

## ABSTRACT

*Abstract Title:*

### **Nutritional Rehabilitation for Protein-Energy Malnutrition (PEM): A Dietary Approach**

*Authors Name:*

**Sukanta Bhunia<sup>1</sup>, Parag Ranjita Bera<sup>2</sup>, Suprakash Pradhan<sup>3</sup>, Komal Priya<sup>4</sup>, Shruti Singh<sup>5</sup>, Amit Kumar Jana<sup>6</sup>, Nabanita Kar<sup>7</sup>, Ankita Das<sup>8</sup>, Tamali Maity<sup>9</sup>, Shreyasi Mandal<sup>10</sup>**

<sup>1, 4, 5</sup>M. Sc. 3<sup>rd</sup> Semester, Dept of Clinical Nutrition and Dietetics, Vinoba Bhave University, Hazaribag, NH 33, Sindoor, Hazaribagh Jharkhand, 825301

<sup>2</sup> Ph D Research Scholar, Department of Bio-Medical Laboratory Science & Management, Vidyasagar University, Paschim Medinipur, West Bengal, 721102

<sup>3</sup>SACT-I, Dept of Nutrition, Prabhat Kumar College (Affiliated to Vidyasagar University, Contai, Purba Medinipur, West Bengal-721401.

<sup>6</sup>Department of Nutrition, Debra Thana Sahid Kshudiram Smriti Mahavidyalaya, Gangaramchak, Chakshyampur, Paschim Medinipur, West Bengal-721124.

<sup>7,8,9,10</sup>UG student, Dept of Nutrition, Ramnagar College (Affiliated to Vidyasagar University, Depal, Purba Medinipur, West Bengal.

Corresponding Email: [nurture10102020@gmail.com](mailto:nurture10102020@gmail.com), Mob No: 8617400233

#### **Introduction:**

Protein-Energy Malnutrition (PEM) is a condition where the body does not receive enough protein and energy from food, leading to health problems. It is a significant public health concern worldwide, affecting 150 million children worldwide, particularly in low-income and countries. PEM may occur in unhealthy eating habits, lack of nutritional knowledge of parents, family size, overall low educational level, and economical and sociocultural backwardness of parents.

#### **Objective:**

To search out the causes, consequences, and management strategies for PEM; to highlight the importance of early detection and intervention of PEM. To restore weight and body composition, improve nutritional status, prevent further malnutrition and support overall health and well-being through nutritional awareness camping and dietary modification.

#### **Methods:**

We focus on a comprehensive review of existing literature on PEM, including epidemiology, pathophysiology, diagnosis, and treatment through social awareness, increasing knowledge about locally available low-cost nutritious food and providing dietary guidelines. Four studies will be conducted to investigate in search out the PEM affected children. 1.A- Anthropometric measurement: Body-Mass-Index (BMI) calculation, Mid-upper arm circumference (MUAC), Weight-for-height, Height for age. 2.B-Biochemical Analysis: Serum albumin levels, Total

lymphocyte count. 3.C-Clinical survey: - Muscle wasting and weakness, Edema, Hair changes, Physical performance.4.D-Dietary Survey: Using Knowledge Attitude Practice (KAP) questionnaire model survey about dietary and food habits.

**Result:**

We received a positive result in our survey and campaign work. It is a continuous and spontaneous process. Following the workshop, participants became significantly increased their anthropometric, biochemical and clinical status through the nutritional guidelines. Participants significantly gained adequate knowledge about nutrition, healthy eating habits, healthy lifestyle and family planning strategies.

**Conclusion:**

PEM is a complex and multifaceted issue requiring a comprehensive approach. Early detection, adequate nutrition, proper balanced diet approach and supportive care can significantly improve outcomes. Addressing PEM requires collaborative efforts from healthcare professionals, dietitians, policymakers, and communities.

Key words: PEM, KAP, Balanced Diet Approach