

PEM (PROTEIN ENERGY MALNUTRITION) IN ADULTS

Protein Energy Malnutrition as the name suggests is lack of protein and energy resulting from poor nutrition.

CAUSES

1. Insufficient food intake.
2. Anorexia.
3. Persistent regurgitation or vomiting.
4. Depletion of electrolytes - sodium, potassium and magnesium from diarrhoea.
5. Malabsorption - small intestinal disease.
6. Increased BMR e.g. thyrotoxicosis, prolonged infections.
7. Glycosuria in diabetes mellitus.
8. Cachexia (condition of abnormally low weight, and general bodily decline in some cases of cancer.)

DIETARY MANAGEMENT

1. **Avoid:**
 - a. Avoid mental stress.
 - b. Avoid crowded and unhygienic places.
2. **CONSUME**
 - a. Give high energy and high protein diet.
 - b. Start with light food which is high in protein and energy:
 - i. Give water drained from boiled green grams, Sugar cane juice, Fruit juices, Vegetables soups, Porridge of lentil and rice, Porridge of pulses and cereals, Milk, milk shakes.
 - c. Make sure food is cooked properly.
 - d. Fluid intake should be adequate.
 - e. Wide variety of food should be selected to ensure all vitamins and minerals are included in the diet.
 - f. Increase intake of antioxidants like vitamin A: all yellow fruits and vegetables contain Vitamin A. Meat, eggs, fish, kidney and liver, liver oils of fish like cod, shark, and halibut are richest source of vitamin A.
 - g. Consume:-
 - h. milk and sea food, nuts, green leafy vegetables, whole grains, peas, lotus stem, pulses, legumes and oil seeds
 - i. Increase intake of vitamin E: foods of animal origin are low in vitamin E.
 - j. Oilseeds and vegetable oils like, coconut oil, groundnut oil, soy, cotton-seed and safflower oil.
 - k. Wheat germ, whole grain, corns, cereals, pulses, nuts, dark green leafy vegetables, olives, spinach, asparagus.
 - l. Another very good antioxidant selenium should be included in the diet: animal foods like - fish, shellfish, eggs, red meat, chicken and liver.
 - m. Grains, Brazil nuts, garlic, wheat germ and brewer's yeast are good source of selenium.
 - n. Include Japanese sea vegetables (arame, hijiki, kombu, nori) in diet if available, they are remarkably nutritious.
 - o. Wheat grass juice is recommended - grow wheat grains in a pot - grass comes up in a weeks time so its advisable to plant seven pots so as to have every days

supply. Extract juice from these grass and consume twice a day. It helps you to develop immunity and is highly nutritious.

- p. Increase consumption of zinc, decreases diarrhoea episodes:
- q. Seafood (especially oysters), beef, oatmeal, chicken, liver, milk, spinach, sea plants, nuts and seeds.
- r. Whole wheat grains provide good amount of zinc.
- s. Have high energy food / drink like sugarcane juice, fats.
- t. Consumption of fresh fruits and raw vegetables is advised.

CONSULT PHYSICIAN

- a. Treat the cause.
- b. If it is complicated with infectious diseases consult your physician immediately.
- c. If you have persistent diarrhea vomiting see your physician at once.
- d. Multivitamin supplements can be taken as indicated by your physician.

NOTE : PLEASE CONTACT WITH YOUR DOCTOR FOR EXACT DIET FOR THE HEALTH PRBLEMS YOU HAVE.THIS A SAMPLE DIET CHART TO GET THE IDEA OF YOUR DAILY ROUTINE FOOD INTAKE TO MAKE YOUR LIFE HEALTHY .