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Analysis of Sweet Potato Consumption in Sokoto Metropolis of Sokoto State of Nigeria

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Abstract: A survey was conducted to analyze sweet potato consumption in Sokoto metropolis. Semi-structured questionnaires were randomly administered to 120 respondents. Questions were asked on level of education, marital status, tribe, occupation and in-house consumption. The findings showed that nearly most of the respondents were Hausa by tribe, married and civil servants with tertiary education. Non of the respondents have sweet potato as a staple food, rice was found to be the major staple food followed by corn, very few are aware of its nutritive value and It is consumed occasionally by almost all house hold members although children and women ate considerably more and mainly as a snack. These findings showed that there are potentials for consumption study of sweet potato in Sokoto state as a whole but the finding that some people have never thought of sweet potato as a food despite its vital nutritive values indicate the need for the crop to be further explored considering the population increase. There is also the need for massive public awareness campaign on this crop. The study was however not able to cover Sokoto state because of limited resources.

Key words: Sweet potato consumption, Sokoto metropolis, vital nutritive values, crop

INTRODUCTION

Sweet potato is among the world most important, versatile and under exploited food crops with global production of more than 133 million tons; it is the fifth most important food crop in developing countries (CIP, 2003). In Nigeria sweet potato is mainly grown in Benue, Taraba, Plateau, Yobe, Kaduna, Kano, Bauchi, Kebbi, Sokoto, Borno, Adamawa, Jigawa, Oyo and Ogun States (Anonymous, 2003). Tewe *et al.* (2003) reported Sokoto state as the third highest producer of sweet potato in Nigeria with production figure of 75,663 tons out of the National figure of 527,226 tons. More than 80% of sweet potato produced in Nigeria was used for human consumption. It is consumed in boiled form, peeled either before or after boiling or dried and milled into flour or even to prepare a fermented drink called *Kunu* in the North and central Nigeria. It can also be used as ingredient of West African dishes such as *fufu* and *amala*, the leaf is an ingredient to soups (Tewe *et al.*, 2003). Sweet potato is an excellent source of carbohydrates, vitamin A and can produce more edible energy per hectare than wheat and rice (CIP, 2003). It has been used in Africa to combat a widespread vitamin A deficiency that results in blindness and even death for 25,000-500,000 African children a year (CGIAR, 2003). It provides as much protein as cereals and beans per hectare (CIP, 1991). Bengie (2005) reported that sweet potato is rich in antioxidants; it is also identified as anti-aging nutrients.

In spite of sweet potato roles as an undeniably one of the World's most important food and vegetable crop, playing an important roles in combating vitamins and other nutritional deficiencies, it is still regarded a minor crop and food for the poor, hence it is rated low and far in food priority list (Tewe *et al.*, 2003). CIP (2003) reported sweet potato as one of the under exploited food crop in the world.

Sokoto state is one of the major producer of sweet potato in Nigeria, the crop is very cheap affordable and available throughout the year. It is pertinent to note that rice that is the major staple in the area is beyond the reach of the poor coupled with the crop nutritional roles, it is thus important to determine the level of sweet potato consumption in the area in order to create more awareness for this very important crop. With Sokoto state as one of the major producers of sweet potato in Nigeria (Tewe *et al.*, 2003) raising sweet potato consumption will increase the income of farmers in the state.

This study supplements the earlier one undertaken by University of Hannover, for GTZ, Alumira and Oboro in 2005 to address the consumption characteristic of sweet potato in Kenya where the authors reported that maize is the predominant staple in Kenya followed by rice, all family members consumed sweet potato but children eat most, followed by wives and husband and mostly in a boiled form at breakfast or as a snacks with few instances where it is consumed for lunch or dinner.

The objectives of the study are, to document the current sweet potato consumption in Sokoto metropolis, to identify its consumption pattern and differences within families and to create more awareness on the importance of the crop.

MATERIALS AND METHODS

The study was conducted in April 2006 in Sokoto metropolis of Sokoto state in Northwestern Nigeria. Eight areas were randomly selected which include Sultan palace, Assada, Ahmadu Bello way, Rijiyar Dorowa, More, Old Airport, Low-cost housing estate and Arkilla. A total of 120 questionnaires were randomly distributed, the sample population consisted of Farmers, Civil servants, Bankers, Housewives, Secretaries, Clerks, etc. Experience has shown that some illiterate respondents were reluctant to respond to questionnaires; therefore, formal discussions were conducted between the respondents and the enumerators whenever necessary. Data collected was analyzed using frequency distributions. A copy of the questionnaire is attached.

RESULTS AND DISCUSSION

The result revealed that nearly most of the respondents (41.66%) had tertiary as their highest education qualification (Table 1). Also most of them (58.33%) were married (Table 2). Hausa (50%) has been found to be the predominant tribe among the respondents (Table 3). Additionally, nearly most (41.66%) were civil servants (Table 4).

