



3055 BA SANGAM COLLEGE

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Worksheet 18

School: Ba Sangam College

Year:12

Subject: Home Economics

Name: _____

Strand	2 HEC 12.2 Food and Nutrition
Sub strand	HEC 12.2.3 Diet and Health
Content Learning Outcome	HEC 12.2.3.1 Explore the utilization of micronutrients and the effects of malconsumption by individuals.

FUNCTIONS OF MINERALS	DIETARY SOURCES	FACTORS WHICH HELP ABSORPTION
	TRACE ELEMENTS	
Copper Helps form hemoglobin and enzymes and hydrochloric acid in the stomach. Necessary for protein synthesis, enzyme and muscle activity.	Sesame seeds, soya beans, mushrooms, sunflower seeds, lentils, walnuts, lima beans, etc.	
Fluorine Forms part of enamel coating of tooth. It prevents tooth decay.	Sea fish Tea Drinking water	

Water

It makes up to two – thirds of body weight, forming the main ingredient in the blood, lymph, cell liquid, extracellular fluid and digestive secretion.

Functions of water

- Transport: water (as blood) transports nutrients, oxygen, carbon dioxide, blood cells, hormones and enzymes around the body.
- Helps to control body temperature by evaporating perspiration (sweat) from the skin.
- Distributes heat generated by metabolism.
- Dissolves food, aids digestion (hydrolysis) and absorption.
- Assists in the removal of waste through kidneys.
- Water is often a source of minerals such as calcium and fluorine.

- It quenches thirst.

Sources of Water

It is obtained from drinking water, milk and from beverages such as tea and alcoholic drinks. Food with high percentage of water includes fruit and green vegetables.

Daily requirement

As 2 – 2.5 litres of water are lost daily by excretion, perspiration and breathing, an equal amount is required to avoid dehydration – 1.5 litres in beverages and 0.8 litres in foods.

DIETARY FIBRE

Dietary fibre or ‘roughage’ comprises the edible parts of plant that cannot be digested or absorbed in the small intestine and passes into the large intestine intact. The term dietary fibre also includes a type of starch known as resistant starch (found in pulses, partly-milled seeds and grains, some breakfast cereals). It provides bulk and also prevents constipation, by keeping the waste products soft so that they can be easily passed from the body.

Sources- It is mainly found in vegetables, fruits, pulses, nuts and wholegrain cereals.

Dietary Fibre and Health

Ingested dietary fibre moves along into the large intestine where it is partially or completely fermented by gut bacteria. During the fermentation process several by-products, short chain fatty acids and gases, are formed.

Activity

1. How much water makes up body weight? (1 mark)

2. List **four** functions of water. (4 marks)

3. What are **two** sources of water? (2 marks)

4. List **two** functions of dietary fibre. (2 marks)

5. State **one** source of dietary fibre. (1 mark)
