

Tropentag, September 16-18, 2015, Berlin, Germany

"Management of land use systems for enhanced food security: conflicts, controversies and resolutions"

Food Consumption Pattern and Micronutrient Adequacy of Cassava Value Chain Households in Guinea Savannah Area of Nigeria

BOLANLE AKINWANDE¹, FOLAKE SAMUEL², RACHEL OPASOLA¹, LUKUMAN AZEEZ¹, ADEBAYO ABASS³

¹Ladoke Akintola University of Technology, Dept. of Food Science and Engineering, Nigeria
²University of Ibadan, Dept. of Human Nutrition, Nigeria
³International Institute of Tropical Agriculture (IITA), Tanzania

Abstract

Monotonous starchy staples that are mainly energy-dense and poor in micronutrient content are common in food insecure areas. This contributes micronutrient deficiencies which impede the health and productivity of individuals, households and communities. A dietary assessment study was carried out in selected communities of Oyo and Kwara States, Nigeria (Guinea Savannah zone). This was to assess and compare the food consumption, dietary diversity and dietary pattern of cassava value chain households (CVCH) and noncassava value chain households (non-CVCH). Household sizes ranged from 2–20 with mean of 8 members. CVCH constituted 87.1% and 72.0% of all households in Oyo and Kwara States, respectively. The most frequently consumed staples and modes of consumption were: yam (18.7%) - pounded; maize (17.7%) – plain gruel; cowpea (16.8%) – steamed pudding; wheat (14.8%) – bread; rice (9.3%) – plain boiled; cassava (8.5%) – fermented flour dough; sorghum (6.6%) – plain gruel; cocoyam (5.6%) – boiled; sweet potato (5.2) – boiled; and millet (2.5%) – plain gruel. The weekly frequency of cassava consumption was significantly higher in CVCH (9.2%) than non-CVCH (6.1%). The minimum number of food groups consumed was 3, the maximum was 10, the mean household dietary diversity score was 6.8 ± 1.1 , with no significant difference between CVCH and non-CVCH. Two major dietary patterns were identified among the households: root/tuber-based and grain-based and these explained up to 58% of the total variance in the diet of the households. The findings show that both cassava value chain and non-cassava value chain households in this study subsist on a fairly monotonous diet with limited diversity. This indicates a vulnerability to micronutrient deficiencies because such diets are often inadequate in micronutrient supply. There is therefore the need for food security and nutrition intervention activities involving dietary diversification to improve micronutrient intake among this population.

Keywords: Cassava, dietary diversity, dietary pattern, household foods, value chain

Contact Address: Bolanle Akinwande, Ladoke Akintola University of Technology, Dept. of Food Science and Engineering, Plot 21 Main Road Ire-Akari Estate Oluyole Extension, Ibadan, Nigeria, e-mail: baakinwande@lautech.edu.ng