

NUTRITION

Food is essential for life. To sustain life, the nutrients in food must perform three functions within the body: build tissue, regulate metabolic processes and provide a source of energy. A proper diet is essential for good health. A well nourished person is more likely to be well developed, mentally and physically alert and better able to resist infectious diseases than one who is not well nourished. Proper diet creates healthier person and extends the years of normal bodily functions. Diet therapy is the application of nutritional science to promote human health and treat disease.

A "nutritionally adequate" diet will contain all the essential nutritive substances in the amounts and proportions required to maintain life and health. These essential nutrients are carbohydrates, proteins, fats, minerals, vitamins and water

FACTORS AFFECTING NUTRITIONAL NEED

Our type of food consumption is affected by several factors. So, to plan a proper balanced diet, we must have clear knowledge of factors affecting it. These factors are discussed below:

1. Customs and beliefs:

The food habits are oldest and deeply seated aspects of any culture. The food habits are associated with love, affection, self image and warmth. The family plays an important role in shaping food habits, which are passed from one generation to next.

2. Religious beliefs: Our food habits have deep relations with our religion. People restrain from eating all those foods, which according to their religion are prohibited.

E.g : Muslims do not eat pork and hindus restrain from consumption of non-vegetarian food.

3. **Food fads:** Type of food which we consume is also ruled by our personal likes and dislikes. These are called food fads. These may sometime play negative role in improvement of underlying diseased condition.

4. **Food taboos:** There are some food related superstitions prevalent in the society. These do not have any scientific basis, e.g. Papaya is not eaten during pregnancy, garlic consumption helps in milk secretion during lactation, etc. These concepts have no basis but people follow them blindly from past.

5 **Geographical location:** Type of food which we consume also depends on geographical location of our state, as crop production depends on geography of the area. So, food which is produced in large amount, usually becomes staple food of that particular region.

For example, North Indian consume more of chapattis, i.e. wheat flour. South Indian have rice as their staple food.

6. **Socio-economic factor:** Income largely affects our type of nutrition which we consume. Income affects our purchasing power and educational level. So, people of lower income group buy cheap food only and amongst these cheap food which foods are more better and healthy for them, will be decided only by their level of education.

7. **Cooking practices:** Method of cooking used, also decides the nutritive value of food. For example, excessive washing of food or washing food after cutting, draining away water of rice after boiling, etc. affect the nutritive value of food.

8. Hot and cold foods: Foods are classified as hot and cold foods by different cultures in are believed to produce more heat in body, which are Supposed to cause boils. While cold foods are believed to cause sore throat. But scientifically these are not proven. For example, Meat, eggs, legumes are supposed to be hot foods. Fruits, vegetables and milk are supposed to be cold food.

9. **Surface area of body:** The larger surface area of the body, the greater is heat loss by radiation. So, more is energy requirement.

10. **Sex:** The energy requirement of males is comparatively higher than females

13. **Age:** Growing children are more active and have high BMR. So, have more energy requirements,

14. **Physiological condition:** The food and nutrition requirement changes in special health conditions like pregnancy and lactations well as in diseased conditions like diabetes melitus, renal disorder, etc.

15. **Climate and environment:** Our food habits are also greatly affected by changing climate. For example, In hot weather, we consume more of chilled and light foods like fruits, ice cream and juices,

16. **Physical activity:** Type of work or activity which an individual do and energy utilization in that type of activity also decides our food requirement.

For example, heavy workers have comparatively more higher energy requirement than moderate and sedentary workers.

17. **Food production and distribution:** The availability of food also decides our food and nutrition. With improving technology in field of agriculture, our food production has increased and India has now nearly become self sufficient. But still our distribution system is full of flaws, as food is not able to reach to undernourished and malnourished individuals, who are below the poverty line. Large amount of crop produce gets rotten and spoiled in mandis (market) every year. So, these issues needed to be taken seriously.

ASSESSMENT OF NUTRITIONAL NEEDS

When a patient admitted to hospital, a nutritional screening is carried out to gather subjective and objective information from patient and relatives to determine nutritional status and identify risk of under nutrition both on admission and on an ongoing basis.

