health. Therefore, the correlation between women's food intake and total food availability in the family needs to be studied in the existing socio-cultural milieu of society.

12.2 ACCESS TO FOOD

Access to food refers to the final food intake of a person or how much they finally get to eat. At home, access to food may depend on the following factors:

1. Economic Access

The family purchases food according to its gross income and the proportionate amount kept aside for purchase and preparation. A portion of the total money in the household is generally held aside for food procurement and preparation. The higher the income, the greater the quantity and choice of food purchased for consumption in the home. The availability of food in the family, therefore, fluctuates with the prevailing rate in the market from where it is purchased.

2. Direct Access

There are families, particularly in rural areas, which own a piece of land and grow food for their own consumption using human and material resources. Depending upon the land size, the family grows and receives the produce. The larger the land, the more food that can be grown and is available for consumption by the family. Conversely, growing food on a smaller piece of land brings less food for family consumption and restricts the available quantity.

3. Social Protection

Public Distribution System (PDS) provides food security at the household level. People below the poverty line are issued ration cards to buy food from government outlets at a much more subsidised rate than the market.

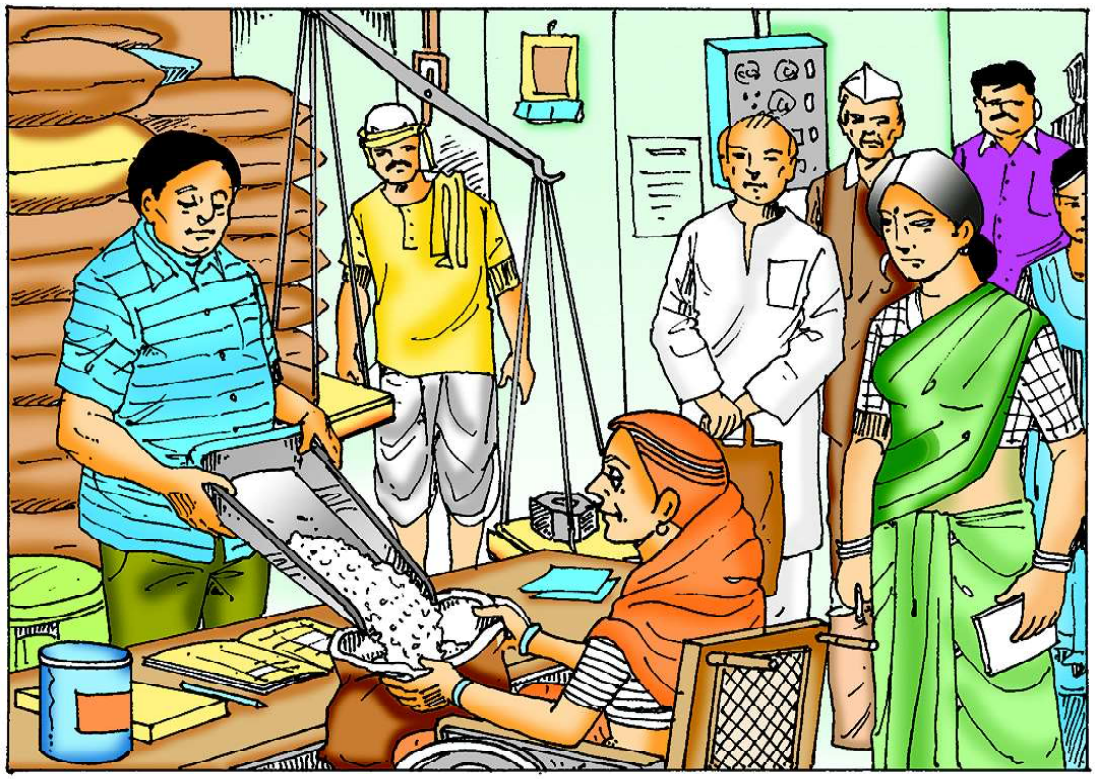

Fig 12.3: People purchasing food grains at a PDS shop

PDS is a food security measure to ensure that all household members have access to enough food for an active, healthy life. In addition, it provides that none of the members lives in hunger or fear of starvation.

To conclude, the quantity and quality of food consumed by the family are constrained by economic access, social protection and direct access to food, as explained above.

Access to food implies *Sufficient resources to obtain appropriate foods for a nutritious diet.*

National Level: The country's food access from the country's production and the global market.

Household Level: The members' ability to produce their food or purchase food from the market.

