Model Answer Of Nutrition

الفرقة الثانية كلية تمريض

Q1- **The five major food groups of food groups of food pyramid are:**

Group(1)Bread, cereal, rice and pasta group.

Group(2)Fruit and Vegetable group.

Group(3)Meat group

Group(4)Milk, yogurt and cheese group.

Group(5)fats, oils and sweets group.

Q2-

Dietary fibers as a nutrient:

Fiber: is exclusively found in plant food, and is a part of the plant that the body cannot digest or absorb into the blood stream, and therefore cannot be properly considered a nutrient. Basically, fiber is ingested into the body and expelled virtually intact. Fibers is found in two forms; as soluble fiber, which dissolves in water, and insoluble fiber which does not dissolve in water.

Q3

Sources and functions of lipids.

Sources of fats:

A- Animal fats: Butter, full cream milk, and fat rich meat, egg yolk.

B- Vegetable oil: Seed oils, soybean oil, Palm oil, coconut oil.

Functions of fat:

1- Role of fat in the diet:

1- Source of energy: Each gram of fat provides 9 Kcal.

2- Satiety value.

3- Carrier of fat-soluble vitamins.

4- Source of essential fatty acids.

5- Precursors of prostaglandin's.

6- Palatability: It stimulates the flow of digestive juices and improves the taste appeal of meals.

II- Role of fat in the body:

1- Energy reserve.

2- Body regulator.

3- Insulation.

4- Protection of vital body organs

Q4

Sources and hazards of deficiencies of calcium.=

Food sources:

A- Animal sources:

- Milk and milk products.
- Fish flour made from whole fish, including bones.
- Sardines.
- Eggs.
- Shellfish.

B- Plant sources:

- Green leafy vegetables and fruits.
- Cereal products and beans.

:**Deficiency health problems**

Osteoporosis: Decrease in mass or amount of bone in the skeleton, remaining bone mass -1 .is of normal composition. It is found primarily among middle-aged and elderly women

Osteomalacia: The amount of bone is normal but the composition is abnormal. It is -2 .associated with low phosphorus levels, low vit. D levels and low blood calcium levels

Tetany: Resulting from increased excitability of the nerve and spasmodic and -3 uncontrolled contraction of muscle tissue. This condition reflects as abnormality in parathyroid .functioning

Q5

PEM in adults and children.

- PEM in adults

The predominant form of PEM in adults is under nutrition.

Causes:

- Insufficient food supply.
- Anorexia.
- Increased energy requirement or increased energy losses (loss of calories in urine e.g glycosuria).
- Malabsorption e.g. small intestine disease
- Cashexia in some cases of cancer.
- Increased basal metabolic rate e.g. thyrotoxicosis, prolonged infections, trauma.

Clinical features:

- Loss of weight, muscle-wasting loss of subcutaneous fat.
- Weak ness, feeling cold amenorhoea& impotence
- Edema and distended abdomen.
- Apathy and depression.

PEM in young children

Malnutrition in young children is endemic in many developing countries.

Two types of severe malnutrition are described, Marasmus and kawashiorkor.

1- Marasmus:

This refers to sever undernutrition in an infant or young child.

Causes:

- Diet very low in energy protein and other essential nutrients.
- Gastroenteritis, with diarrhea and poor appetite, the further depletes the children energy reserves.

Clinical features*:*

- The child is very this with no subcutaneous fat and wasted muscles.
- Reduced body weight, below 60%.
- No edema and skin and hair changes.

2- Kwashiorkor:

This type of malnutrition occurs most often in the second year of life in a child weaned from the breast on to a starchy diet very low in protein.

Clinical features:

- The child is miserable and apathetic.
- There are hair changes and symmetrical skin changes
- Edema and muscle wasting.
- Fatty liver and indigestion.
- Low plasma albumin.

Predisposing factors of PEM:

- Low socioeconomic standard.
- Bad sanitary environment.
- Nutrition ignorance and bad habits of the mother.
- Prolonged breast-feeding and faulty weaning practice. *

Infection

Prevention of PEM:

1- Socioeconomic and community.

2- Health education including nutrition education of mothers.

3- Prevention and control of communicable.

4- Breast-feeding with proper weaning and adequate protein supplementation.