In addition to the need for nutritional assessment of all patients, an assessment of each patient's dietary needs .When a person is admitted to hospital as an in-patient ,the following are identified and recorded within one day as part of the nursing assessment:

1. Assessment history of intake of food, lifestyle or any medications to find out the actual risk of nutritional problems. Consider the current and previous health problems that affect nutritional status.
2. Determine the eating pattern of the patient, what type of food consumed and frequency of consumption, i.e. likes and dislikes of the patient and consider foods from all food groups to identify potential dietary omissions and thus nutritional risks.
3. Assessment of food allergies or need for a therapeutic diet is essential to ensure that appropriate food and fluid is provided to minimize any patient health risks associated with provision of an inappropriate diet.
4. Assessment of patient's physical difficulties while eating and drinking. e.g. need for a soft-easy-chew diet and drinking need for equipment to help while eating. Assessment of nutritional status should be repeated weekly for inpatients.

NURSING RESPONSIBILITY FOR MEETING NUTRITIONAL NEEDS OF PATIENTS

Meal time is an important event in the patient's long day and the patient's diet is an integral part of the total treatment plan. Certain nursing interventions may help the patient to meet his or her nutritional needs.

1. Consider the patient's food preferences as much as possible
2. Encourage the patient to fill out the selective menu, so that preferred foods will be served.
3. Provide the patient with assistance in selecting the appropriate foods from the menu. The use of selective menus has improved food acceptance in most hospitals. Order and deliver the patient's tray promptly, when it has been delayed while he was undergoing tests or procedures
5. Feed or assist the patient as necessary. Even patients, who can feed themselves, may need assistance in opening milk cartons, cutting meat and spreading butter on bread.

6. Discuss the advantages of the following diet. Explain to the patient how he will feel better and heal faster. For some diseases or disorders, the patient may be required to follow a special diet during the period of illness or the remainder of his life.

a. A high protein diet is essential to repair tissues in any condition, which involves healing such as recovery from surgery or burns.

b. A person with diabetes must adhere to a diet controlled in calories, carbohydrates, protein and fat.

C. A person with hypertension may require a diet restricted in sodium.

7. Inform the dietitian or food service specialist for any special needs the patient may have.

8. A patient who has lost his teeth and has difficulty chewing will need modifications in the consistency of food he/she eats.

9. Visit with the patient briefly when serving the food tray

10. Encourage family members to visit during meal time. If who needs assistance. Be sure that this is relaxing and safe for the client.

11. When conditions allow for it, encourage the ambulatory patient to go to the dining hall for meals or open curtains in a double room so that patients may eat together.

12. If the patient alone, turn on the television or radio.

DIET THERAPY

It is the treatment of a disorder with a special diet. Dietary prescriptions include the written order regarding the foods liquids to be given to the patient. A basic knowledge of nutrition and diet therapy contributes to the nurse's ability to effectively answer the patient's questions about the diet and nutrition. A dietary prescription may be for nothing by or mouth, a standard diet or special diet.

Nothing by Mouth Nil per oral (NPO) status includes diet modifications well as fluid restriction. It is prescribed before surgery or certain diagnostic procedures.

Regular diets are planned to meet the nutritional needs of adolescents, adults and geriatric phases of the life span. The regular diet includes the basic food groups and a variety of foods. The basic food groups include meat, milk, vegetables, fruits, bread and cereal, fats and sweets. The regular diet is designed to provide exceptionally generous amounts of all recognized nutrients and meets or exceeds the RDA for all nutrients tabulated.

Soft Diet It includes the foods that are easy to chew and swallow, thus promoting mechanical digestion of food. Nuts, seeds (tomatoes) and fried food is avoided.

Clear Liquid Diet It is also called surgical liquid diet, is ordered as prepared for diagnostic tests or as first meal or two after surgery. Liquids included are water, tea, lemon-lime soda, carbonated drinks, clear and strained fruit juices.

Full Liquid Diet It includes all foods that are liquid to room temperature. In addition to the liquids on a clear liquid diet mill drinks, Cream soups, cooked cereals, ice-cream puddings or all fruits and vegetables.

Mechanical Soft Diet: It consists of food fixed for a person who has no teeth or has difficulty in chewing. The food is either ground or chopped into very small pieces and cooked very soft to ease the chewing.