Individual Level: Individual's ability to meet their nutritional needs

INTEXT QUESTIONS 12.1

1. Explain Food Cycle?

2. Comment on the role of women in the Food Cycle.

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3. Discuss the mechanism of social protection with respect to access to food.

12.2.1 Gender and Access to Food

A household's access to sufficient and nutritious food may not assure adequate food intake by all household members, as intra-household food allocation may not sufficiently meet each household member's requirements. This may hold valid given the socio-cultural factors and existing gender equations where bias and discrimination against women and girls are now a fact.

There is a strong relationship between gender-based discrimination and the channels households, and individuals access food. The unequal access to food is, by and large, defined by the following factors:

- **Gender Inequality:**

  Gender inequality exists in various forms. For example, women face discrimination in education and employment opportunities and within the household, where their bargaining power is lower.

  Women and girls make up 60 percent of the world's chronically hungry. Moreover, their health status is relatively poor in comparison to men. Though the Equal Right to Food for women has been enshrined in the Convention on the Elimination of All Forms of Discrimination against Women, not much has been achieved to ensure it is on the ground.

Gender discrimination is a stark reality which impacts food, nutrition and health outcome for women and girls. Women are discriminated against for:

- **Inheritance Rights -** Denied under the pretext of family lineage and continuity.
- **Low Wage Rate -** Paid less for as much work performed by men.
- **Employment & Income -** Restricted options to work and earn
- **Decision making -** Very limited participation.
- **Social status -** Given a status lower than men.
- **Unequal distribution -** Provided fewer resources than men.
- **Food and medical care -** The last to receive in the family

Women have a significant role and responsibility in the food sector. They contribute tremendously to food production, processing, distribution, and marketing. At home, they procure, store, prepare, distribute, and ensure that all members have ample food. However, data indicate that girls have significantly worse health and nutrition outcomes than boys. The reason for this

discrepancy may be seen in gender discrimination in the intra-household allocation of resources. The preference for boys in our families is a fact coupled with higher resources spent on boys than girls. These include more access to food, education and learning opportunities for boys than girls.

Women's access to food is closely connected to the access of food to the household. Women are primarily responsible for the food supply in the household. Women have access to food through production on family farms or through purchasing it with money. Gender roles often create socio-cultural constraints on women's access to food. These constraints are interrelated with each other. The three major kinds of constraints are: Physical, Socio-cultural, and Economic

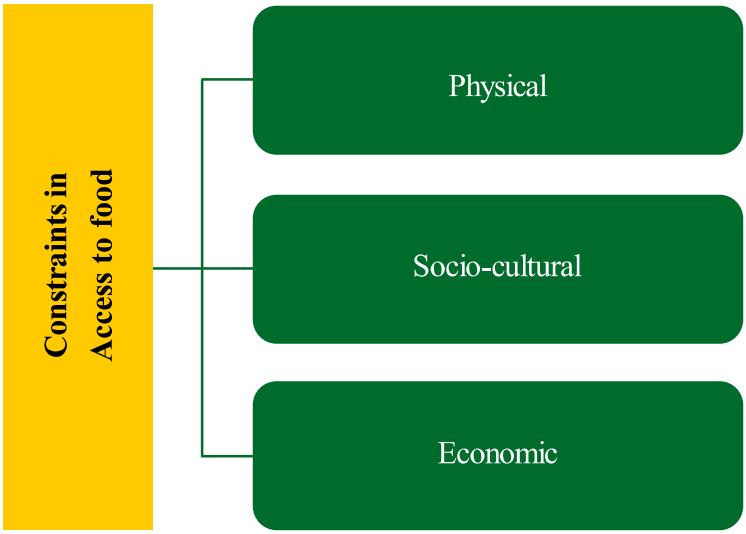

Figure 12.4: Various Constraints for access to food

Various factors are explained as under:

- **Physical Access to Food**

  Generally, women are less mobile and more time-constrained due to the gender-based division of labour in the household and socio-cultural norms. While men are generally held responsible for income-generating activities, women oversee childcare and time-consuming domestic activities. Lack of time and workload at home may constrain women from maintaining optimum food intake.

- **Economic Access to Food**

  Women have less decision-making power in the household. Their restricted mobility outside the home limits their engagement with the market. As a result, they have fewer chances to participate in income-generating activities in the market. This may reduce their bargaining power and weaken their say in access to and distribution of intra-household resources. Due to malnutrition, women's participation in the economic system

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and their productivity also get adversely affected. This results in a vicious cycle of women, nourishment, and productivity. The productivity of an undernourished woman is low, and when coupled with illiteracy, all the chances for her to find work are negated.

