NDAH CHRIS CHIMENEM

18/MHS03/007

ANATOMY

BCH 204

**QUESTION 1: WHAT DO YOU UNDERSTAND BY THE TERM “BIOLOGICAL VALUE OF PROTIENS”**

Biological value is a measure of the proportion of absorbed protein from a food which becomes incorporated into the proteins of the organism's body. It captures how readily the digested protein can be used in protein synthesis in the cells of the organism. It is an expression of a number of the nutritional characteristics of the food.

**QUESTION 2: LIST AND EXPLAIN THE VARIOUS METHODS OF ASSESMENT OF PROTEIN QUALITY**

1. Biological Value (BV)
2. Net Protein Utilization (NPU)
3. Amino Acid Score
4. Critique
5. Protein Efficiency Ratio (PER)

* **Biological value**: It is defined as the percentage of absorbed nitrogen retained in the body and a complete evaluation of the dietary protein includes measurement of the biological value and the digestibility.
* **Net Protein Utilization (NPU):** this is defined as the ratio of amino acid mass converted to proteins to the mass of amino acids supplied.
* **Amino Acid Score:** It works with protein digestibility to determine if a protein is complete.
* **Critique:** this is a process where there is detailed analysis and assessment of the protein quality in the body.
* **Protein Efficiency Ratio (PER):** used extensively to evaluate the nutritional qualities of food proteins. It is based on the weight gain of a test subject divided by its intake of a particular food protein.