

Assessment of the Awareness of Orange Fleshed Sweet Potato and its Utilization in Areas of Kwara State

by

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5th Annual SPHI Marketing, Processing and Utilization Community of Practice Meeting on 23rd – 24th April 2018, at the Lotus Hotel in Blantyre, Malawi.

Background Information

KWARA STATE

- A state in the North Central Region of Nigeria
- Made up of sixteen local governments & three senatorial districts
- Population of 2.37 million based on Nigeria 2006 Census
- Existence of many markets

OFSP

- Good for under-nutrition and micronutrient malnutrition
- Significant impact on vitamin A deficiency that threatens children under age five (Tadesse *et al.*, 2015)
- High bioavailability of vitamin A in children (Jaarsveld *et al.*, 2005)
- Low glycemic index
- Healthy fiber content

INTRODUCTION

- Challenge of VAD Contributes to 25% of infant, child and maternal mortality in Nigeria due to reduced resistance to protein-energy malnutrition, acute respiratory infection, measles, malaria and diarrhea (WHO, 2009; UNICEF, 2013).
- Kwara State is in the north central geopolitical zone and has been reported to have a high incidence of VAD among children under five and maternal women (Maziya-Dixon *et al.*, 2006; Kuku-Shittu *et al.*, 2016)
- Vitamin A is essential for vision in dim light, cellular bone and tooth growth, formation and maintenance of healthy skin, hair and mucous membranes, reproduction and immunity boosting. So important in embryological development that without it, the fertilized egg cannot develop in to a foetus (Brody, 2007).

Vitamin A Deficiency

- Night blindness or impaired adaptation to the dark
- Lowered immunity to infections such as measles, diarrhea, chicken pox and respiratory infections
- Anaemia
- Poor growth
- Slowed bone development
- Blindness
- Death

OFSP products



OFSP Cookies



OFSP *Chin-chin*



OFSP Agidi



OFSP-Moringa seed complementary mix



OFSP Syrup for *kunun-zaki*



OFSP Juice for syrup

Our Findings

- Agidi samples made from maize with 30% OFSP inclusion recorded highest contents of beta carotene and other vitamins and minerals studied. They exhibited better sensory characteristics than the control (100% maize).
- Complimentary food developed from OFSP with moringa seed inclusion at 10% was found to be better than a commercial complimentary food in beta carotene content, protein and was preferable in sensory parameters

Some Published Articles

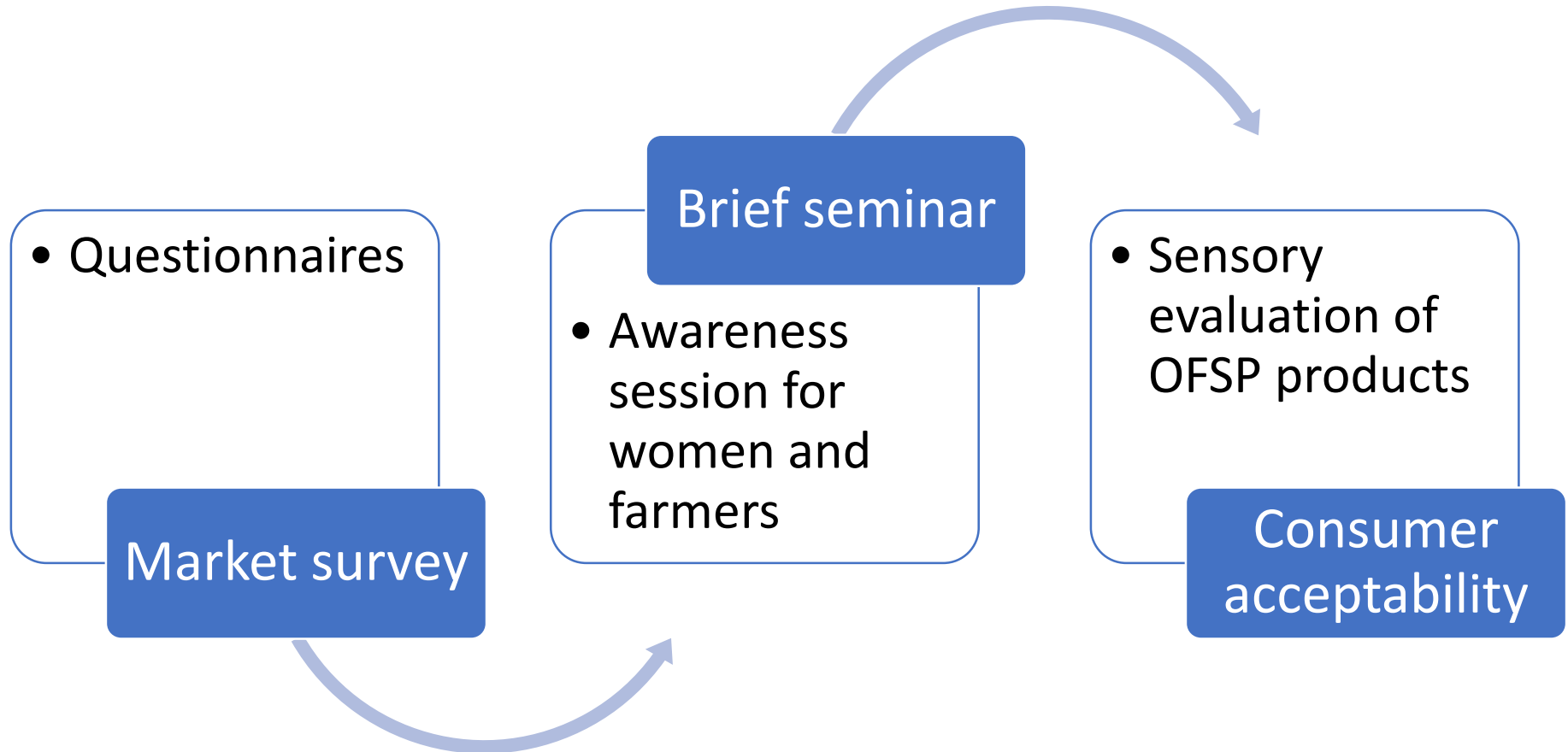
- Kolawole, F. L., Balogun, M. A., Usman, F. D. & Akeem, S. A. (2016): **Effect of Drying Methods on the Chemical and Functional Properties of Potato (*Solanum tuberosum*) and Sweet Potato (*Ipomoea batatas*) Varieties.** *Nigerian Journal of Agriculture, Food and Environment* 12 (4): 151 – 156.
- Kolawole, F. L., Balogun, M. A., Sanni-Olayiwola, H. O. (2017). **Determination of the Micronutrient Composition of Complimentary Food Prepared from Orange fleshed Sweet Potato and Germinated Moringa Seed Flour Blends.** *Journal of Agriculture and Agricultural Technology*. 8 (1): 51-56.
- Kolawole, F. L., Balogun, M. A., Sanni-Olayiwola, H. O. and Abdulkadir, S. O. (2017). **Functional and Chemical Properties of Moringa-fortified Orange-fleshed Sweet potato flour for complementary food.** *Croatian Journal of Food Technology, Biotechnology and Nutrition*. 12(1-2): 37-43.
- Kolawole, F. L., Balogun, M. A., Karim, O. R., Akintayo, O. A. and Sarafa, A. (2017). **Assessment of chemical Properties and consumer acceptability of fortified maize based fermented gruel, “Agidi”.** *Ukrainian Journal of Food Science*, Vol 5(1).

