ISSN: 2287-6898 International Journal of Bio-Pharma Research

Volume 11, Issue 1 (2021) pp.2710-2711

Commentary

Open Access

Biochemistry and its chemical composition in living matter

Thomas Abraham^{*}

Department of Biochemistry, Harvard University, Cambridge, United States.

Received: 01-Mar-2022, Manuscript No. IJBPR-22-61652; **Editor assigned:** 04-Mar-2022, Pre QC No. IJBPR -22-61652 (PQ); **Reviewed:** 18-Mar-2022, QC No. IJBPR -22-61652; **Revised:** 25-Mar-2022, Manuscript No. IJBPR -22-61652 (R); **Published:** 04-Apr-2022, DOI: 10.35248/2287-6898.22.11. 2710-2711.

Description

Biochemistry or organic chemistry includes chemical techniques inside and regarding dwelling organisms. A sub-field of each chemistry and biology, biochemistry can be divided into three fields like structural biology, enzymology and metabolism [1,2]. Almost all regions of the existence sciences are being exposed and advanced *via* biochemical technique and research. Biochemistry specializes in how the chemical foundation which permits organic molecules to offer upward to the techniques that arise inside dwelling cells and among cells, in flip bearing on substantially to the know-how of tissues and organs, in addition to organism shape and function. Biochemistry is intently associated with molecular biology, that is the have a look at of the molecular mechanisms of organic phenomena.

Much of biochemistry offers with the structures, bonding, features, and interactions of organic macromolecules, together with proteins, nucleic acids, carbohydrates, and lipids. They offer the shape of cells and carry out a number of the features related to existence. The chemistry additionally relies upon the reactions of small molecules and ions [3,4]. These may be inorganic (for example, water and steel ions) or organic (for example, the amino acids, which might be used to synthesize proteins). The mechanisms utilized by cells to electricity from their surroundings through chemical reactions are called metabolism. The findings of biochemistry are carried out more often than in medicine, nutrients and agriculture. In medicine, biochemists look into the reasons and remedies of diseases. A study of the chemicals and processes found in biochemistry, plants, animals and microorganisms, and the changes they undergo between development and life[5]. It deals with the chemistry of life and, in

itself, utilizes the techniques of analytical, organic and physical chemistry, as well as the techniques of physiologists who deal with the molecular basis of life processes. All chemical changes in an organism generally the decomposition of substances to obtain the required energy, or the construction of complex molecules required for life processes are collectively called metabolism. These chemical changes depend on the action of organ catalysts known as enzymes, which depend on the genetic mechanism of the cell for their presence. Therefore, it is not surprising that biochemistry is invading the study of illness, drug action, and chemical changes in medicine, nutrition, genetics, and other aspects of agriculture. The term biochemistry is synonymous with two older terms, physiological chemistry and biochemistry. The biochemical aspect of dealing with the chemistry and function of very large molecules (proteins, nucleic acids, etc.) is often categorized as molecular biology. In addition to water and salts or minerals, all living cells contain a large number of organic compounds, which are substances made of carbon in relation to various proportions of hydrogen and oxygen. Nitrogen, phosphorus and sulphur are also common ingredients. In general, most of the organic matter in cells can be classified into proteins, carbohydrates, and fats or lipids. Nucleic acids and various other organic derivatives are also important components. Each class contains a wide variety of individual compounds. There are also many substances that are not usually in large quantities but are not assigned to any of the above categories.

References

1. Waddington CH. Molecular biology or ultrastructural biology?. Nature. 1961; 190(4781):1124-1125.

- Fariselli P, Rossi I, Capriotti E, Casadio R. The WWWH of remote homolog detection: the state of the art. Brief Bioinform. 2007; 8(2):78-87.
- Rojas-Ruiz FA, Vargas-Méndez LY, Kouznetsov VV. Challenges and perspectives of chemical biology, a successful multidisciplinary field of natural sciences. Molecules. 2011; 16(3):2672-26887.
- 4. Ulveling D, Francastel C, Hubé F. When one is better than two: RNA with dual functions. Biochimie. 2011; 93(4):633-644.
- 5. Knowles, J.R. "Enzyme-Catalyzed Phosphoryl Transfer Reactions". Annu Rev Biochem. 1980; 49: 877–919.