NAME: Benjamin Awura

SCHOOL: AFRICAN INSTITUTE FOR PROJECT MANAGEMENT STUDY

COURCE: DIPLOMA IN HUMAN NUTRITION

No: D003

CONNTENT: ANSWERS TO THE ASSINGNMENT THREE.

Q. 1. Answers

Carbohydrates are one of the six nutrients that supply body with energy, and have the following types

1. Monosaccharide, this is simple sugars and of single sugar unit. Examples are glucose, fructose, and galactose.
2. Disaccharides are compound sugar with two sugar unit, for example sucrose, lactose maltose.

1. Polysaccharides are complex carbohydrates of many sugar unit, examples are whole grain, fruits, and vegetables.

Function of carbohydrates in human body includes the following.

* Provides energy to the body, this is primary role of carbohydrate to provide all cells of the body with energy. Many cells consider glucose as source of energy than other compound like fatty acids. And brain is highly sensitive to low blood glucose level, because it uses it for function.
* Energy storage, if the body has excess glucose for its function then the rest are stored as glycogen in muscle and liver.

* Building macromolecules, some glucose is converted to ribose and deoxyribose which essential building block of important macromolecules like RNA, DNA.

* Sparing protein and, in conditions where glucose is not enough to meet body needs, glucose is synthesize form amino acid, because there is no storage molecules of amino acids, this is directly extracted from muscle tissues.

* Assisting lipid metabolism, rise in glucose inhibits the use of lipid as energy. htt://2012book.lardbucket.org/books/an-introductiontonutrition.

Q. 2. Answers

Yes they are important as seen in the table below with their sources

|  |  |  |
| --- | --- | --- |
| Nutrients | Importance | Sources |
| Protein | for building body tissues and repair | Meat, beans, fish |
| Carbohydrate | Provides energy to the body | Rice, cassava, maize |
| Fats and oil | Acts as cushion to vital organs and also adds flavor | Seeds like sun flower, coconut, sesames |

Protein, Carbohydrates, fats and Oil are macronutrient.

Q. 3. Answers

Nutrient deficiency means lack of specific nutrient in the body, therefore, for the following signs they are shown in the table below.

|  |  |
| --- | --- |
| Signs | Nutrient deficiency |
| Pallor | Iron |
| Goitre | Iodine |
| Bitot’s spot | Retinol |
| Bilateral pitting oedema | Protein |
| Severe visible wasting | All nutrient |

#### For more details nutrition module 1 page 4 and 10

Q. 4. Answers

Malnutrition is an abnormal physiological condition caused by deficiency excess or imbalance of energy and nutrient. Therefore, it has the following impact.

* Increase vulnerability to diseases.
* Developmental delay (stunting growth)
* High morbidity rate
* High mortality rate
* Low productivity

How to prevent malnutrition following measures are required

1. Nutrition-specific intervention and programming, these mainly address the immediate cause of malnutrition that is to say inadequate dietary and ill-health,

* Promotion of optimum maternal infant young child nutrition. (MIYCN)
* Disease prevention and management.
* Nutrition intervention in emergencies

1. Nutrition-sensitive intervention and programming, these address the underline causes of malnutrition like access to food, care practices to health services, safe and hygienic environment.

* Agriculture and food security programs.
* Child protection.
* Maternal mental health.

1. Health/nutrition education and counseling, these involves a combination of education strategies formulated to:

* Increase knowledge and awareness.
* Change attitudes;
* Promote positive behaviors and practices

#### Sources community management of acute malnutrition guideline (CMAM)

Q. 5. Answers

The vulnerable groups are women of child bearing age, children under 5 years and HIV/TB clients with these groups the only way to address the problem is through, therapeutic and preventive method as follow

1. Therapeutic methods.

* Provision of micronutrient supplementation for example vitamin A, folic acid, and iodize salt, in mass campaign or during nutrition programs.

1. Preventive measure.

* All pregnant women are to be encourage to attend antenatal clinic

* Setting up blanket supplementary feeding programs in the community (BSFP)
* All children are to be immunize to bush up their immunity

* Health/nutrition education to the community to awareness among the vulnerable groups

Q. 6. Answers

Fiber is the tough stringy part of fruit, vegetable and grains, they have the following assistance in digestion.

1. It helps to move waste from digestive system by making the stool bulk and soft
2. Fiber helps to balance glucose and control diabetes.
3. It helps to prevent the accumulation of too much body fats.
4. Fibers from vegetable, legumes helps to bind cholesterols and carries it out of the body in the stools to prevent heart disease

#### Source nutritionnote-2.pdf