THERAPEUTIC DIET

Therapeutic diet is qualitative or quantitative modified version of basic nutritious diet which has been tailored to suit the changing nutritional needs of a patient or diseased condition. Therapeutic nutrition begins with a normal diet.

The factors that are required to be considered for altering the diet are

- underlying disease condition which requires a change in the diet
- the possible duration of the disease
- the factors in the diet which must be alter to overcome these conditions
- the patients tolerance for food by mouth.

While planning meals for a patient, things to be considered:

- economic status
- food preference
- occupation
- time of meals

The therapeutic diet are as follows:

- 1. high fibre diet
- 2. very low residue diet
- 3. high calorie diet
- 4. high protein diet
- 5. sodium restricted diet
- 6. low fat diet
- 7. salt restricted diet

ROUTINE HOSPITAL DIET

Normal or general diet in the hospital setting is a balanced diet which meets the nutritional needs of an patient.

The routine hospital diet are as follows:

- 1. clear fluid diet
- 2. full fluid diet
- 3. soft diet
- 4. regular normal diet

CLEAR FLUID DIET

INTRODUCTION:

This diet is made up of clear liquids that have no residue, and it is non gas forming, non-irritating and non-stimulating to peristaltic action. A clear liquid diet helps to give enough fluid to stay hydrated. Foods allowed are barley water, dal water, clear strained fruit juice, whey water, tea and coffee without milk, non-carbonated beverages, coconut water, fat free broth.

Clear fluid diet is given for the patients who has acute illness or surgery produces a marked intolerance for food as may be evident by nausea, vomiting, anorexia, distention and diarrhoea. This diet is suggested in the following conditions in acute infections before diagnosis, in acute inflammatory conditions of the intestinal tract, following operations upon the colon or rectum when it is desirable to prevent evacuation from the bowel, to relieve thirst and to supply the tissues with water

AIM:	
To prepare a clear fluid diet for a _	

PRINCIPLES:

- Milk is not suggested in the clear fluid diet
- This diet is entirely inadequate from a nutritional standpoint since it is deficient in protein, minerals, vitamins and calories
- The diet gives 300 kcal and no protein.
- The diet can meet the requirement of fluids and some minerals. It should not be continued for more than 24 to 48 hours
- The amount of fluid is usually restricted to 30 to 60 ml per hour at first, with gradually increasing amounts being given as the patient's tolerance improves.

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FULL FLUID DIET

INTRODUCTION:

The full fluid or blenderized diet consists of food which are liquid at room temperature, this diet bridges the gap between the clear fluid and soft diet. Foods allowed are clear liquids, strained soups and fruit juices. A person may be able to eat pureed versions of their favorite foods in addition to a wide variety of thicker liquids.

The main aim of full fluid diet is to add nutritional requirements for the patients who could not consume solid foods. It is recommended for following conditions, postoperative conditions, acute gastritis, acute gastritis, diarrhoea, Swallowing and chewing problems, This diet is also suggested when milk is permitted and for patients not requiring special diet but too ill to eat solid or semisolid foods.

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To prepare a full fluid diet for -----

PRINCIPLES:

- The full fluid consists of foods which pass easily through a straw or syringe.
- In this diet, foods which are liquid or which readily become liquid on reaching the stomach are given.
- Solid foods are blenderized, thinned and strained.
- High calorie liquid supplements are given between meals as needed.
- This diet is given at 2-4 hour intervals.
- The diet is adequate in all nutrients and provides approximately 1200 calories and 35 gm of protein.
- A well planned full fluid diet is adequate in calories, protein and fat but may be inadequate in vitamins, minerals and fibres.
- Whole milk, buttermilk, coconut milk contains high calories. Skim milk powder and plain yogurt contains high protein.

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SOFT DIET

INTRODUCTION:

The soft diet is made up of simple, easily digested food and contains no harsh fibre and low in fat. This diet is one of the most frequently used routine diets, many hospital patients are placed on this until a diagnosis is made. This diet bridges the gap between acute illness and convalescence. Foods allowed are, Refined, finely ground whole grain, Pureed, cooked and mashed banana, Milk and milk products, Butter, oil, cream and margarine, Custards, kheer and puddings.

It is used in following conditions,

- Acute infections
- Following surgery
- Patients who are unable to chew
- Patients with dental problems.
- Soft diets are often used to treat swallowing disorders, collectively known as dysphagia. it is common in older adults and those with neurological disorders and neurodegenerative disorders.

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To prepare a soft diet for -----

PRINCIPLES:

- This diet gives 1500 kcal and 35 40 g of protein.
- In this diet, three meals with intermediate feedings should be given
- It is often modified for further for certain pathologic conditions as bland and low residue diet.
- Soft diet are used when regular textured or highly seasoned foods can't be tolerated.
- Soft diet should consist of food that are soft as well as easy to eat and digest.
- Spicy or irritating foods
- Alcohol and caffeinated beverages.

