
FEEDING OF DISEASED INFANT AND CHILD

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Nutritional requirements vary greatly from health to disease. Four feeding methods are available: oral feeding, tube feeding, gastrostomy and jejunojejunostomy feeding and total nasoduodenal and nasojejunostomy. The last three methods in addition to nasoduodenal and nasojejunostomy, feedings are used for high risk newborn. In fever and infection, the caloric requirements may be increased to 50%, protein intake to 2gm/kg body weight, a liberal use of carbohydrates is important in replenishing glycogen stores. Fluid intake must be liberal to compensate for losses. Vitamins are needed in larger doses proportionate to the increase in calories. Small quantities of food at intervals of 2- 3 hours will permit adequate nutrition without overtaxing the digestive system at any time. In hiatus hernia, dietary measures consist of small frequent feeds with propping up the child during and for an hour after feeding in mild cases. Positional therapy should be continued all the day in severe cases. In pyloric stenosis, frequent feeds thickened with cereals are given. The child should be put in semi-upright position for an hour or so after feeding. In constipation, high fibre diets as vegetables, fruits, cereals and bran are essential as they increase the faecal bulk, soften the stool and stimulate peristalsis. In diarrhea, feeding should be continued in both breast and artificially fed infants in order to break the vicious cycle of fluid electrolyte malnutrition- protein energy malnutrition. If intravenous fluids are used the patient should receive nothing by mouth. In coeliac disease, the regimen of gluten free diet must be lifelong. In cystic fibrosis, small frequent meals fortified with pancreatic enzymes, rich in protein and poor in fat are usually better tolerated. Water soluble preparation of vitamin ADEK (Abidec) are usually added. In protein losing enteropathy, hypoallergic and high protein diet should be prescribed in addition to replacement of iron, copper, calcium and lipid losses. In glucose galactose intolerance, fructose is the only sugar to be introduced. In sucrose intolerance, sucrose free diet must be planned. In lactose intolerance, lactose free diet should be given. In all disaccharides malabsorption, starch, sucrose and lactose free regimen should be prescribed. If all monosaccharides intolerance is present, parenteral feeding should be instituted. In ulcerative colitis and regional enteritis, liberal amounts of high quality protein 2-3 gm per kilogram body weight with low residue diet should be prescribed. In liver cirrhosis, protein intake should be high enough to maintain nitrogen equilibrium but low enough to prevent hepatic coma. Approximately 35 - 50 gm/ day are needed. Potassium supplements are sometimes needed to correct deficiency from nausea, vomiting, diarrhea or reduced intake. Sodium restriction is prescribed in presence of oedema and ascites. Low fibre diet is necessary when there is danger of haemorrhage from oesophageal varices. In

hepatitis, foods should be liquid to soft of sufficient calories. A liberal intake of carbohydrate and fat as tolerated is required. Proteins are given in 1 gm/kg body weight daily. In hepatic coma reduction of protein intake is essential in acute cases. Later on, proteins are given gradually while monitoring the level of 'blood ammonia. About 1500-2000 Kcal in the form of carbohydrates are needed to prevent tissue breakdown. In protein calorie malnutrition, the essence of therapy is to provide sufficient protein, calorie, Vitamins, and minerals to bring positive nitrogen balance and improve lean body mass as soon as possible. In food allergy, treatment requires elimination of the 'offending allergin from the diet. In congenital heart disease and congestive heart failure, a small frequent feeds of high energy and sodium free diet as calorie and adequate supply of vitamins are needed. Vitamin K is given when prothrombin time is prolonged proteins should be given up to 5 gm/Kg body weight/day. Hypertension is often lowered with weight loss in the obese patients. sodium restriction is also effective in lowering the blood pressure. In respiratory infection, good diet helps the patient to overcome infections. In bronchial asthma, the detection of a food allergin and its subsequent exclusion from diet may be important factor in the treatment of asthma. In acute glomerulonephritis, energy should be increased 25% above normal. Protein intake is reduced only if there is uraemia. Fluids are adjusted according to urine output. Sodium salt is restricted Whenever, oedema, hypertension or oliguria are present.