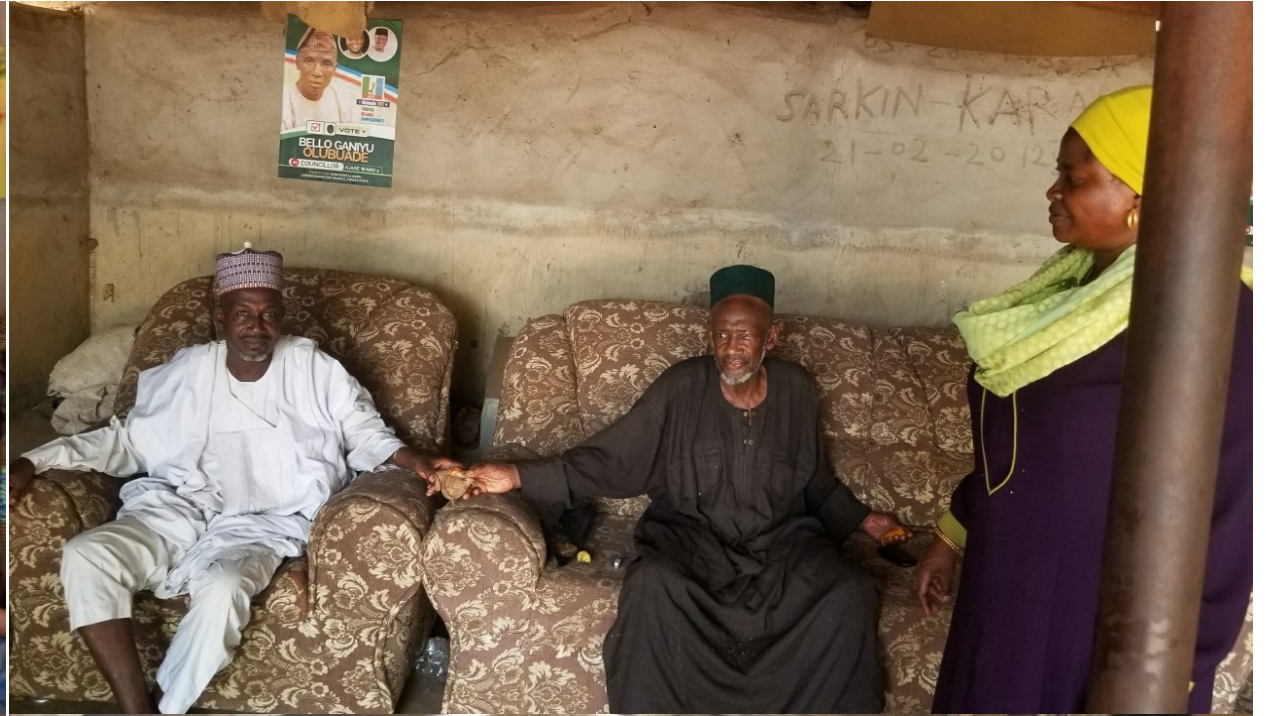
Need To Create Awareness

Objectives of study

- To assess the level of awareness of OFSP in rural areas of kwara state
- To educate the people on the importance and uses of OFSP
- To evaluate the consumer acceptability of some products made from OFSP