- **Socio-cultural Access to Food:**

  Customary practices often dictate differential roles, privileges, and life options for women and men, especially favouring the latter. For example, the woman's access to food at home is determined by the meal-eating pattern of the household. The pattern is based on multiple factors such as age, sex, social status, and decision-making power of the member.

  In economic stress, access to quantity and quality of food is further reduced for women. Moreover, the intra-household distribution of food becomes more biased against women and girls owing to gendered social norms, raising gender-specific nutritional needs and lifecycle vulnerabilities.

Family is not a homogenous unit operating with members who share the same amount of access to and utilisation of the household's resources, including food-an underline dynamic impacts intra-household resource allocation and its effects on distribution within the family.

ACTIVITY 12.1

Visit 5-6 house at Lunch or dinner time. Observe their meal eating patterns and make a report on how all the members sit together, how food is served, who serves the food, and if personal preferences are asked when serving it, etc.

INTEXT QUESTIONS 12.2

1. Define gender discrimination?
2. What do you understand by access to food in the context of gender?
3. Clarify how do women's access to food differ from that of men?

12.3 Major deficiency diseases in India

Insufficient food intake or hunger causes ill health and many associated deformities. There is a decrease in body size, known in medical terms as stunting or stunted growth. This process starts *in utero* if the mother is malnourished. This state continues through approximately the third year of life. It leads to higher infant and child mortality.

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Our body requires many different vitamins and minerals crucial for both body development and disease prevention. These vitamins and minerals are often referred to as micronutrients. Unfortunately, they aren't produced naturally in the body, so we must get them from food.

A nutritional deficiency occurs when the body does not get the necessary amount of a nutrient. Deficiencies can lead to a variety of health problems. These can include digestion problems, skin disorders, stunted or defective bone growth, and dementia.

Nutritional deficiencies cause irreversible damage to the human body. These lead to stunted growth, which cannot be reversed even with improved nutritional intake later in life.

Nutritional deficiencies adversely affect health in three ways:

- Premature failure of vital organs occurs during adulthood. For example, a 50-year-old individual might die of heart failure because his/her heart suffered structural defects during early development.
- Stunted individuals suffer a far higher rate of disease and illness than those who have not undergone stunting.
- Severe malnutrition in early childhood often leads to defects in cognitive development.

Poor food intake among women and children directly impacts nutritional deficiencies among them. Taking the average nutritional status of households, severe malnutrition has been found among the women in eastern states and the state of U.P. and M.P.

In India, women face most health problems due to socio-cultural and gender discrimination. As a result, the high-risk periods in their lives are the early childhood and reproductive years.

In India, higher female mortality between ages 1 and 5 and high maternal mortality rates are due to the following reasons:

- Inadequate and poor nutrition
- Poor access to primary healthcare
- Poor reproductive health
- Discrimination against girls

The practice of sex determination tests and induced abortion of female fetuses lead to a skewed sex ratio. For example, the sex ratio in India is 943 females per 1000 males (Population Census, 2011).

Gender disparity in nutrition prevails from infancy to adulthood. Girls are breastfed for shorter periods during infancy. Therefore, malnutrition among girls below five years of age is an underlying cause of death.

Adolescence, between the ages 10 and 13 years in girls, is characterised by a growth spurt, i.e., growth is very fast in this phase. During this time, physical changes affect the body's nutritional needs.

