



## Impacting Human Health, Nutrition, and Enhancing Food Security in Africa through Dietary-based, Additive Food Manufacturing

**Name:** Samuel Tunde Olorunsogo

**Affiliation:** Senior Lecturer at Federal University of Technology Minna

**Country:** Nigeria

**Email ID:** [solorunsogo@futminna.edu.ng](mailto:solorunsogo@futminna.edu.ng)

### ABSTRACT (upto 300 words)

Africa is seasonally blessed with bumper harvests of food ingredients, but a high percentage of these harvests are lost due to the inability to convert them to shelf-stable forms. However, chronic hunger, malnutrition, dietary deficit, concurrent diseases, and food insecurity remain the most compelling dilemma in sub-Saharan Africa. The immediate causes of these problems are low dietary intake. The proposed presentation aims to combat these compelling dilemmas in Africa through dietary-based, additive food manufacturing. Unless attention is given to this food manufacturing approach, the goal of ending hunger, malnutrition, dietary deficit, diseases, and food insecurity may not be achieved in Africa. The dietary needs of consumers (children, teens, pregnant women, nursing mothers, aged men, sportsmen) are not the same. A consumer may require a meal for a specific diet because of nutritional needs or health challenges. Processing our cheap, readily available, underutilized local food ingredients and agricultural products into high-quality, safe, nutritionally enhanced manufactured food that meets the populace's dietary needs is a crucial issue that our local food industry has not been able to tackle. Currently, Africa's food industry does not consider the dietary requirements of individual consumers; food manufacturing based on dietary needs is not yet practiced. Dietary-based, additive food manufacturing is a viable, sustainable, and long-term solution for overcoming hunger, malnutrition, dietary deficit, diseases, and food insecurity in Africa. Food manufacturers spend millions of dollars developing new forms of food. However, it would be impossible for manufactured foods to optimally nourish our bodies unless those

foods contain the essential nutrients that our bodies need. The focus on healthier living via the proper diet is gaining more audience among diverse consumers. Changes in lifestyle and health consciousness give rise to new categories of foods. There is a growing need/market for dietary-based food products.





## BIOGRAPHY (upto 200 words)

Engr. Dr. Olorunsogo Samuel Tunde has a Ph.D. in Food Engineering from the Federal University of Agriculture, Abeokuta; M.Eng. in Food Engineering from the Federal University of Technology, Minna; and a Bachelor of Engineering (B. Eng.) degree from the Federal University of Technology, Akure. His research interests are in Food product/process development, modeling, optimization, and simulation, Food packaging and storability studies, and Development of food processing equipments. He has supervised and co-supervised more than 30 Postgraduate and Undergraduate students in Nigeria. He has also authored and co-authored over 20 research papers, including conference proceedings. He is a reviewer of three international journals. He is a member of the International Society of Food Engineering and a Registered Engineer with the Council of Regulation of Engineers in Nigeria (COREN). He is married with three children. His extra-curricular



**Presenter Name:** Engr. Dr. Olorunsogo Samuel Tunde.

**Mode of Presentation:** Oral/Poster.

**Contact number:** +234 (806) 2411757

