EVALUATION OF MAJOR FOODSTUFF PREFERENCE OF HOUSEHOLDS IN JOS SOUTH LOCAL GOVERNMENT AREA, PLATEAU STATE, NIGERIA

Jabil, I. Y[1], Manggoel, W[2], Mashat, I. M[2], and Toro, I. A[1]
[1]Federal College of Animal Health and Production Technology, Vom
[2]College of Agriculture, Garkawa

ABSTRACT
The study evaluates the preference of household foodstuff in Jos South Local Government Area of Plateau State, Nigeria. The aim was to identify the type of foodstuff stocked by households, food preference, and factors that influence the type of food consumed by households in the study area. Data were collected from 80 households who were randomly selected using questionnaires. The data were analyzed using descriptive statistic, percentage and five-points type rating scale. The result reveal that the most stocked foodstuff were grains, especially maize (26.25%), Acha (23.75%) and Rice (23.75%). For root and tubers, yam was the major (40%) tuber stocked by the households followed by Irish potatoes (23.75%). Pepper (36.25%), onions (20%) and tomatoes (25. %), were the common consumed of vegetables. In the meat category, fish (38.75%) and beef (26.25%), had the highest percentages. Palm (38.75) and Groundnut (32.50) oils were the most consumed in of the oil category. These foodstuffs are the most preferred to others in the various categories. Households should stock and consume local and cheap food types that can provide valid nutrition instead of foodstuffs that are costly with less nutritional value. Adequate storage and processing facilities should also be adopted by farmers to enhance the availability of these staples especially during off season periods.
Keywords: *Preference, Household, Foodstuff, Income, Stock, Price*

Introduction

Food is a basic necessity of life (FAO, 2009). Its importance at the household level is occasioned by the fact that it is a basic means of sustenance, the adequacy in both quantity and quality of which is a key requirement for good health and productive life. The provision of adequate food and balanced diet is necessary for the survival of members of any society. According to Sorensen *et al.* (2003), food is any substance consumed to provide nutritional support for the body. People consume different types of food for the satisfaction of wants. The choice of food is therefore based on the highest possible level of satisfaction the consumer desires (Tuang, 2002).

Most foods have their origin in plants. They are consumed either directly or processed. Animals are used as food either directly or indirectly by the products they produce. The essential nutrients required from food include carbohydrate, protein, fat and oil, minerals and vitamins (Widhalm and Kearney, 1997). The plant and animal materials that supply these nutrients are called foodstuffs. These foods produce energy, maintain life and stimulate growth. Peoples' food preference and acceptance pattern are largely learned. Learning in this case means physiological learning or conditioning that comes from the repeated positive and negative consequences that people experience with food and eating, leading them to either like or dislike a food type (Babcook, 1961).

There is enough food in the world to feed everyone. The problem however, is distribution and whether households have enough, its distribution within the household and whether the food satisfies the nutrition needs of all members of the household (FAO, 1991). Income, taste, family size and season influence food preference of households (FAO, 2009). The study therefore surveyed households for the foodstuff stocked by them. It was also aimed at determining the foodstuff preference of households as well factors that influence food preference and consumption in the study area.

The Study Area

The study area is Jos South Local Government Area of Plateau State, Nigeria; geographically located between latitude 9^0 30^0 to 10^0N of the Greenwhich meridian. It is known for its cold and rocky nature due to its high altitude of over 1450 meters above sea level. The coldest period is between November and February, with an average daily temperature of 18^0C while warmer periods occur between March and April. The rains fall between May and October, with a peak in August. The mean annual rainfall varies between 137.75cm and 146.0cm. Jos South Local Government Area has a population of about 31,139.2 people (NPC, 2006) housed in four districts (*Vwang, Gyel, Du and Kuru*). The population is made up of people of different cultures and socio-economic backgrounds. The Local Government is a semi-urban location but served with vast agricultural land, with mining ponds readily supplying water for irrigation. The common food crops grown include Rice, Maize, Irish potatoes, Yam, Acha, Sweet potatoes, Cocoyam, Tomatoes, Groundnut and assorted Vegetables. Cattle, sheep, goats, Pigs and poultry are reared by many households.

Methodology

Questionnaires were randomly administered to eighty households, covering all the four districts (*Vwang, Gyel, Du and Kuru*) of the Local Government Area. Information sought included foodstuffs stocking and consumption pattern by households, foodstuff preference, and factors that determine such preference by households. Data were analyzed using descriptive statistics, 5-point type rating scale and simple ranking method.

