* **Developmental Needs of Young Adult:**
* **Nutritional Need:**
* Caloric intake should be based on occupation, amount and duration of physical activity or mental effort, emotional state, age, body size, climate, individual’s metabolism and presence of disease.
* Basal metabolic rate includes the energy spent on digesting, metabolizing and absorbing food. Women have 5-10% lower metabolic rate than men of comparable height and weight.
* The greater the body surface, the higher the basal metabolism rate. The obese person requires fewer calories for the size because adipose tissue consumes less oxygen than muscles thus, less energy is expended comparatively.
* A healthy woman needs 1800-2000 calories daily to maintain nutritional status; 46 gram should be protein. If pregnant, at least 300 calories should be increased. During lactating, at least 500 to 650 calories, 30 gm proteins should be increased and calcium intake should be 1200 mg.
* Fiber in diet: Fiber increases stool weight and transit time. Pressure is relieved along the intestinal tract and improved elimination pattern and avoid constipation. Fiber containing foods are whole grain, cereals, raw fruits or vegetables.
* There are five major food groups and some foods from each group should be consumed each day. Overall the diet should: (a) have plenty of grain products, fruits and vegetables; (b) contain a moderate amount of protein (about 10% to 12% of total calories); (c) contain limited amounts of sugar and salt; and (d) be low in fat, saturated fat and cholesterol (20% to 25% of total calories).
* Trans fat must be avoided as much as possible as it increases LDL (bad) cholesterol and triglycerides and decreases HDL (good) cholesterol. Replace fat with fiber foods.
* **Health problems related to Nutrition and Food Habits:**

1. **Obesity:**

* Those who have a BMI of 25 to 29 are considered overweight; those with a BMI of 30 to 39, obese; and those with a BMI greater than 40, extremely obese.
* Obesity is defined as abnormal or excessive fat accumulation that presents a risk to health.
* **Causes:**
* Restricted activity
* Consuming high amounts of energy, particularly fat and sugars.
* **Clinical Manifestation:**
* Shortness of breath
* Fatigue
* Joint pain
* Gastro esophageal reflux disease
* **Management:**

1. **Exercise:**

* Appetite is decreased after exercise because of lowered blood supply to the gastrointestinal tract.
* Exercise may decrease tension and stress, resulting in less frequent eating for nonnutritive purposes.
* Physical exercise weekly to expend 2500 calories/kcal in females and 3300 calories/kcal in males, equal to 60 to 90 minutes of moderate exercise daily.

1. **Diet:**

* Adequate energy or caloric intake is necessary for efficient use of protein for growth and tissue maintenance.
* Basal metabolic rate decreases after a period of caloric restriction.
* Caloric restriction combined with mild exercise can result in greater fat loss and reduced loss of lean body mass than caloric restriction alone.
* Caloric intake of 1300 to 1500 calories daily, of which 23% to 24% come from fat. A low-fat, high carbohydrate diet helps weight maintenance.
* Eating breakfast, a morning meal, daily.

1. **Constipation:**

* The term ‘Constipation’ refers to an abnormal infrequency of defecation or the passage of abnormally hard stools or both.
* It may be defined as a decrease of frequency of bowel movement from what is “normal” for the individual, hard, difficult-to-pass stools, a decrease in stool volume and retention of feces in the rectum.
* It may be due to lack of fiber in diet and low amount of water and liquid intake.
* **Etiology:**

1. Gastrointestinal:
2. Dietary: Low fiber diet, inadequate food
3. Reduced motility: Irritable bowel syndrome, Intestinal obstruction
4. Structural disease: colonic carcinoma, megacolon and diverticulosis
5. Defecatory disorders: gut obstruction and anorectal diseases (piles, fissures)
6. Non gastrointestinal:
7. Drugs: opiates, calcium antagonists, iron supplements, anticholinergic and aluminium containing antacids
8. Neurological: multiple sclerosis, parkinsonisms, CVA, spinal cord injury and autonomic neuropathy
9. Metabolic/Endocrine disease: diabetes, hypercalcemia, hypothyroidism
10. Psychiatric disorders: schizophrenia and depression

* **Clinical Manifestation:**
* Hard, dry stool
* Abdominal distension
* Decreased frequency of bowel movement
* Abdominal pain
* Rectal pressure
* Increased flatulence
* Nausea
* Anorexia
* Stool with blood
* **Management:**
* Emollients are stool softeners and lubricants, which lubricate intestinal tract and soften feces, making hard stools easier to pass. Eg: Docusate sodium, Docusate calcium. These docusate salts act as a detergent in the intestine, reducing surface tension, which facilitates the incorporation of liquid and fat, softening the stool. Discontinue if abdominal cramping occurs.
* Hyperosmolar laxatives like lactulose, polyethylene glysol, sorbitol increase stool osmolarity. Fluid is drawn into the intestine, stimulating peristalsis. When these are used, adjust the dose and frequency of administration to control side effects and regulate defecation.
* Stimulants increase peristalsis by irritating colon wall and stimulating enteric nerves. Eg: Bisa-codyl (Bulcolax), castor oil.
* **Nursing Management:**
* Eat 20 to 30 grams of fiber per day. Gradually increase amount of fiber eaten over 1 to 2 weeks. Fiber softens hard stool and add bulk to stool. Food high in fiber: Raw vegetable and fruits, beans.
* Drink plenty of water or fruit juice. Avoid coffee, tea and cola.
* Exercise at least 3 times per week.
* Set a regular time to defecate.
* Do not delay defecations.
* Do not overuse laxatives and enemas as normal motility of bowel is interrupted and bowel movements slow down.

