

Protein Energy Malnutrition/ Protein Calorie Malnutrition

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What is a Protein?

- Protein, a highly complex substance that is present in all living organisms. Proteins are of great nutritional value and are directly involved in the chemical processes essential for life.
- Proteins are large biomolecules, or macromolecules, consisting of one or more long chains of amino acid residue. Protein builds, maintains, and replaces the tissues in one's body.
- It is commonly found in animal products, though is also present in other sources, such as nuts and legumes

What is Protein Energy Malnutrition(PEM)/ Protein-Calorie Malnutrition (PCM)?

- PEM, sometimes called protein-energy undernutrition (PEU), is a form of malnutrition that is defined as a range of conditions **arising from coincident lack of dietary protein and/or energy (calories) in varying proportions**
- **Protein-Calorie Malnutrition (PCM)** refers to a nutritional status in which reduced availability of nutrients leads to changes in body composition and function.
- It occurs when a child doesn't eat enough protein and energy (measured by calories) to meet nutritional needs.
- Protein energy malnutrition has been associated with:
 - worsening encephalopathy
 - poor control of ascites
 - increased infection rate
 - increased hospital admissions

- increased mortality

Types of Protein-Calorie Malnutrition (PCM)

- **Kwashiorkor (protein malnutrition predominant):** It is a form of severe protein malnutrition characterized by edema and an enlarged liver with fatty infiltration. It is caused by sufficient calorie intake, but with insufficient protein consumption, which distinguishes it from marasmus.
- **Marasmus (deficiency in calorie intake):** It is a form of severe malnutrition characterized by energy deficiency. It can occur in anyone with severe malnutrition but usually occurs in children.
- **Marasmic kwashiorkor** (marked protein deficiency and marked calorie insufficiency signs present, sometimes referred to as the most severe form of malnutrition): It is caused by acute or chronic protein deficiency and chronic energy deficit and is characterized by edema, wasting, stunting, and mild hepatomegaly.

Government of India's initiative to contain Malnutrition in the country

The Government is implementing several schemes/programmes of different Ministries/Departments through States/UTs to address various aspects related to nutrition.

The Ministry of Women and Child Development is implementing POSHAN Abhiyaan, PradhanMantriMatruVandanaYojana, Anganwadi Services and Scheme for Adolescent Girls under the Umbrella Integrated Child Development Services Scheme (ICDS) as direct targeted interventions to address the problem of malnutrition in the country

POSHAN Abhiyaan

Government has set up POSHAN Abhiyaan on 18.12.2017. The goals of POSHAN Abhiyaan are to achieve improvement in nutritional

status of children from 0-6 years, adolescent girls, pregnant women and lactating mothers in a time bound manner

The Abhiyaan aims to reduce malnutrition in the country in a phased manner, through a life cycle approach, by adopting a synergised and result oriented approach.

The major activities undertaken under the POSHAN Abhiyan are community mobilization including community based events, creating awareness, advocacy leading to Jan Andolan- to educate the people on nutritional aspects.