

Dietetics and Therapeutic Nutrition (Major Core)

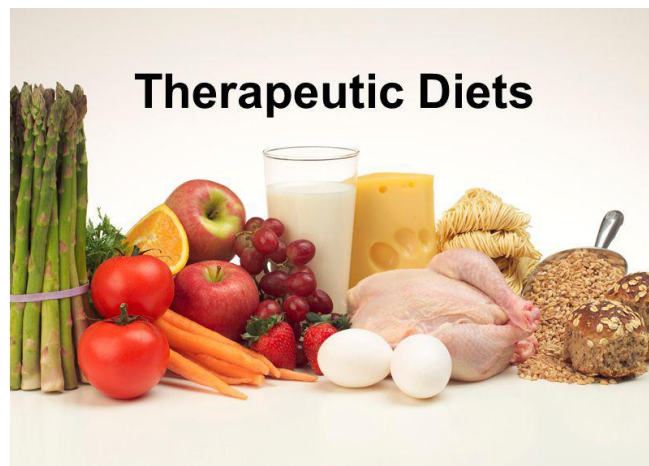
B.A. VI semester (NEP 2020)

Unit I

Therapeutic Nutrition

Therapeutic nutrition refers to the use of food and the **nutrients** it contains to prevent or treat a disease or condition. There are studies which show that if the body become deficient in certain nutrients, illness can result. By replenishing the missing nutrients, it is sometimes possible to prevent, reverse, or slow down an illness. When using nutrition therapies for an existing illness, it is important that patients are monitored by a health care professional.

The use of nutrition to prevent illness is not an uncommon practice. Dietary guidelines have been put in place to guide people in making smart choices when it comes to eating. Fruits, vegetables, lean meats, whole grains, and low-fat dairy are all recommended for a well-**balanced diet**. Each of these contains raw materials that they body needs to function normally and optimally. If any of these materials are absent or depleted, illness can occur.



चिकित्सीय आहार के मुख्य उद्देश्य हैं

ए। पोषण की अच्छी स्थिति बनाए रखने के लिए।

ख। जो भी कमियां थीं, उन्हें ठीक करने के लिए।

सी। पोषक तत्वों के चयापचय के लिए शरीर को या शरीर के कुछ हिस्से को आराम प्रदान करना।

घ। वजन में परिवर्तन लाने के लिए जहां कभी आवश्यक हो।

ई। निर्धारित आहार के पालन की आवश्यकता के बारे में रोगी की शिक्षा।

चिकित्सीय पोषण की शुरुआत सामान्य आहार से होती है जिसे अच्छे पोषण को बीमार व्यक्ति को बहाल करने की योजना बनाई जाती है।

वह आहार जो रूग्णावस्था में किसी व्यक्ति को दिया जाता है। ताकि वह जल्दी सामान्य हो सके यह सामान्य भोजन का संशोधित रूप होता है। उपचारात्मक आहार कहते हैं। क्योंकि बीमार पड़ने पर व्यक्ति के शरीर को कोई भाग रोग ग्रसित हो जाता है। जिससे उसकी पोषण आवश्यकता में परिवर्तन आ जाता है। जैसे मधुमेह में पेनक्रियाज उपयुक्त मात्रा में इन्सुलिन उत्पन्न नहीं कर पाता जो कि शक्कर के पाचन में सहायक होता है। ऐसे में यदि हम व्यक्ति को सामान्य मात्रा में शक्कर देंगे तो उसके लिये हानिकारक होगी और जब शक्कर उसके आहार से अलग कर दी जाती है। तो इन्सुलिन को आवश्यकता नहीं होती उपचारात्मक आहार देने के प्रमुख कारण-

बीमारी में आहार परिवर्तन के कारण निम्नलिखित हैं।

1. पोषण का अच्छा स्तर बनाये रखना।
2. पोषण की अपर्याप्त मात्रा को सही करना।
3. आहार की तरलता में संशोधन करना।
4. शारीरिक वजन में आवश्यकतानुसार कमी करना।

