

# Community Health Nutrition



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**Course name : Community Health Nursing Theory**

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# Outlines

- **Definition of Nutrition , Diet, Nutritional assessment**
- **Community Health Nursing**
- **Mission of Community Health Nutrition**
- **Nutritional Assessment**
- **Types of nutrition assessment (ABCD)**

# Definition

**Nutrition:** Process by which living organism receives material and uses them to promote it's vital activities.

**Nutrient:** Any substance which is digested and absorbed to promote body function

# Definition

## **Diet:**

Selection of food which is normally eaten by person or population

## **Food:**

Substance when eaten , digested, absorbed provide at least one nutrient

## **Balanced diet :**

Diet that provide adequate amount of all nutrients

## **Malnutrition:**

Caused by incorrect amount of nutrient intake

## **Nutritional status:**

Health status that produced by balanced between requirements and intake.

## **Nutritional assessment:**

Measurement of nutritional status by anthropometrics ,  
biochemical data, dietary history

**The Community Health Nutrition (CHN) specialization combines principles and practices from nutrition and social and behavioral science to develop, implement and evaluation of programs and policies that promote optimal nutrition and population health and well-being.**

**Nursing nutritional assessments** are important for determining nutritional factors that are related to patient health concerns and addressing those factors through patient education or medical treatments.

# Mission of Community Health Nutrition

- To assure conditions in which people have access to adequate and appropriate food.
- To assure conditions in which people can achieve optimal nutritional health.



**There are various strategies that can be used to combat public nutrition problems.**

1. Diet or food-based strategies
2. Nutrient-based approach or medicinal approach

# 1. Diet or food-based strategies:

They are preventive and comprehensive strategies that use food as a tool to overcome nutritional deficiencies.

They can play an important role in preventing micronutrient deficiencies by increasing the availability and consumption of micronutrient-rich foods.

## 2. Nutrient-based approach or medicinal approach

Nutrient-based or medicinal approach : In this approach nutrient supplements are given to vulnerable groups i.e., those who are at risk of deficiency and those who have deficiency.

# Nutritional assessment:

## Types of nutrition assessment (ABCD):

- **A**nthropometric
- **B**iochemical
- **C**linical
- **D**ietary

# Nutritional Assessment

**Anthropometric:** Anthropometry is the measurement of physical dimensions such as height or weight, as well as the fat mass composition of the human body to provide information about a person's nutritional status.

# Nutritional Assessment

## Anthropometric measurement :

The core elements of anthropometry are

- Height,
- Weight,
- Head Circumference,
- Body Mass Index (BMI),
- Body Circumferences To Assess For Adiposity (Waist, Hip, And Limbs),
- Skinfold Thickness.

# Nutritional Assessment



Anthropometric Measurement :

## - Height & Weight Measurement

Make sure legs are straight, arms are at sides, and shoulders are level. Make sure the child or teen is looking straight ahead and that the line of sight is parallel with the floor. Take the measurement while the child or teen stands with head, shoulders, buttocks, and heels touching the flat surface (wall).

# Nutritional Assessment

Anthropometric:

- Head circumference





# Nutritional Assessment

## Anthropometric Measurement:

Body mass index (BMI) is a person's weight in kilograms divided by the square of height in meters. BMI is an inexpensive and easy screening method for weight category underweight, healthy weight, overweight, and obesity.

$$\text{BMI} = \frac{\text{Weight in kilogram}}{(\text{Height in meter})^2}$$

# Nutritional Assessment

## Anthropometric Measurement:

Body mass index (BMI)

$$\text{BMI} = \frac{\text{Weight in kilogram}}{(\text{Height in meter})^2}$$

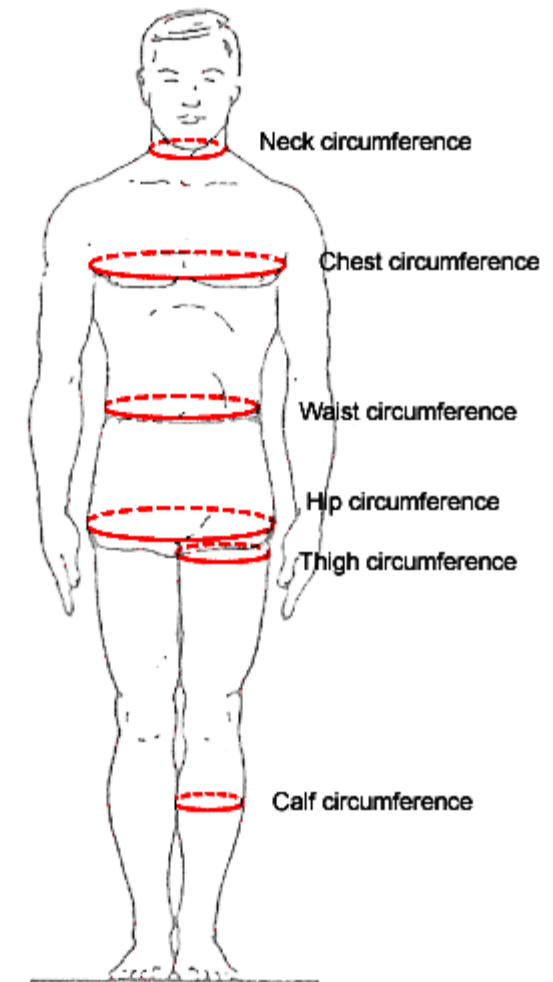
Descriptions	BMI (Kg/m <sup>2</sup> )
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obesity	
Mild (Class 1)	30-34.9
Moderate (Class 2)	35-39.9
Morbid (Class 2)	<40

# Nutritional Assessment

## Anthropometric Measurement:

### Body circumferences

A **body circumference measurement** is simply the circumference around a specific area of your body when measured with a measuring tape.



# Nutritional Assessment

## Anthropometric Measurement:

### Skinfold Thickness

Skinfold measurement is a technique to estimate how much fat is on the body. It involves using a device called a caliper to lightly pinch the skin and underlying fat in several places.



Chest Skinfold



Abdomen Skinfold



Thigh Skinfold

# Nutritional assessment:

## Types of nutrition assessment (ABCD):

- Anthropometric
- Biochemical
- Clinical
- Dietary

# Nutritional assessment:

## Types of nutrition assessment (ABCD):

- **Biochemical**

**Biochemical assessment** uses laboratory measurements of serum protein, serum micronutrient levels, serum lipids, and immunological parameters to assess general nutritional status and to identify specific nutritional deficiencies.

# Nutritional assessment:

## Types of nutrition assessment (ABCD):

- **Clinical Assessment**

Clinical assessment – estimation of nutritional status on the basis of recording a medical history and conducting a physical examination to detect signs (observations made by a qualified observer) and symptoms (manifestations reported by the patient) associated with malnutrition.

# Nutritional assessment:

## Types of nutrition assessment (ABCD):

- **Dietary Assessment**

**Dietary assessment** involves the collection of information on foods and drinks consumed over a specified time that is coded and processed to compute intakes of energy, nutrients and other dietary constituents using food composition tables.



