# **ABSTRACT**

**Background:** The *Integrating Orange Project* promotes production and consumption of orange-fleshed sweet potatoes (OFSP) to address vitamin A deficiency among rural populations of Zambia since 2011.

**Objective**: This study assesed household production and consumption of OFSP, and identified factors associated with consumption there of OFSP in *Integrating Orange Project* areas in Chipata district, Zambia.

**Methods:** Respondents of 295 randomly selected households were interviewed using a structured questionnaure during the sweet potato harvest season. Associations between OFSP consumption and household factors were asssesed using chi-square tests; unstandardized residuals were used to detect differences within different categories.

**Results:** Frequency of OFSP consumption was categorised as ≥4 days during the last 7 days (30.2%), 1−3 days during the last 7 days (49.5%), eats OFSP but not during the last 7 days (7.1%), and never (13.2%). In total, 60.3% of households planted OFSP; and 40.0% bought OFSP, mostly from farmers within the community. OFSP consumption was associated with presence of children less than five years old in the household, production of OFSP, purchasing of OFSP, and respondent having knowledge on health benefits of OFSP (P < 0.001). Age and sex of the housheold head, and household size had no association with the OFSP consumption OFSP (P > 0.05).

**Conclusion:** High consumption of OFSP was reported during the harvesting season in *Integrating Orange Project* areas. Programs promoting OFSP consumption should thus focus on OFSP production and sensitizing households on nutritional benefits of OFSP, and target households with children less than five years old as entry point.

**Keywords; *Orange fleshed sweet potatoes; Consumption; Vitamin A Deficiency; orange fleshed sweet potatoe knowledge; Sweet potato preferences; Production; Procurement; cooking methods; Purchase .***