Q6

How to assess an obese person mentioning possible causes of obesity and how to prevent obesity.

Assessment of Obesity

1- Qualitative assessment ‘distribution of adiposity’ location of fat in different parts of the body’.

2- Quantitative assessment

One- Relative body weight (R.W.)

Body weight (kg):

Desirable weight is obtained from special tables of desirable weights for given heights. Ideal RW is supposed to be 100.

$$\frac{\text{Body weight}}{(\textit{Height in meters})^2}$$

Normal BMI is 20-25kg/m2

c- Skin fold test:

Thickness of skin over the middle of triceps muscle is measured in millimeters by special device.

Normal thickness

20 mm in man.

30 mm in women

Skin fold test is usually used in infants and young children.

Causes:

Weight gain is due to an imbalance between energy intake and energy expenditure.

1- Highest fat intake.

2- Consumption of energy – dense food and drink's high in fat and sugar.

3- Alcohol promotes weight gains

4- Decreasing physical activity

5- Family and genetic predisposition.

6- Certain drugs many contribute to weight gain e.g. corticosteroids, sulphonylureas, tricyclic anti- resents.

7- Endocrine causes are rare.

Prevention and control:

The prevention and control of obesity depends on behavioral modification including the following issues:

1- Self-monitoring using a food diary.
2- Need for long-term lifestyle change.
3- Need to modify eating habits.
4- Need to assess present exercise level and ideas to increase this if necessary.
5- Separation of eating from other activities level and ideas to increase this if necessary.
6- Planning of daily food intake.
7- Possibility of changes to individual eating style.
8- Identification of the causes of negative emotions and stress.
9- Dealing with situations that interfere with every day food choices e.g. eating out, holidays, family pressure and cost.

A-1-

1-Major diseases caused by smoking.

1-Cardiovascular diseases

Coronary thrombosis
Cerebral thrombosis
Kidney failure
Gangrene, amputation of legs

2-Cancers lung, bladder, esophagus, kidneys, pancreas and cervix.

3-COPD
4-Other risks caused by smoking.
5-Impotence.

A-2-

Basic principles of primary health care.

1-Community participation

Def----------
Advantages 1-adress felt health needs
2-ensure
social responsibility
3-ensure sustanability
4-cost sharing
5-enhancement of knowledge
6-inter sectoral collaboration

2-Inter sectoral collaboration (Def, advantages)

3-Integration of health services (Def, advantages)

4-Equity(Def, advantages)

5-Self-reliance(Def, advantages)

A-3-Advantages of breast feeding for both infant and mother.

For infant: 1-warm,ready, sterile, perfectly balanced in components.

2-more
easily digested, available all times

3-protect from infections, GIT, anemia and vitdef

4-help bonding and development.

For mother:
1-promote involution of uterus

2-lower incidence rate of cancers

3-saves times and troubles of some women

4-less strain on budget

5-feminine role, motherly attitude

6-help delaying new pregnancy

7-mother find great satisfaction

A-4- Protective measures against health care wastes.

1-
development of awareness

2-personal hygiene

3-immunization

4-personal protection

5-training and information

B-1-**Components of reproductive health.**

1-premarital care

2-preconception care

3-ante-natal care

4-natal care

5-post-natal care

6-inter-conception care

B-2-**Ten steps of successful breast feeding.**

1-Have a written policy

2-train all health care staff necessary to implement this policy

3-inform all women about the benefits &management BF

4-Help mother initiate BF within half-hour of birth

5-show mother how feed, maintain lactation

6-no food or drink other than BF unless medically indicated

7-Rooming in

8-BF on demand

9-no artificial teats or pacifiers to baby

10-BF groups support refer mother to clinic

B-3-**Types of health care waste**

A-Non-risk HCW A1: Recyclable waste

A2: Biodegradable waste

A3: Other non-risk waste

B-HCW requiring special attention

B1: Human anatomical

B2: Sharps

B3: Pharmaceutical waste B31: Non-hazardous pharmaceutical waste

B32: Potentially hazardous pharmaceutical waste

B33: Hazardous pharmaceutical waste

B4: Cyto-toxic pharmaceutical waste

B5: Blood and body fluids

C-Infectious and highly infectious waste

C1: Infectious waste

C2: Highly infectious waste

D-Other hazardous waste

E-Radioactive waste