

Food and Nutrition

Grade 10

Tutorial 1

1. Define the following terms:

- a) Metabolism.
- b) Malnutrition
- c) Balanced Diet

2 (i) Foods containing protein are classified by their biological value.

- a) Explain the term high biological value protein.
- b) Explain the term low biological value protein.
- c) Name four different foods which are good sources of high biological value (HBV) protein.

(ii) Proteins can prevent extreme conditions such as kwashiorkor.

- a) Give four other functions of proteins in the body.
- b) Proteins are made up of amino acid molecules. Explain why some proteins have a lower biological value(LBV)than others
- c) Name three different foods which are a good source of low biological value protein.
- d) Name the elements that combine to form protein.
- e) Complete the following to describe digestion and absorption of protein.

In the stomach_____ acid creates a suitable medium for digestion of protein to begin.

There are two enzymes in the stomach. Pepsin converts protein to _____ and clots milk.

In the duodenum, the enzyme _____ produced by the _____ continues to convert protein to _____. In the ileum, the enzyme _____ from _____ juice, completes the breakdown of protein to _____ ..

3. Write an informative paragraph on each of the following:

- a) the choice and care of saucepans;
- b) the disposal of kitchen waste.

4. Discuss the importance of Non Starch Polysaccharides (NSP) / dietary fibre in the body.

5. Name two good sources of NSP.
6. Discuss the importance of vegetables in the diet and suggest ways in which they could be used in the preparation of family meals.
7. The small intestine plays an important part in digestion and absorption. Describe and explain:
 - a) digestion in the small intestine;
 - b) absorption in the small intestine.
8. State five different types of vegetable and give an example of each.
9. Water is vital to life.
 - a) Name the condition which results from a deficiency of water in the body.
 - b) Give two symptoms of the condition named in (a)(i)
 - c) State two groups of people who may need to increase their water intake. Give a reason in each case.
 - d) Name four foods which have a high water content.