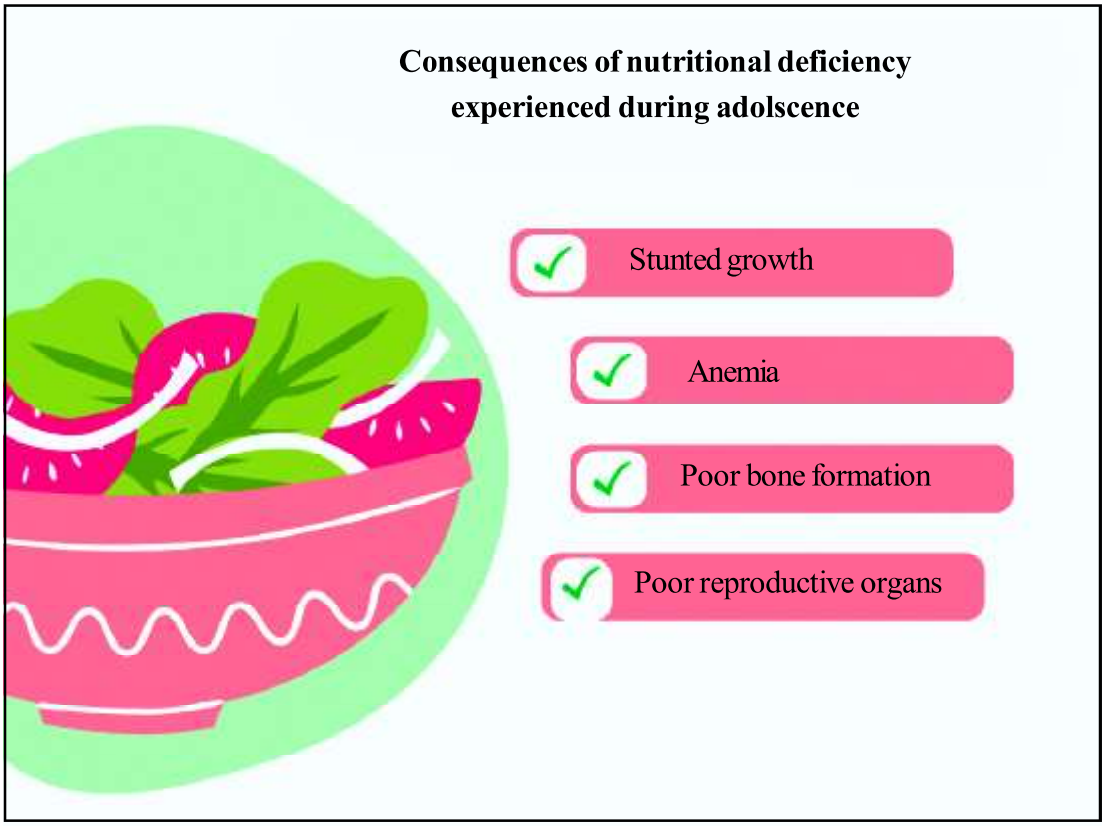

Fig 12.5: Consequences of nutritional deficiency

Any nutritional deficiency experienced during this critical period can result in stunted growth, Anemia, poor bone formation and reproductive organs and their functions. Stunted growth during adolescence has a negative bearing on the health status of women during adulthood and beyond.

ACTIVITY 12.2

Find out the sex ratio of top and bottom 5 states in India based on Census 2011

12.3.1 Major Deficiency Problems

There are various primary nutritional problems found among women in India. Thesea are given in the diagram.

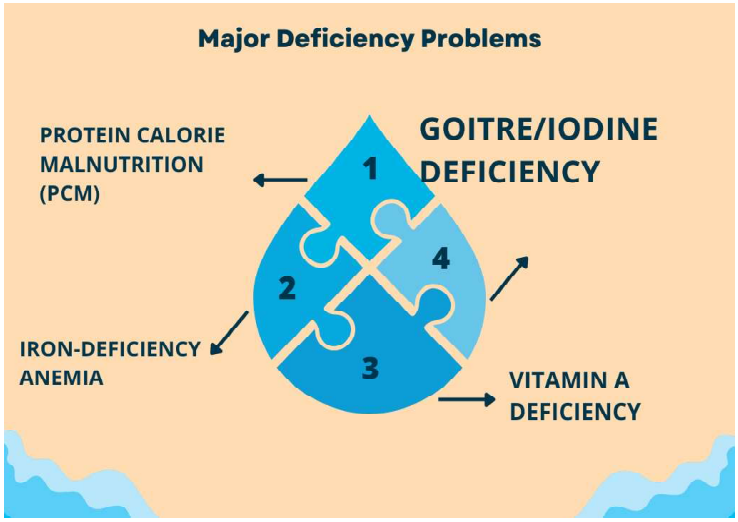

Fig 12.6: Major Deficiency Problems

- **Protein Calorie Malnutrition (PCM)**

PCM is the primary cause of death in underdeveloped countries. Also called protein-energy malnutrition (PEM) is caused by insufficient nutritional intake to meet the body's needs.

The clinical signs and symptoms of PCM include the following:

- Poor weight gain
- Slowing of linear growth
- Behavioural changes - Irritability, apathy, decreased social responsiveness, anxiety and attention deficits

In Indian conditions, the dietary sources of proteins and calories are the same. Therefore, an adequate quota of calories is expected to ensure adequate protein in the diet.

