



Tropentag, September 20-22, 2023, hybrid conference  
“Competing pathways for equitable food systems transformation:  
Trade-offs and synergies”

## Perceptions and consumption of fortified food products in Ghana: The case of mushroom-fortified bread

ROBERT AIDOO, FAIZAL ADAMS, GIFTY BOAKYE APPIAH, SETH ETUAH, BRIGHT KYEI, IVY A. SOWAH, MARINO E. ESSUMAN, TRAVIS ADU-POKU, DANIEL OPPONG, KOFI YEBOAH ASARE

*Kwame Nkrumah University of Science and Technology (KNUST-Kumasi), Dept. of Agricultural Economics, Agribusiness and Extension, Ghana*

### Abstract

Ghana is experiencing double burden of malnutrition with a high prevalence of undernutrition and overweight/obesity. This is partly due to the consistent increase in the consumption of refined food products like white bread in both rural and urban communities. This substantial rise in the consumption of refined food among households has led to serious nutrient deficiency, especially in areas where food is usually consumed without adequate quantities of vegetables, fruits, and proteins. Refined bread, which is a major component of the daily breakfast and bedtime meal in Ghana, is made from highly processed wheat flour with inadequate quantities of proteins, essential vitamins, minerals and dietary fiber required for proper functioning of the human body. Fortifying bread with mushrooms reduces the adverse effect of consuming refined bread by increasing its nutritional content and health benefits. This study used primary data from 406 randomly selected households to examine perceptions and consumption patterns for mushroom-fortified bread in the Ashanti Region of Ghana. Perception index, binary probit and tobit regression models were employed to analyse the field data. Evidence from the study shows that only 26 % of consumers had purchased and consumed mushroom-fortified bread, even though 63 % of bread consumers were aware of this new product on the market. Generally, consumers have positive perception about mushroom-fortified bread, especially because of its nutritional content, health benefits and superior sensory attributes. However, household consumption of this fortified food product is significantly influenced by awareness, age of household head and income level. Intensive awareness creation about mushroom-fortified bread through local radio stations and social media platforms is recommended to stimulate household demand for the new product to promote good health and nutrition in Ghana.

**Keywords:** Bread, consumption, fortification, mushroom, perception