आहार संशोधन करते समय ध्यान रखने योग्य बातें:-

1. रोगी को ऐसा महसूस न हो कि उसे परिवार के अन्य सदस्यों से एकदम भिन्न आहार दिया जा रहा है।
2. रोगी की रुचि के अनुसार भोजन हो
3. आहार को आकर्षक ढंग से परोसा जाये ताकि रोगी को खाने की इच्छा हो।

उपचारात्मक आहार संशोधन के प्रकार

1. आहार की तरलता में संशोधन - कई बार रोगी कुछ बीमारियों में ठोस भोजन नहीं ले पाता जैसे ज्वर, दस्त, वमन। ऐसे समय में तरल आहार देना लाभदायक होता है। स्थिति सामान्य होने पर अर्द्धठोस या ठोस।
2. पोषक तत्वों में परिवर्तन- रोग के हिसाब से पोषक तत्वों में परिवर्तन किया जाना चाहिए जैसे उच्च रक्त चाप में नमक की कमी, दस्त में तरल पदार्थों की अधिकता, पीलिया में कम वसा।
3. भोजन की बारम्बारता में परिवर्तन- बीमारी की अवस्था में व्यक्ति एक बार में अधिक भोजन नहीं ले पाता और इस समय सही मात्रा में पोषक तत्व मिलना भी आवश्यक होता है।

THERAPEUTIC DIET

SIGNIFICANCE

Useful in managing
disease

Promote greater
resistance to specific
conditions

Prevention or
Supplemental treatment

Therapeutic Diets

- Regular diet
- Liquid diet
- Soft diet
- Diabetic diet
- Calorie controlled diet
- Low cholesterol diet
- Fat restricted (low-fat) diet
- Sodium restricted diet
- Protein diet
- Bland diet
- Low residue diet

Clear- Liquid Diet

Purpose:

Relieve thirst and help maintain fluid balance.

Use:

Post-surgically and following acute vomiting or diarrhea.

Foods Allowed:

carbonated beverages; coffee (caffeinated and decaff.); tea; fruit-flavored drinks; strained fruit juices; clear, flavored gelatins; broth, consommé; sugar; popsicles; commercially prepared clear liquids; and hard candy.

Foods Avoided:

Milk and milk products, fruit juices with pulp, and fruit.

Full- Liquid Diet

Purpose:

Provide an adequately nutritious diet for patients who cannot chew or who are too ill to do so.

Use:

Acute infection with fever, GI upsets, after surgery as a progression from clear liquids.

Foods Allowed:

clear liquids, milk drinks, cooked cereals, custards, ice cream, sherbets, eggnog, all strained fruit juices, creamed vegetable soups, puddings, mashed potatoes, instant breakfast drinks, yogurt, mild cheese sauce or pureed meat, and seasoning.

Foods Avoided:

nuts, seeds, coconut, fruit, jam, and marmalade

Soft Diet

Purpose:

Provide adequate nutrition for those who have troubled chewing.

Use:

patient with no teeth or ill-fitting dentures; transition from full-liquid to general diet; and for those who cannot tolerate highly seasoned, fried or raw foods following acute infections or gastrointestinal disturbances such as gastric ulcer or cholelithiasis.

Foods Allowed:

very tender minced, ground, baked broiled, roasted, stewed, or creamed beef, lamb, veal, liver, poultry, or fish; crisp bacon or sweet bread; cooked vegetables; pasta; all fruit juices; soft raw fruits; soft bread and cereals; all desserts that are soft; and cheeses.

Foods Avoided:

coarse whole-grain cereals and bread; nuts; raisins; coconut; fruits with small seeds; fried foods; high fat gravies or sauces; spicy salad dressings; pickled meat, fish, or poultry; strong cheeses; brown or wild rice; raw vegetables, as well as lima beans and corn; spices such as horseradish, mustard, and catsup; and popcorn.

Sodium- Restricted Diet

Purpose:

Reduce sodium content in the tissue and promote excretion of water.

Use:

Heart failure, hypertension, renal disease, cirrhosis, toxemia of pregnancy, and cortisone therapy.

Modifications:

Mildly restrictive 2 g sodium diet to extremely restricted 200 mg sodium diet.