- **Iron-deficiency Anemia**

Iron deficiency anaemia is the most common type of Anaemia. It occurs when our body doesn't have enough mineral iron to make haemoglobin, a protein in red blood cells in our blood responsible for carrying oxygen to the tissues. Anaemia occurs when we have a decreased level of haemoglobin in our blood.

Iron Deficiency Anemia is a global health problem primarily due to iron deficiency. It involves a population of all age groups and sex. But adolescent girls, pregnant and lactating women are more vulnerable to it. According to the latest available estimates, 59.1% of Indian adolescent girls are anaemic (NFHS-V, 2019). The symptoms of iron deficiency Anemia are general fatigue, weakness, pale skin, shortness of breath, dizziness, cold hands and feet, irregular heartbeat and headaches.

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In India, nutritional Anaemia is a significant public health problem.

Anaemia complicates childbearing, causing higher maternal and infant deaths, maternal depletion, and low birth weight infants, but it also severely affects women's productivity and quality of life. About 20% of maternal deaths are estimated to be directly related to Anaemia, and another 50% are associated with it. The reasons for maternal deaths include sepsis, abortion, haemorrhage, Anaemia, etc. Sexually transmitted diseases, HIV, have serious implications for women. Many deliveries take place at homes, with untrained assistance, resulting in increased chances of infection and death. Due to low status, women are mostly not involved in decision-making, including contraceptive use, family size, etc. More so, they often seek medical help only if an illness is advanced and the chances of survival are less.

The control of Anaemia in India is a challenging issue. Reasons like inadequate dietary intake of iron, defective iron absorption, increased iron requirements due to repeated pregnancies and lactation, poor iron reserves at birth, the timing of umbilical cord clamping, timing and type of complementary food introduction, frequency of infections in children, and excessive physiological blood loss during adolescence and pregnancy are some of the causes for a high prevalence of Anaemia. Oral intake of iron salts like Ferrous Sulphate tablets helps check iron deficiency Anaemia. These are very low-cost tablets available in the market. For direct consumption, intake of iron-rich green leafy vegetables (amaranth, drumstick leaves, coriander, etc.), jaggery, ragi and dried fruits help check Anaemia. Prophylactic administration of Iron and Folic acid to women and children in poor communities as part of routine PHC services through MCH centres and schools must also be strengthened to prevent Anaemia.

- **Vitamin A Deficiency**

  Vitamin A deficiency is a common form of micronutrient malnutrition affecting 21.1% of preschool-age children and 5.6% of pregnant women worldwide.

Vitamin A plays a vital role in our vision. To see the full spectrum of light, our eye needs to produce certain pigments for the photoreceptor cells in the retina to work properly. Vitamin A deficiency stops the production of these pigments, leading to night blindness. Nyctalopia (Night Blindness) is one of the first signs of Vitamin A deficiency.

Vitamin A deficiency is the leading cause of preventable blindness in children worldwide. An estimated 250,000 to 500,000 children become blind every year because of vitamin A deficiency. Half of these children die within a year of losing sight.

In pregnant women, vitamin A deficiency causes night blindness and may contribute to maternal mortality. Vitamin A deficiency also compromises the immune system, increasing the chance of death from malaria, measles and diarrhoea.

Vitamin A is found in many foods, including red, yellow, and orange vegetables and fruits (carrots, sweet potatoes, pumpkin, mangoes, papaya), eggs, and cantaloupes. Lack of access

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to a balanced diet with enough vitamin A can lead to its deficiency.

- **Goitre/Iodine Deficiency:**

  Iodine deficiency is a lack of the trace element iodine, an essential nutrient in the diet. It may result in a goitre, which results in developmental delays and other health problems. Therefore, iodine deficiency is a significant public health issue as it is a preventable cause of intellectual disability. Globally, 2.2 billion people live in areas with iodine deficiencies, with the risks of resulting complications, while in India, 167 million people are at risk of Iodine Deficiency Disorder (IDD), 54.4 million people have a goitre, and 8.8 million people have IDD-related mental/motor handicaps.

Prevention includes the intake of iodised salt and iodine compounds added to other foodstuffs, such as flour, water and milk. Seafood is also a well-known source of iodine. However, iodised salt consumption is low due to a lack of knowledge about iodine deficiency diseases, poverty and the low availability of iodised salt in the far-off area.

