

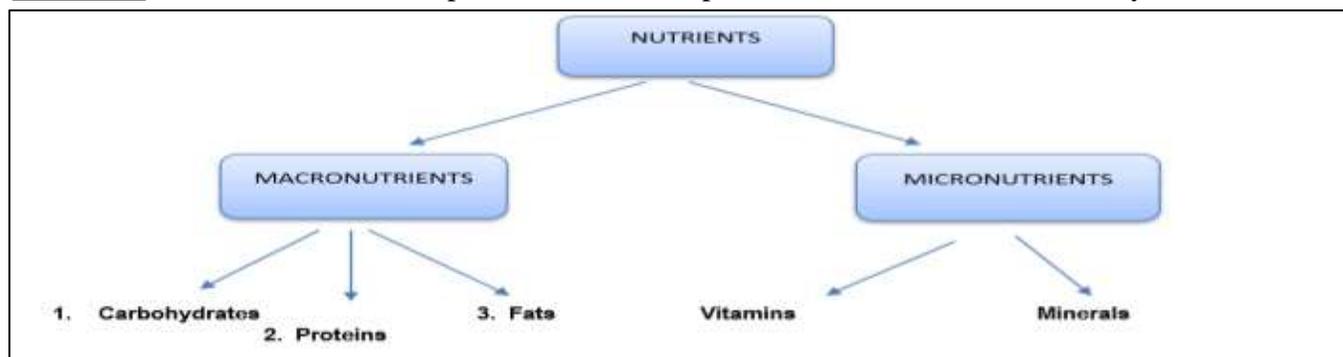


WEEKLY HOME STUDY PACKAGE - WEEK 1 (05/07/21 – 09/07/21)

Subject	HOME - ECONOMICS	Year/Level	11
Strand	HEC: 2 Food And Nutrition		
Sub-strand	HEC 11. 2.3 Diet And Health		
Content Learning Outcome	Describe the types and sources of macro nutrients		

LESSON NOTES/ACTIVITY:

Nutrients - Chemical substances present in food that provides nourishment for our body.



Macronutrients

can be defined as the classes of chemical compounds people consume in the largest quantities and which provide bulk energy are carbohydrates, proteins, and fats.

Carbohydrates

- Carbohydrates are one of the main dietary components. This category of foods includes sugars, starches,

Classification of carbohydrates

1. Monosaccharides	<ol style="list-style-type: none"> 1. Glucose 2. Fructose 3. Galactose
2. Disaccharides	<ol style="list-style-type: none"> 1. Sucrose = glucose + fructose 2. Lactose = glucose + Galactose 3. maltose = glucose + glucose
3. Polysaccharides <ul style="list-style-type: none"> ✓ Complex Carbohydrates (Starches) <ul style="list-style-type: none"> • Amylose (Straight Chain) • Amylopectin (branched chain) ✓ Dietary fiber (plant materials that resist digestion) <ul style="list-style-type: none"> • Soluble (pectin, guar gum, oat bran) • Insoluble (cellulose, lignin) 	<ol style="list-style-type: none"> 4 links of glucose, straight chain 4 Linked straight chains with a-1, 6 linked branch pts. 1. Absorbs water 2. Delays absorption of sugar 3. Binds bile salts

Functions of carbohydrates

- Carbohydrates spare protein so that protein can concentrate on building, repairing, and maintaining body tissues instead of being used up as an energy source.
- For fat to be metabolized properly, carbohydrates must be present. If there are not enough carbohydrates, then large amounts of fat are used for energy.
- Carbohydrate is necessary for the regulation of nerve tissue and is the ONLY source of energy for the brain.
- Some carbohydrates are high in fiber, which helps prevent constipation and lowers the risk for certain diseases such as cancer, heart disease and diabetes.

ACTIVITY: Use the information above and answer the following questions:

1. Which of the following is a macro nutrient? **(1 mark)**

- A. Iodine
- B. Vitamin C
- C. Sodium
- D. Carbohydrates

2 Glucose is an example of a **(1mark)**

- A. monosaccharide.
- B. disaccharide.
- C. polysaccharide.
- D. polypeptide.

3. Define the term Nutrient. **(1mark)**

4. Explain the function of carbohydrates in the body ? **(2marks)**

5. State **one** nutritional disease caused by deficiency of carbohydrates in the body. **(1 mark)**

6. Describe how carbohydrate is absorbed in the body **(2marks)**

7. What is a carbohydrate? **(1mark)**

8. What foods contain carbohydrates? **(1mark)**