Non of the respondents have sweet potato as a staple food, rice was found to be the most important staple as indicated by 75% of the respondents, another 16.68% consider corn to be their staple food, 4.16% considered (sorghum), However non of them has sweet potato as staple, The result is in conformity with that of Tewe *et al.* (2003) who reported that sweet potato is not a staple crop for most of the people in many states in Nigeria; in Imo, Abia and Rivers state sweet potato was the 5th food crop while it was forth in Anambara, Cross rivers and Enugu states, The result is however, not in conformity with that of Alumira and Obora (2005) who reported that only 5.7% of their respondent have sweet potatoes as their most important staple in Kenya (Table 5). Table 6 shows that 12.16% of the respondents eat sweet potato once in a week, 25% eat it (monthly), 58.33% eat it only occasionally while 4.07% do not eat sweet potato at all. The result is not in conformity with that of Alumira and Oboro (2005) who reported very low consumption of sweet potato in Kenya.

Table 1: %Distribution of study population according to education

Level of education	Percentage
Primary	8.35
Secondary	33.33
Tertiary	41.66
Quranic	12.50
Adult	4.16
Total	100.00

Source: 2006 survey

Table 2: %Distribution of study population according to marital status

Marital status	Percentage
Single	20.83
Married	58.34
Widow	12.50
Divorce	8.33
Separated	0.00
Total	100.00

Source: 2006 survey

Table 3: %Distribution of study population by tribe

Tribe	Percentage
Hausa	50.00
Fulani	33.33
Others	16.67
Total	100.00

Source: 2006 survey

Table 4: % Distribution of study population according to occupation

Occupation	Percentage
Farmers	33.33
Trading	16.68
Civil servant	41.66
Others	8.33
Total	100.00

Source: 2006 survey

Table 5: % Distribution of respondents based on and most important staple foods

Most important staple	Percentage
Rice	75.00
Corn	16.68
Sorghum	4.16
Sweet potato	Nil
Others	4.16
Total	100.00

Source: 2006 survey

Table 6: % Distribution of study population according to frequency of consumption

Frequency of consumption sweet potato	Percentage
Daily	Nil
Weekly	12.60
Monthly	25.00
Occasionally	58.33
Not at all	4.07
Total	100.00

Source: 2006 survey

The study investigated in house consumption of sweet potato and it was discovered that sweet potato is eaten by all members of the family. When asked who eat it most, 4.18% said it was the husband, 12.5% wife, 66.66% (children), 12.5% others (Table 7), while 4.16% said they did not know the result is however not in agreement with that of Alumira and Oboro (2005) who reported that others (Were all members of the family eat equally) eat most of

Table 7: % Distribution of respondents according to household member consumption of the sweet potatoes

Family member	Percentage
Husband	4.18
Wife	12.50
Children	66.66
Visitors	Nil
Others	12.50
Do not know	4.16
Total	100.00

Source: 2006 survey

Table 8: Distribution of study population by meal at which sweet potato is consumed

Meals	Percentage
Break fast	16.66
Lunch	29.16
Supper	8.33
Snacks	41.69
Do not know	4.16
Total	100.00

Source: 2006 survey

Table 9: % Distribution of respondents according to reasons for sweet potatoes consumption

Reasons	Percentage
Main staple not available	4.16
High cost of staple	25.00
When it is a lot in the market	50.00
When received as a gift	16.66
Others	3.33
Do not eat at all	0.83
Total	100.00

Source: 2006 survey

Table 10: % Distribution of study population by awareness of nutritive value of sweet potato

Awareness of nutritive value	Percentage
Yes	12.50
No	87.50
Total	100.00

Source: 2006 survey

Table 11: % Distribution of respondents based on trend of sweet potato consumption

Level of consumption	Percentage
Increase	25.00
Decrease	16.67
Do not know	58.33
Total	100.00

Source: 2006 survey

the sweet potato. The results of the survey have further indicated that 41.69% of the respondents eats sweet potato as snacks, 16.66% takes sweet potato during breakfast and 29.16% takes it during (lunch) (Table 8). The result is not in accord with that of Alumira and Oboro (2005) who reported that over 50% of the respondents in Kenya eat sweet potato at breakfast. The survey has also tried to identify the reasons for consumption of sweet potato. It was discovered that 25% of the respondents eat sweet potato when the main staple is costly, 4.16% when the main staple is not available, 50% eat sweet potato when there is a lot of it in the market while 16.66%, eat it when received as a gift. The result is in agreement with that of Alumira and Oboro (2005) who recorded

highest number of respondents that eat sweet potato when there is a lot in the market (Table 9). However, only 12.5% of the respondents are aware of nutritive value of sweet potato and 87.5% are not aware of its nutritive value (Table 10). Also 25% of the respondents said consumption of sweet potato is on the increase and 58.33% did not know (Table 11).

CONCLUSIONS

The results has revealed that although greater part of the people in sokoto metropolis were aware of the existence of sweet potato, rice is the predominant staple food among all the tribes in the area, Sweet potato consumption is occasional with children eating most of it followed by wives. Sweet potatoes are mostly consumed as snacks but there were few instances where it is consumed as lunch or dinner. Most people eat sweet potato when it is very much available at the market. Very low people are aware of sweet potato nutritive value; this could be the reason why it is still not a staple but a complement food. Both middle and low-income respondents consumed sweet potato with similar frequency at similar meals. The findings show that there are potentials for analysis of sweet potato consumption in the area. The finding that some people have never thought of sweet potato as a food despite its potentials in preventing famine and its vital nutritive values indicate the need for the crop to be further explored considering the population increase. There is also the need for massive public awareness campaign on this crop.

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