Results and Discussion

Foodstuff stocked by households

Foodstuff identified in this study included grains, Root and tubers, meat, vegetable, spices and oil. Accordingly, the results showed that the most stocked foodstuff is food grains which include; maize (26.25%), Acha (23.75%), Rice (18.75%), guinea corn (10%), bean (10%), millet (8.75), and wheat (2.5%). Maize (26.25%) is a major component of the households' diet. This may be because it is largely cultivated in the area, relatively cheap and readily available. It is produced and consumed annually than other grains (IITA, 2009). The economic implication is that, farmers who produce maize have readily available market for their produce. For root and tubers, yam is the major tuber stocked by the households; followed by Irish potato, Cassava and sweet potato, and cocoyam. However, Ojo (2005) explained that 90% of the Irish potato consumed in Nigeria is produced in Plateau State with Bokkos, Mangu and Jos South Local Government Areas as the main producers.

For spices, pepper, onions (20%) tomatoes, Garlic and Ginger were also recorded. Pepper and tomatoes were the most stocked and consumed. The demand for spices in household diets is a joint type of demand because spices are not eaten as diet but used as seasoning. This means that the demand for spices by households is a function of consumption of other classes of food. In the meat category, fish is the most stocked by the households in the study area. Bush meat, chicken, beef and pork were also observed to characterize their foodstuff. Fish is a vital source of protein for people (Norton, 1991). It can be preserved (dry) for longer period of time than other forms of meat and is available in the market at an affordable price. Gatenby (1996) also found out that fish was not preferred yet have appreciable amount of protein and is readily available in the market. In this part of the World (Nigeria), fish has no cultural taboo.

Ugu leaf (pumkin) was found to be the most stocked and consumed amongst vegetables. This was followed by moringa leaf, jute and water leaf, spinach, and cabbage/lettuce. Groundnut and palm oils were the major cooking oils observed to

have been stocked by the households in the study area. This may be due to the fact that palm oil has been certified to be nutritionally good and harmless (FAO, 2009), and is even used as antidote. Groundnut oil is locally produced and is used in cooking and baking. Vegetable and other types of oils were also recorded in the foodstuff of the households.

Food Stuff Preference

Foodstuff preference is a choice behavior among consumers (Maxwell, 1992). The preference study examined consumer preference judged as most preferred, preferred and not preferred; for grains, root and tubers, vegetable, spices and oil. The result for grains showed that Maize, Rice, Beans, Acha, Millet and wheat are preferred; accept guinea corn which is not preferred. For root and tubers, Yam, Irish and sweet potatoes, cocoyam were preferred; however cassava was not preferred. Cocoyam is a traditional crop, it is produce and consumed locally only in those households where the head of households have favorable attitude towards its consumption (Marshall, 1995). However, Ojo (2005), in a food preference study reported that cocoyam was also not preferred to any other foodstuff other than yam which is a substitute. The basis of preference was substitution and cocoyam was not abundantly available more than other foodstuff to have been substituted.

Meat, beef, fish, bush meat and chicken were preferred accept pork which was not preferred. This result may imply that pigs are reared by farmers for the purpose of generating income and not to be consumed by them. Ojo (2005) also found out that fish was not preferred yet have appreciable amount of protein and is readily available in the market.

For vegetable, usu and bitter leaf, Moringa and jute were preferred to spinach, lettuce/cabbag, and water leaf were not preferred. Usu leaf, bitter leaf and moringa have been found to be tonic and medicinal, respectively (Gibney, 2004). These might be reason why their consumption is obvious in the study area. The uses of these vegetables in the diets of the households therefore can improve the health condition of the people in the study area. For spices, onion, peppers, ginger, tomatoes were preferred accept garlic (not preferred). The commonly ate oils were; groundnut, palm, and vegetable oils. They were preferred to other oils. The type of oil consumed by people varies from one culture to another and from place to place (Lappalainen *et al.,* 1997).

Conclusion

From the study the preferred foodstuff in the study area are: for grains; maize, rice, beans, acha, millet and wheat, root and tubers were yam, Irish potatoes, sweet potatoes, coco yam, for vegetable; *ogu* leaf, bitter leaf, jute, moringa, for meat; beef, fish, bush meat, and chicken, for spices; onions, pepper, ginger, tomatoes and for oil, groundnut oil, palm oil, and vegetable oil.