Foods Avoided:

Table salt; all commercial soups, including bouillon; gravy, catsup, mustard, meat sauces, and soy sauce; buttermilk, ice cream, and sherbet; sodas; beet greens, carrots, celery, chard, sauerkraut, and spinach; all canned vegetables; frozen peas;

All baked products containing salt, baking powder, or baking soda; potato chips and popcorn; fresh or canned shellfish; all cheeses; smoked or commercially prepared meats; salted butter or margarine; bacon, olives; and commercially prepared salad dressings.

Renal Diet

Purpose:

Control protein, potassium, sodium, and fluid levels in the body.

Use:

Acute and chronic renal failure, hemodialysis.

Foods Allowed:

High-biological proteins such as meat, fowl, fish, cheese, and dairy products range between 20 and 60 mg/day.

Potassium is usually limited to 1500 mg/day.

Vegetables such as cabbage, cucumber, and peas are lowest in potassium.

Sodium is restricted to 500 mg/day.

Fluid intake is restricted to the daily volume plus 500 mL, which represents insensible water loss.

Fluid intake measures water in fruit, vegetables, milk and meat.

Foods Avoided:

Cereals, bread, macaroni, noodles, spaghetti, avocados, kidney beans, potato chips, raw fruit, yams, soybeans, nuts, gingerbread, apricots, bananas, figs, grapefruit, oranges, percolated coffee, Coca-Cola, orange crush, sport drinks, and breakfast drinks such as Tang or Awake

High- Protein, High- Carbohydrate Diet

Purpose:

To correct large protein losses and raises the level of blood albumin. May be modified to include lowfat, low-sodium, and low-cholesterol diets.

Use:

Burns, hepatitis, cirrhosis, pregnancy, hyperthyroidism, mononucleosis, protein deficiency due to poor eating habits, geriatric patient with poor intake; nephritis, nephrosis, and liver and gall bladder disorder.

Foods Allowed:

General diet with added protein.

Foods Avoided:

Restrictions depend on modifications added to the diet. The modifications are determined by the patient's condition.

Purine- Restricted Diet

Purpose:

Designed to reduce intake of uric acid-producing foods.

Use:

High uric acid retention, uric acid renal stones, and gout.

Foods Allowed:

General diet plus 2-3 quarts of liquid daily.

Foods Avoided:

Cheese containing spices or nuts, fried eggs, meat, liver, seafood, lentils, dried peas and beans, broth, bouillon, gravies, oatmeal and whole wheat, pasta, noodles, and alcoholic beverages. Limited quantities of meat, fish, and seafood allowed.

Bland Diet

Purpose:

Provision of a diet low in fiber, roughage, mechanical irritants, and chemical stimulants.

Use:

Gastritis, hyperchlorhydria (excess hydrochloric acid), functional GI disorders, gastric atony, diarrhea, spastic constipation, biliary indigestion, and hiatus hernia.

Foods Allowed:

Varied to meet individual needs and food tolerances.

Foods Avoided:

Fried foods, including eggs, meat, fish, and sea food; cheese with added nuts or spices; commercially prepared luncheon meats; cured meats such as ham; gravies and sauces; raw vegetables;

potato skins; fruit juices with pulp; figs; raisins; fresh fruits; whole wheats; rye bread; bran cereals; rich pastries; pies; chocolate; jams with seeds; nuts; seasoned dressings; caffeinated coffee; strong tea; cocoa; alcoholic and carbonated beverages; and pepper.

Low-Fat, Cholesterol- Restricted Diet

Purpose:

Reduce hyperlipidemia, provide dietary treatment for malabsorption syndromes and patients having acute intolerance for fats.

Use:

Hyperlipidemia, atherosclerosis, pancreatitis, cystic fibrosis, sprue (disease of intestinal tract characterized by malabsorption), gastrectomy, massive resection of small intestine, and cholecystitis.

