

Research Group – Lipid and Lipoprotein Research Group,  
Department of Biochemistry,  
Faculty of Biological Sciences.

The Lipid and Lipoprotein Research Group is a functional entity in the Department of Biochemistry, University of Nigeria, Nsukka. It engages in the investigation of different aspects of lipid and lipoprotein studies ranging from nutritional, industrial, medical, biotechnological and metabolic considerations. There are essentially five sections of the group, namely:

### **1. Fats and Oils Section**

This section is involved with the following studies:

- (a). Production of glycerol for body oil and cosmetics.
- (b). Production of monoglycerides for emulsification.
- (c). Fractionation and production of palm kernel oil for the manufacture of soap, palmitate and stearates.
- (d). Production of oils from cotton seed, rubber seed and other oil seeds which are rich in polyunsaturated fatty acids for use in the paint and other industries.
- (e). Vegetable oil production for cooking purposes.

### **2. Lipid and lipoprotein Standardisation and Analyses Section**

The sections involved with the development and standardization of the methods used for lipid for and lipoprotein analysis. It is also responsible for the analysis of lipids and lipoproteins for routine and research purposes.

### **3. Epidemiological Section**

This section carries out surveys on lipid and lipoprotein distributions in the communities; determines the incidence and prevalence of hyperlipidaemias and other lipid disorders, and correlates lipid and lipoprotein levels/disorders with disease conditions. It also carries out intra and inter community studies on lipid and lipoprotein levels/disorders.

### **4. Nutritional and Immunological Section**

This section is concerned with experimental studies in man and animals on the relationship between diets and lipid metabolism. It also engages in the formulation of appropriate feeds for the control of certain diseases which have causal relationship with lipid metabolism. This section also develops or raises antisera to the lipoprotein classes.

### **5. Phytobiochemical Section**

The main functions of this section are:

- (a). Production of hypolipidaemic agents from local plants.

- (b). Production of anti-hypertensive and anti-platelet aggregation agents from local plants
- (c). Formulation and production of fat emulsions for parenteral nutrition
- (d). Production of enzymes, for example, lipase from local plants for biotechnological studies
- (e). Carrying out pharmacological tests for the potency and efficacy of the plant extracts.

The Group is co-ordinated by Prof. Obi U. Njoku in the Department of Biochemistry. The Group was established by late Prof. I.C. Ononogbo, and attracted a lot of Grants from different organization, namely: WHO, IDRC and Federal ministry of science and Technology, African Business Network and UNESCO. Currently it is headed/coordinated by Prof. Obi U. Njoku

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