Recommendations

- Households should stock and consume local and cheap food type that can provide valid nutrition instead of foodstuffs that are costly with less nutritional value.
- Adequate storage and processing facilities should also be adopted by farmers to enhance the availability of these staples especially during off season periods to keep price of the foodstuff stable.
- Households must engage in viable economic ventures to raise income in order to afford sufficient and quality food

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Table 1: Distribution of households based on foodstuff stocking (n = 80)

Foodstuff	Frequency	Percentage
Grain		
Maize	21	26.25
Rice	15	18.75
Beans	8	10.00
Millet	7	8.75
Guinea corn	8	10.00
Wheat	2	2.50
Acha	19	23.75
Root and Tuber		
Yam	19	23.75
Irish potato	32	40.00
Cassava	11	13.75
Sweet potato	11	13.75
Cocoyam	7	8.75
Meat		
Beef	10	12.50
Pork	3	3.75
Fish	31	38.75
Chicken	15	26.25
Bush meat	21	26.25
Vegetables		
Ogu leaf	23	28.75
Bitter leaf	5	6.25
Moringa leaf	17	21.25
Jute	9	11.25
Spinach	10	12.50
Water leaf	9	11.25
Cabbage/Lettuce	7	8.75
Spices		
Garlic	9	11.25
Pepper	29	36.25
Ginger	6	7.50
Tomato	20	25.00
Onion	16	20.00
Oil		
Palm oil	31	38.75
Groundnut oil	26	32.50
Vegetable oil	10	12.50
Other oils	13	16.20

Table 2**:** Foodstuff Preference

Food stuff	Most preferred (3)	Preferred (2)	Not preferred (1)	Gt	Gm	Remark
Grains						
Maize	147 (49)	24(12)	29(29)	200	2.50	Preferred
Rice	147 (42)	24(12)	29(29)	202	2.53	Preferred
Beans	159 (53)	32(16)	11(11)	202	2.53	Preferred
Acha	180 (60)	26(13)	7(7)	213	2.66	Preferred
Millet	102 (34)	74(37)	9(9)	185	2.31	Preferred
Guinea corn	12 (4)	128(64)	12(12)	152	1.90	Not preferred
Wheat	60 (20)	92(46)	14(14)	166	2.08	Preferred
Root and tubers						
Yam	168 (56)	42(21)	03(03)	213	2.66	Preferred
Irish potatoes	186 (62)	32(16)	02(02)	220	2.75	Preferred
Sweet potatoes	117 (39)	26(13)	28(28)	171	2.14	Preferred
Cassava	39 (13)	24(12)	55(55)	181	1.48	Not preferred
Cocoyam	78 (26)	60(30)	24(24)	162	2.03	Preferred
Meat						
Beef	165 (55)	12(6)	9(9)	186	2.33	Preferred
Pork	90 (30)	22(11)	39(39)	151	1.89	Not preferred
Fish	30 (10)	126(63)	7(7)	163	2.07	Preferred
Sea food	48 (16)	108(54)	10(10)	166	2.08	Preferred
Chicken	168 (56)	42(21)	03(03)	2.13	2.66	Preferred
Vegetable						
Ogu leaf	219 (73)	10(05)	02(02)	231	2.89	Preferred
Butter leaf	99 (33)	52(26)	21(21)	174	2.18	preferred
Moringa	164 (54)	32(16)	39(39)	233	2.91	preferred
Jute	144 (48)	26(13)	10(10)	180	2.25	preferred
Water leaf	21 (7)	100(50)	13(13)	134	1.68	Not preferred
Spinach	60 (20)	22(11)	49(49)	131	1.64	Not preferred
Lettuce/cabbage	102 (34)	14(7)	39(39)	155	1.94	Not preferred
pices						
Garlic	30 (10)	98(49)	16(16)	139	1.74	Not preferred
Onion	150 (52)	40(20)	8(8)	204	2.55	Preferred
Pepper	189 (63)	14(7)	10(10)	213	2.17	preferred
Ginger	24 (8)	128(64)	8(8)	160	2.00	Preferred
Tomato	60 (20)	120(60)	10(10)	190	2.38	preferred
Oil						
Groundnut oil	180 (60)	20(10)	20(20)	220	2.75	Preferred
Palm oil	177 (59)	30(15)	6(6)	213	2.66	Preferred
Vegetable oil	75 (25)	94(47)	8(8)	177	2.21	Preferred
Other	33 (11)	16(8)	51(51)	100	1.25	Not preferred

Figures in parentheses are products of preference code and frequencies. Gt = geometric total.
Gm = geometric mean
Bench mark = 2.00