PROCEDURE:

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REGULAR NORMAL DIET

INTRODUCTION:

It is most frequently used in all hospitals. Many special diets progress ultimately to a regular diet. A regular diet is a healthy meal plan that includes a variety of healthy foods from all the food groups. A healthy meal plan is low in unhealthy fats, salt and added sugar. The amount and calories and serving size depends on age, gender, weight and height. Regular normal diet is used for ambulatory and bed patients whose conditions does not necessitate a special diet of one of the routine diets. It is intended for convalescing patients who do not require a therapeutic diet. This diet is capable of maintaining a good nutrition.

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To prepare a regular normal diet for-----

PRINCIPLES:

- This diet gives 1800 2000 kcal and 42-45 g of protein.
- Light diet is given before regular diet.
- This diet is simple in character and preparation.
- This diet is easily digested
- It gives maximum nourishment with minimum effort to the body.
- This diet is well balanced, adequate in nutritional value and attractively served to stimulate a possible poor appetite.

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DIET IN FEBRILE CONDITIONS

INTRODUTION:

Fevers are usually caused by bacterial or viral infections and can accompany any infectious illness. Fever can also result due to antigen antibody reaction, malignancy or due to graft rejection. Infection is invasion of the body by harmful organisms such as bacteria, fungi, protozoa, rickettsiae or viruses. The infective agent may be transmitted by a patient or carrier in airborne droplets expelled during coughing and sneezing or by direct contact.

There are three types of fevers:

- Short duration cold, tonsillitis, influenza and typhoid
- Chronic- tuberculosis and AIDS
- Intermittent malaria

AIM:

To prepare a diet for febrile condition

PRINCIPLES:

The febrile diet should be bland, readily digested food should be used to facilitate digestion and rapid absorption. The Food may be soft or of regular consistency. Initially, the patient may be able to ingest only 600to 1200 kcal daily, but this should be increased as rapidly as possible. About 100 g protein or more is prescribed for an adult when fever is prolonged.

Dietary suggestions for typhoid, malaria an influenza:

- A high calorie, high protein, high carbohydrate, low fat, high fluid, low fibre and bland diet is suggested for typhoid patients.
- At first clear fluid diet is given, followed by full fluid and soft diet. On liquid diets the patient may not meet high calorie and high protein requirements.
- As the patient is improving soft diet can be given. The febrile diet may upset water balance and liquid diets are helpful in meeting water and electrolyte requirements.
- Due to intestinal inflammation, great care must be exercised to eliminate all irritating fibres and spices in the diet.
- Foods allowed are refined cereals, bread, eggs, boiled potato, porridge, coconut water, barley water, steamed vegetable juices.
- Foods avoided are butter, ghee, chillies, fried foods.

Tuberculosis:

- A high calorie, high protein, high vitamin and high fluid soft diet is recommended
- During the acute stage a high calorie fluid and soft diet is prescribed.
- Small quantities of fluid diet can be given once in three hours and can be increased to four hours once the fever comes down.
- Two to three servings of different types of fruits are suggested to meet micronutrient and antioxidant requirement.

 As the patient progresses, normal, attractive and palatable food should be given. Rest, fresh air and good nutrition are the key elements for recovery from tuberculosis.
PROCEDURE:
RESULT:

DIET IN GASTROINTESTINAL DISEASE

INTRODUCTION:

Upper gastrointestinal disease includes gastroesophageal reflux disease (GERD), indigestion, peptic ulcer and gastric surgery. Intestinal disease includes constipation, diarrhoea, dumping syndrome and diverticulosis. Inflammatory bowel disease includes ulcerative colitis, crohn's disease and irritable bowel syndrome, intestinal gas and flatulence.

AIM:

To prepare a diet in gastrointestinal disease for ------

OBJECTIVES:

UPPER GARTROINTESTINAL DISEASE:

GERD – reflux is a condition where the consumed food regurgitates. It is more common among people in the age group 20 - 40.

• Foods known to irritate or decrease lower esophageal sphinter pressure include chocolate, alcohol, mint, carbonated beverages, citrus juices. Also avoiding high fat foods reduces the reflux

INDIGESTION – it is caused by the disturbances in the upper digestive tract. Indigestion is caused by emotional tension, malnutrition or eating too much.

• Dietary indulgences like excessive volumes of food or high intake of fat, sugar, caffeine, spices or alcohol are commonly implicated in dyspepsia. The patients are treated by avoiding or restricting these foods.

PEPTIC ULCER – it is used to describe any localized erosion of the mucosal lining of those portions of the alimentary tract that come in contact with gastric juice.

