



## Malnutrition in a community:

### ❖ What is malnutrition?

Malnutrition is a serious condition that happens when your diet does not contain the right amount of nutrients. This includes diets that have too little nutrients or so many that the diet causes health problems. The nutrients involved can include calories, protein, carbohydrates, fat, vitamins or minerals.

A lack of nutrients is called **undernutrition** a surplus of nutrients causes **overnutrition**.

### ❖ Signs and symptoms of malnutrition:

Some signs and symptoms of malnutrition include:

- A lack of appetite or interest in food or drink
- Tiredness and irritability
- An inability to concentrate
- Always feeling cold
- Depression
- Loss of fat, muscle mass, and body tissue
- A higher risk of getting sick and taking longer to heal
- Longer healing time for wounds
- A higher risk of complications after surgery
- Difficulty breathing and heart failure.

In children, there may be:

- A lack of growth and low body weight
- Tiredness and a lack of energy
- Irritability and anxiety



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- Slow behavioral and intellectual development, possibly resulting in learning difficulties

## ❖ Causes of malnutrition:

Malnutrition can occur for various reasons.

### 1. A low intake of food

Some people develop malnutrition because there is not enough food available or because they have difficulty eating or absorbing nutrients.

This can happen as a result of:

- a) Cancer
- b) Liver disease
- c) Conditions that cause nausea or make it difficult to eat or swallow
- d) Taking medications that make eating difficult — due to nausea, for example
- e) Mouth problems such as badly fitting dentures may also contribute to malnutrition.

### 2. Mental health conditions

Undernutrition or malnutrition can affect people with:

- a) Depression
- b) Dementia
- c) Schizophrenia
- d) Anorexia nervosa

### 3. Social and mobility problems

Factors that can affect a person's eating habits and potentially lead to malnutrition include:

- a) Being unable to leave the house or reach a store to buy food
- b) Finding it physically difficult to prepare meals



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- c) Living alone, which can affect a person's motivation to cook and eat
- d) Having limited cooking skills
- e) Not having enough money to spend on food

#### 4. Digestive disorders and stomach conditions

If the body does not absorb nutrients efficiently, even a healthful diet may not prevent malnutrition.

Examples of digestive and stomach conditions that may cause this include:

- a) Crohn's disease
- b) Ulcerative colitis
- c) Celiac disease
- d) Persistent diarrhea, vomiting, or both

#### 5. Alcohol use disorder

Consuming a lot of alcohol can lead to gastritis or long-term damage to the pancreas. These issues can make it hard to digest food, absorb vitamins, and produce hormones that regulate metabolism.

Alcohol also contains calories, so a person may not feel hungry after drinking it. They may therefore not eat enough healthful food to supply the body with essential nutrients.

#### ❖ Risk factors of malnutrition:

In some parts of the world, widespread and long-term malnutrition can result from a lack of food.

In the wealthier nations, however, those most at risk of malnutrition include:

- a) Older adults, especially when they are in the hospital or long-term institutional care
- b) People who are socially isolated — for example, due to mobility issues, health problems, or other factors



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- c) People with a low income
- d) People recovering from or living with a serious illness or condition
- e) Those who have difficulty absorbing nutrients
- f) People with chronic eating disorders such as bulimia or anorexia nervosa

Some people may need to take supplements if they follow a specific diet.

### ❖ **How does malnutrition affect the community?**

Malnutrition affects more people; most of them live in the community. Malnutrition is both a cause and consequence of disease and can lead to increased mortality and morbidity, delayed recovery from illness and impaired body function which can make carrying out activities of daily living difficult.

Poverty amplifies the risk of, and risks from, malnutrition. People who are poor are more likely to be affected by different forms of malnutrition. Also, malnutrition increases health care costs, reduces productivity, and slows economic growth, which can perpetuate a cycle of poverty and ill-health.

### ❖ **How can we prevent malnutrition in the community?**

There are two major approaches in addressing malnutrition.

1. Nutritional planning
2. Direct nutrition and health development

#### **1. Nutritional planning:**

This involves political commitment by the government. A well planned and well executed long term project can accelerate the developmental process and the benefits can be rewarding and permanent.



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Nutritional planning involves formulation of a nutrition policy and overall long term planning to improve production and supplies of food, ensure its equitable distribution and programs to increase the purchasing power of people. This may include, land reforms, proper guidance in agriculture to help farmers to get better yields from their lands, help in proper marketing of farm produce. To help increasing the capacity of people to buy nutritious food in adequate quantity, income generating activities for the weaker sections of the community, making available good quality food in affordable prices through proper public distribution system, etc are some of the plans for the government to implement.

## **2. Direct nutrition and health development:**

### **a) Improved health care system**

Infections like malaria, measles and diarrhea are prevalent in our society and they precipitate acute malnutrition among children and infants. A good health care system that provides immunization, oral rehydration, periodic de-worming, early diagnosis and proper treatment of common illnesses can go a long way in preventing malnutrition in the society.

Managing malnutrition in the community involves identifying malnutrition using a universally validated screening tool and implementing appropriate care plans according to the degree of malnutrition. Regional and local guidance can be used to assist healthcare professionals to prescribe appropriate oral nutritional supplements.

### **b) Nutrition education**

People can be educated on

- The nutritional quality of common foods
- Importance and nutritional quality of various locally available and culturally accepted low cost foods



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- Importance of exclusive breast-feeding for six months and continuing to breast feed up to two years or beyond.
- Damage caused by irrational beliefs and cultural practices of feeding
- Recipes for preparing proper weaning foods and good supplementary food from locally available low cost foods.
- Importance of including milk, eggs, meat or pulses in sufficient quantities in the diet to enhance the net dietary protein value.
- Importance of feeding children and adults during illness
- Importance and advantages of growing a kitchen garden
- Importance of immunizing their children and following proper sanitation in their day to day life.

**c) Early detection of malnutrition and intervention**

- The longer the developmental delays remain uncorrected, the greater the chance of permanent effects and hence intervention must occur during pregnancy and first three years of life.
- A well recorded growth chart can detect malnutrition very early. Velocity of growth is more important than the actual weight at a given time
- If growth of the child is slowed or is arrested as shown by flat curve on the growth card, physician should be alerted and any hidden infection or any reason for nutritional deficiency must be evaluated and taken care of.
- If growth chart is not maintained, anthropometric indices like, weight, height mid arm circumference, and chest circumference etc. can be measured and used for evaluation of nutrition.



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**d) Nutrition supplementation**

Usually, biologically vulnerable groups like pregnant women, infants, preschool going and school going children are targeted by various welfare measures conducted by the government. Calories, proteins and micronutrients like iron, vitamin A and zinc can be supplemented.

**e) Objective of nutrition supplementation of infants and children includes**

- To treat and rehabilitate severely malnourished subjects.
- Improve the general health and wellbeing of children, increase the resistance to infectious illnesses and thereby decrease morbidity,
- Accelerate the physical growth and mental development of children
- Improve the academic performance and learning abilities of children.

**f) Objective of supplementing pregnant and lactating women include**

- Preventing anaemia in the mother thus improving her health and the pregnancy outcome.
- Improving calorie intake and prevent low birth weight baby, thus breaking the vicious cycle of intergenerational cycle of growth failure.
- Supplementing calcium to prevent osteoporosis.