Foods Allowed:

Nonfat milk; low-carbohydrate, low-fat vegetables; most fruits; breads; pastas; cornmeal; lean meats; unsaturated fats

Foods Avoided:

Remember to avoid the five C's of cholesterol- cookies, cream, cake, coconut, chocolate; whole milk and whole-milk or cream products, avocados, olives, commercially prepared baked goods such as donuts and muffins, poultry skin, highly marbled meats

Butter, ordinary margarines, olive oil, lard, pudding made with whole milk, ice cream, candies with chocolate, cream, sauces, gravies and commercially fried foods.

Diabetic Diet

Purpose:

Maintain blood glucose as near as normal as possible; prevent or delay onset of diabetic complications.

Use:

Diabetes mellitus

Foods Allowed:

Choose foods with low glycemic index compose of:

45-55% carbohydrates

30-35% fats

10-25% protein

Coffee, tea, broth, spices and flavoring can be used as desired.

Exchange groups include: milk, vegetable, fruits, starch/bread, meat (divided in lean, medium fat, and high fat), and fat exchanges.

The number of exchanges allowed from each group is dependent on the total number of calories allowed.

Non-nutritive sweeteners (sorbitol) in moderation with controlled, normal weight diabetics.

Foods Avoided:

Concentrated sweets or regular soft drinks.

Acid and Alkaline Diet

Purpose:

Furnish a well balance diet in which the total acid ash is greater than the total alkaline ash each day.

Use:

Retard the formation of renal calculi. The type of diet chosen depends on laboratory analysis of the stone.

Acid and alkaline ash food groups:

Acid ash: meat, whole grains, eggs, cheese, cranberries, prunes, plums

Alkaline ash: milk, vegetables, fruits (except cranberries, prunes and plums.)

Neutral: sugar, fats, beverages (coffee, tea)

Foods allowed:

Breads: any, preferably whole grain; crackers; rolls

Cereals: any, preferable whole grains

Desserts: angel food or sunshine cake; cookies made without baking powder or soda; cornstarch,

Pudding, cranberry desserts, ice cream, sherbet, plum or prune desserts; rice or tapioca pudding.

Fats: any, such as butter, margarine, salad dressings, Crisco, Spry, lard, salad oil, olive oil, etc.

Fruits: cranberry, plums, prunes

Meat, eggs, cheese: any meat, fish or fowl, two serving daily; at least one egg daily

Potato substitutes: corn, hominy, lentils, macaroni, noodles, rice, spaghetti, vermicelli.

Soup: broth as desired; other soups from food allowed

Sweets: cranberry and plum jelly; plain sugar candy

Miscellaneous: cream sauce, gravy, peanut butter, peanuts, popcorn, salt, spices, vinegar, walnuts.

Restricted foods:

No more than the amount allowed each day

Milk: 1 pint daily (may be used in other ways than as beverage)

Cream: 1/3 cup or less daily

Fruits: one serving of fruits daily (in addition to the prunes, plums and cranberries)

Vegetable: including potatoes: two servings daily

Sweets: Chocolate or candies, syrups.

Miscellaneous: other nuts, olives, pickles.

High- Fiber Diet

Purpose:

Soften the stool

Exercise digestive tract muscles

Speed passage of food through digestive tract to prevent exposure to cancer causing agents in food

Lower blood lipids

Prevent sharp rise in glucose after eating.

Use:

diabetes, hyperlipidemia, constipation, diverticulitis, anticarcinogenics (Colon)

Foods Allowed:

recommended intake about 6 g crude fiber daily

All bran cereal

Watermelon, prunes, dried peaches, apple with skin; parsnip, peas, Brussels sprout, sunflower seeds.

Low Residue Diet

Purpose:

Reduce stool bulk and slow transit time

Use:

Bowel inflammation during acute diverticulitis, or ulcerative colitis, preparation for bowel surgery, esophageal and intestinal stenosis.

Foods Allowed:

Eggs; ground or well-cooked tender meat, fish, poultry; milk, cheeses; strained fruit juice (except prune): cooked or canned apples, apricots, peaches, pears; ripe banana; strained vegetable juice: canned, cooked, or strained asparagus, beets, green beans, pumpkin, squash, spinach; white bread; refined cereals (Cream of Wheat)