- Moderate amount of food should be eaten. Heavy meals should be avoided.
- Foods to be included are dairy products like milk, cream, butter, steamed fish and green leafy vegetables.
- Foods to be avoided are tea, coffee, gravies, pickles, spices, chillies, curries, condiments and all fried foods.

GASTRIC SURGERY- surgery is advised when the ulcer is complicated by haemorrhage, perforation or obstruction

- Small amount of fluid and then large amount of fluid can be given
- Highly spiced, fatty or hypertonic foods may not be well tolerated by patients.

INTESTINAL DISEASES:

DUMPING SYNDROME- it usually occurs as a result of loss of normal digestion of gastric emptying and gastrointestinal and systemic response to a meal.

• Six small meals can be taken instead of three larger meals.

CONSTIPATION- it is passage of firm or hard pellet like stools at infrequent and long intervals with difficulty to expel.

- Patients should be encouraged to take coarse bran as a breakfast cereal
- Maize dry, Bengal gram, onion, quinoa, curry leaves, field beans, soya beans, guava and sapota are good sources of fibre which prevent constipation.
- Fluid intake of 8 10 glasses a day is useful in keeping the intestinal contents in a semisolid state for easier passage along the tract.

DIVERTICULAR DISEASE – it refers to the sac like herniations of the colonic wall.

- High fibre diet
- Consumption of vegetarian diet

DIARRHOEA- it is the passage of stools with increased frequency, fluidity or volume compared to the usual for a given individual.

- A well cooked gruel of rice and lentil is usually well tolerated
- The diet should be isomolar. Mashed bananas are also good
- Sugary, soft drinks, fruit juices and tea are not suitable for use because they contain high osmolites.
- Caffeine should be avoided

INFLAMMATORY BOWEL DISEASE:

CROHN'S DISEASE- with progression of the disease,ulceration develops throughout the mucosa most commonly the distal ileum and colon.

- BMI of 20-29 may require 25-30kcal/kg.
- With strictures and fistulas low fibre diet that is high in energy and high protein diet 1-1.5 g/kg is given.
- Probiotics may be beneficial
- Use of omega fatty acids and oleic acid and increased intake of diet rich in antioxidants could decrease inflammation.

ULCERATIVE COLITIS – ulceration of mucosa occurs and causes crampy abdominal pain, explosive or bloody diarrhoea.

- Energy requirements are based on the current BMI 30 35 kcal/kg
- Low fibre diet is needed
- Vitamins and minerals supplementation may be needed
- Medium chain triglycerides may be helpful

IRRITABLE BOWEL SYNDROME – symptoms are alternating diarrhoea, constipation, excessive flatulence, rectal pain and mucus in the stool.

- A normal diet is recommended, with emphasis on high fibre foods that will add high add high bulk to the stool
- Excess in dietary fat, caffeine, sugars and alcoholic beverages should be avoided
- Relaxation and stress reduction techniques is also helpful.

INTESTINAL GAS AND FLATULENCE- abdominal distention or cramping pain associated with the accumulation of gases in the upper or lower GI tract.

- Consumption of unusual amount of fructose or even sucrose may also result in increased amount of faecal substrate.
- Legumes produce flatus or gas due to the presence of stachyose and raffinose.

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DIET IN LIVER AND GALL BLADDER DISEASE

INTRODUCTION:

Virus can cause infection and damage the liver. Types A,B,C,D,E and G can cause hepatitis. Due to excessive alcohol intake, the liver may become tender and enlarged. Cirrhosis refer to the colour of nodules of hepatocytes regenerating between strands of fibrous tissues. Damage to liver cells leads to increase in bilirubin resulting in jaundice.

To prepare a diet in liver and gall bladder disease for -----

PRINCIPLE:

- A high protein, high carbohydrate and moderate fat, high vitamin is recommended.
- Small attractive meals at regular intervals are better tolerated
- Overfeeding should be avoided
- Sodium should be restricted only when there is ascites
- Fibre should be restricted when there is danger of oesophageal varices and portal hypertension.

PROCEDURE	:
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DIET IN ADDICTIVE PATIENTS

INTRODUCTION:

Anorexia nervosa and bulimia nervosa are the two common eating disorders. Anorexia often results from a distorted body image, which may result from emotional trauma, depression or anxiety. Bulimia has two different types namely purging and non purging bulimia. Purging bulimia people will regularly induce vomiting after binge eating. Non purging bulimia people will engage in extreme exercise to prevent weight gain after a binge.

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To prepare a diet in addictive patients for -----

PRINCIPLE:

- Weight restoration and body weight maintainance
- A development of neutrality toward food through redeveloping intuitive understandings of hunger, fullness and satiety.
- Stabilization of weight through decreasing the cycles of binging and compensation.

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