1. **Anemia and vitamin deficiency:**

* Other diseases related to diet are diverticular disease of colon, colon cancer, appendicitis, hemorrhoids.
* Iron deficiency is the most common cause of nutritional anemia in the world. It is a condition where one has inadequate amounts of iron to meet body demands such as during periods of rapid growth and pregnancy.
* Iron deficiency anemia is usually due to a diet insufficient in iron and from blood loss.
* **Causes:**
* Low iron stores
* Reduced iron intake
* Excessive losses of iron from body
* Decreased iron absorption
* Increased iron demands
* Defective iron metabolism
* **Clinical Features:**
* Pallor
* Fatigue and malaise
* Shortness of breath
* Dizziness
* Tachycardia
* Restless leg syndrome (uncomfortable feeling in legs, sensations of pulling, tingling, crawling)
* Frequent infection
* **Nursing Consideration:**
* If animal proteins, egg or milk are inadequate in the diet, the person may need supplementary calcium, iron and vitamin B-complex. Iron supplements may be needed even if grain products are used. For pure vegetarian – who consume no milk and no eggs will need vitamin B12 supplement.
* Teaching about the need of fiber in the diet which can prevent constipation. Fiber in diet can also help reduce the incidence of cancer of the colon, gallstone and heart disease.
* Teaching on caloric restriction combined with mild exercise can result in greater fat loss reducing weight.
* Suggestions for Nutritional Health:
* Increase consumption of fruits, vegetable and whole grain.
* Decrease consumption of food or beverages with high refined sugar.
* Do not add salt in food during cooking.
* Decrease consumption of food high in total fat and animal fat.
* Restrict use of luncheon or variety meats (sausage, salami)
* Avoid deep fat frying and encourage to use baking, boiling, roasting.
* Avoid excessive intake of any nutrient.
* Limit intake of alcohol.

* **Work and Leisure:**
* **Work:**
* Work is to do something that involves physical or mental effort, especially as part of job. The choice of vocation, occupation or profession depends to a great extent on the person’s self-concept, personality, educational status, opportunities and interest.
* Homemaking and child rearing are also essential and important work; each is fatiguing and stressful in its own way.
* Work has a powerful role in life as it (a) defines self, self-esteem and roles; (b)gives a sense of purpose; (c) provides opportunities for mastery and creativity; (d) structures financial standing; (e) contributes to friendships; and (f) affects exercise and leisure activities.
* It may also contribute to physical or emotional health problems and poor family relationships.
* **Burnout:**
* Burnout is stress response to unrewarding/overload of work situation that the person undergoes physiological and psychological changes in response to work.
* The physical and emotional exhaustion is accompanied by a sense of frustration and loss of control over anger.
* **Features of burnout:**
* Loss of control over anger
* Not doing a good job or negligence
* Depression
* Neglecting the family
* Job turnover
* Low self-esteem and low morale
* **Ways of overcoming burnout:**
* Initiate new ideas and values into work.
* Maintain the personal/professional identity in the work.
* Need to expand interest, hobbies, social contact to make the work for satisfy.
* Each one of us has to realize that the work of all situation has challenges.
* Develop sense of hope and growth to help burnout prevention.
* **Leisure:**
* Leisure is freedom from obligations and formal duties of paid work and opportunity to pursue at one’s own pace, mental nourishment, enlivenment (more fun), pleasure and relief from fatigue and work.
* **Factors influencing leisure:**
* Gender, family size, working condition or community responsibilities, mental status of person, income and socio-economic class, personal interest, etc.
* Challenging work makes leisure time more refreshment.
* Successful leisure prepares the worker for more challenge and help to balance living.
* **Summary:**
* Caloric intake should be based on occupation, amount and duration of physical activity or mental effort, emotional state, age, body size, climate, individual’s metabolism and presence of disease. Women have 5-10% lower metabolic rate than men of comparable height and weight. The greater the body surface, the higher the basal metabolism rate. A healthy woman needs 1800-2000 calories daily to maintain nutritional status. Overall each day, diet should: (a) have plenty of grain products, fruits and vegetables; (b) contain a moderate amount of protein (about 10% to 12% of total calories); (c) contain limited amounts of sugar and salt; and (d) be low in fat, saturated fat and cholesterol (20% to 25% of total calories). Replace fat with fiber foods. Those with a BMI of 30 to 39 are considered to be obese. Causes of obesity are restricted activity and consuming high amounts of energy, particularly fat and sugar. It’s clinical features includes shortness of breath, fatigue. It can be managed by exercise and diet. Physical exercise weekly to expend 2500 calories/kcal in females and 3300 calories/kcal in males, equal to 60 to 90 minutes of moderate exercise daily. A low-fat, high carbohydrate diet helps weight maintenance. The term ‘Constipation’ refers to an abnormal infrequency of defecation or the passage of abnormally hard stools or both. Causes can be gastrointestinal or non-gastrointestinal. It’s clinical features are hard, dry stool, abdominal distension, decreased frequency of bowel movement. It can be managed by emollients, hyperosmolar laxatives and stimulants. Iron deficiency is the most common cause of nutritional anemia in the world. The causes of iron deficiency anemia are low iron stores, reduced iron intake, excessive losses of iron from body. It’s clinical features are pallor, fatigue and malaise, shortness of breath. Work is to do something that involves physical or mental effort, especially as part of job. Leisure is freedom from obligations and formal duties of paid work and opportunity.
* **Assignment:**
* Read about the nutritional needs & work and leisure of young adult.
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