In India, there are a host of other mineral and vitamin deficiency diseases, other deficiency anaemias, like folic acid, vitamin B12 and B6 deficiency anaemias, and problems caused by food toxicants like adulteration of mustard oil with argemone seed oil and consumption of ground nut flour contaminated by a toxic fungal growth in groundnut seeds.

To improve the health status of women and children, we need to bring a social shift in access, availability, and food distribution within the family society.

INTEXT QUESTIONS 12.3

1. Why does Nutritional Deficiency occur?
2. What are the main types of common nutritional deficiencies?
3. What is iron deficiency Anaemia?

WHAT YOU HAVE LEARNT

- Women are directly and indirectly involved in various food production, processing, packaging, and marketing stages. However, at the stage of food consumption, their food intake gets conditioned by socio-cultural beliefs and norms.
- Access to food refers to the final food intake of a person or how much they finally get to eat. Unfortunately, women's access to food is, by and large, restricted by the prevailing gender bias and discrimination which results in multiple health problems.

Notes

- Less food intake in quantity and quality cause nutritional deficiencies with a long-term harmful impact on the body. Common nutritional deficiencies occur due to a lesser intake of vitamins, minerals and iron in food. These are, however, preventable and can be addressed through optimum food intake and nutritional supplements.
- To improve the health status of women, the prevailing socio-cultural norms need to be addressed through awareness-building and gender-responsive services.

TERMINAL EXERCISE

1. What is the role of women in the food cycle?
2. Why do women suffer from health ailments more than men?
3. Which socio-cultural practices restrict women's access to food?
4. What are the different modes of food distribution in India?
5. How can women prevent nutritional deficiencies?
6. Observe the food intake of an adolescent brother and a sister in a family over two complete days. Note down the frequency and quantity of food consumed separately by both. Tabulate the information and compare the two. Draw comparisons on food consumption based on age, sex and gender of the brother and the sister.

ANSWERS TO INTEXT QUESTIONS

12.1

1. The food cycle is the complete process from agriculture production to food availability to the people. It involves various stages, such as growing, harvesting, processing, packaging, marketing, and distribution of food products.
2. Women are involved in various stages of the food cycle. They work in family-owned farms and are responsible for the tasks such as sowing, weeding, harvesting, cleaning and packaging food items.
3. Social protection is ensured through Public Distribution System, which provides subsidised food and non-food items to the country's poor. A network of outlets under the Public Distribution System (PDS) provides food such as cereals, oil and sugar at a rate much subsidised than the market. PDS provides household food security whereby all members always have access to enough food for an active and healthy life. In addition, it ensures that none of the members lives in hunger or fear of starvation.

Notes

12.2

1. Gender discrimination is prejudice or discrimination based on a person's sex or gender. Women and girls are deprived of their right to live and educate due to gender bias against the female child.
2. Food is generally distributed in the family. Each member is given the food for his/her age and likes/dislikes. Usually, the woman of the house cooks and distributes food among the family members.
3. Women's access to food depends on two main factors:
4. Economic Access to Food:

   Women have comparatively lesser mobility outside the home, so their engagement with the market remains very restricted. As a result, their chance to participate in income-generating activities is reduced, so their bargaining power is reduced. This limits their say in access to and distribution of intra-household resources, including food. Subsequently, food, as a priority item of consumption, remains more accessible to other family members than the women.

- Socio-cultural Access to Food:

  Customs and culture dictate differential roles, privileges, and life options for women and men, especially favouring the latter. A woman's access to food is primarily determined by the meal-eating pattern followed in the household. This pattern is based on multiple factors such as age, sex, social status and decision-making power of the member and the priority given to the same. With women at the receiving end, their share in available food is often compromised. They would voluntarily forgo their share in a particular food item for the love and concern of the other family member.

12.3

1 Insufficient food intakes deplete our body of essential nutrients. As a result, our body becomes weak and loses its ability to fight against infection and illness. Nutritional deficiencies occur when the quantity and quality of food intakes are below essential requirements. The Indian Council of Medical Research defines the recommended nutritional daily allowances.

2 The common nutritional deficiencies are Protein, Calorie Malnutrition, Iron deficiency Anaemia, Vitamin A, B12 and Goitre due to iodine deficiency.

3 Iron deficiency Anaemia is the most common type of Anaemia. It occurs when our body doesn't have enough mineral iron, which is required to make Hemoglobin. Lack of iron in the bloodstream leads to insufficient oxygen in our body and we get symptoms like tiredness, dizziness and cold hands and feet.