Methodology



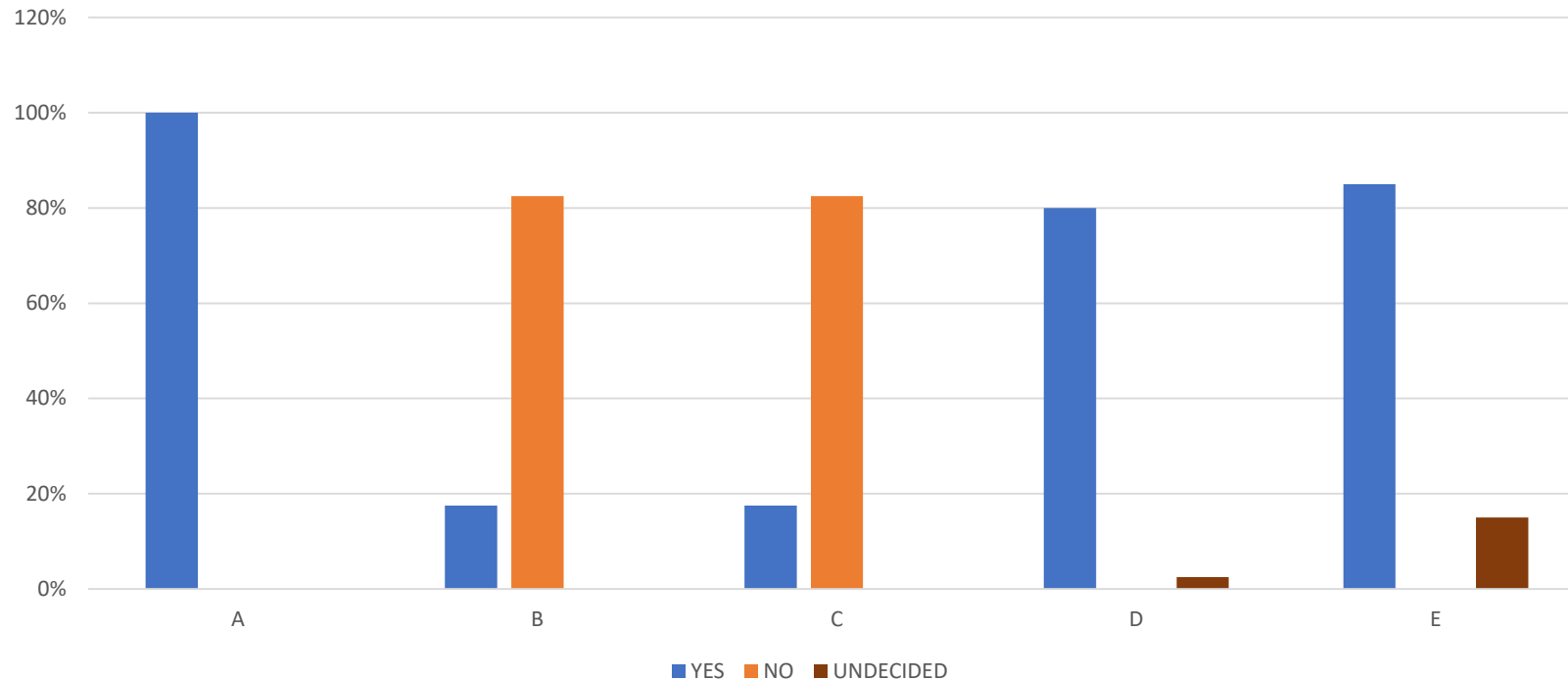


Awareness sessions





Statistical result on level of awareness



Key:

A- Familiarity with sweet potato

B- Familiarity with Orange Fleshed Sweet Potato (OFSP)

C- Use of OFSP in dishes

D- Willingness to use in dishes

E- Willingness to pay more

Where we are ;

- VAD remains a public health challenge
- Consumers are health conscious
- Potential use of OFSP in various products has been tested
- OFSP can be utilized in various forms- flour, puree, juice
- Awareness of OFSP is low

Considerations

- Post Harvest Storage
- Market value Chain
- Preservation of Puree
- Stable OFSP Products
- Willingness to Pay More

Future Actions

Agro-extension Programmes

Improve Vine Availability

**'Farm to Table' Scheme
(School feeding program)**

**Industrial and Government
Collaborations**

**Further Research and
Elaborate Awareness
Campaigns**

THANK YOU
FOR
LISTENING!

