

FOOD CONSUMPTION PATTERNS OF ADULT RURAL DWELLERS IN OLUYOLE LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

AJALA, CHRISTIANA G. AND MELUDU, NKIRU T.

ABSTRACT

Better food consumption patterns are indications of sustainable agriculture and rural development in Nigeria. This study examined food consumption patterns of adult rural dwellers in Oluyole Local Government Area of Oyo State. A sample of 150 rural dwellers was selected through multi-stage sampling procedure. Rural dwellers main source of water supply is rain (63.40%), while their major source of cooking energy is firewood. Seventy-three percent of the rural dwellers eat two main meals in a day. Findings also revealed that they consume food items from cereals and products of root tubers more than three times in a week. Half of the respondents (53.3%) do not consume food items from meat and dairy products at all. Rural dwellers source of water supply and type of cooking energy were significantly related to their level of food consumption patters. Also primary occupation ($\chi^2 = 11.75$; $p = 0.02$), marital status ($\chi^2 = 2.09$; $p = 0.02$), family size ($\chi^2 = 0.68$; $p = 0.02$), tribe ($\chi^2 = 0.50$; $p = 0.02$), sources of information ($\chi^2 = 12.08$; $p = 0.02$) and type of cooking energy ($\chi^2 = 10.07$; $p = 0.03$) were significantly related to their type of food consumption patterns. Uninterestingly, these rural dwellers consume food items that are starchy based than body building nutrients. Nutrition education should be emphasized in government policies for rural development and better food consumption patterns. The home economics extension workers should communicate and provide awareness to the rural dwellers on the importance of forming adequate food consumption patterns.

Keywords: food consumption pattern, eating, habit

INTRODUCTION

The development of the science of nutrition made food to be recognized as the fundamental source of nutrients. Food and nutrition are basic human rights because they are necessary inputs for human development. Over the years, various food cultures and consumption patterns have emerged. In Nigeria, different food types are associated with different ecological regions and ethnic groups. For instance the Fulanis are highly noted for milk, diary and meat consumption, while the Ibibios are noted for high consumption of starchy and sea foods. Malnutrition is the major contribution to illness and disease in the world (Ezzati, et al 2002). This includes risk factors related to under nutrition, excess consumption of certain diet components (carbohydrates and fat etc) and low consumption of other food items like fruits and vegetables. Rural dwellers food consumption patterns depend on many factors intervention into the life patterns of the community to which they belong. These factors affect food availability and how each food could be processed and stored.

Factors Affecting Food Consumption Patterns

Food consumption patterns can be defined as the recognizable ways of eating foods. Rural dwellers tend to adhere to their old eating patterns rather than venturing to seek new and more proper eating habits. In order to maintain healthful diets, Jama (2002) asserts that a variety and balance of foods from all food groups and moderate consumption of all food items is very important. Variety in the diet implied choosing a number of different foods within any given food group, rather than eating the "same old thing" day after day. Food consumption pattern has been observed to be influenced by socio-economic factors including sex, income, occupation, type of house and source of cooking energy. Also, food

consumption patterns of the mother prior to conception and during pregnancy and lactation affects the reproductive cycle and health of the newborn infant. A mother with poor food consumption patterns have the risk of delivering a baby that is physically and mentally handicapped. Wright and Sims (1987) assert that many complex interacting systems affect man's food consumption patterns and his consequent state of health. They further explained that natural environment (climate, topography, soil conditions etc) determines what food can be produced. The man made environment (technological developments for processing, storing and distribution of food) affects what food will be made available for consumption. The behavioural environment (religion, ethnicity, economics, cultural/traditions) determines what specific foods will be selected from the variety that are available before they are acceptable for consumption in a particular group to which the individual belongs. Adequate food consumption patterns play an important role in rural development activities. It ensures their capacity to embark on livelihood activities that is sustainable.

Food Consumption Patterns and Rural Development

Proper and adequate food consumption patterns is the instrument for achieving other rural developmental goals, most especially those connected to reduction in child mortality and improvements in maternal health, primary education enrolment and achievement, gender equity and the capacity to resist disease, (ACC/SCN, 2004). In order to be healthy and active, rural dwellers need to have food in adequate quantity, quality and variety in order to meet energy and nutrient requirements (FAO, 2001). Inadequate nutrition prevents children from developing their potentials while adults will experience difficulty in maintaining or expanding theirs. A nutritious adequate diet must include all the important nutrients. Certain cultures and tribes prohibit the consumption of certain food items of high nutritive value on an account of ethnic or religious beliefs and taboos (Yahaya, 2002). Most of these beliefs have no scientific basis and they tend to deprive people from eating nutritious and balanced diets. Rural dwellers are always victims of these taboos due to their conservative nature. This shows that food is vital for body growth and development, work, survival and reproduction. Therefore poor food consumption patterns will surely affect not just the nutritional and health status, the capacity of the rural dwellers to produce enough for sustainable income and food security. Therefore this study was deigned to determine the factors that adequate household food consumption patterns of rural dwellers in Oluyole Local Government Area of Oyo State.

METHODOLOGY

The Area of study is Oluyole Local Government Area (LGA) of Oyo State, Nigeria. It shares boundaries with four LGAs; Ibadan Southwest, Ibadan Southeast, Ona-Ara and Ido within the Ibadan metropolis while it shares borders with Ogun state through Egba Obafemi, Odeda and Ijebu North Local Government Areas. The population of the study consists of rural dwellers in selected communities in Oluyole LGA of Oyo State. Multi-stage sample sampling procedure was used for the study. Oluyole LGA has ten wards. Three wards were randomly selected for this study while two communities were randomly selected from each ward using the statistical table of random numbers making a total of six communities. These communities were Abanla, Idi-Ayunre, Apadi, Oleyo, Ibusogboro and Onigambari. Finally twenty five rural dwellers were randomly selected from each community. Thus a total of one hundred and fifty respondents were sampled. Food consumption patterns were measured by asking respondents to indicate the number of meals taken in a day. Respondents were also asked whether they eat meat, fish or poultry everyday. Level of food consumption patterns was measured using a food frequency table. The score for each respondent were summed up and the mean calculated. Respondents with scores below the mean were categorized as low level of utilization and above were categorized as high level. Factors affecting food

consumption patters was measured by presenting a list of factors to respondents on a four point scale of very strongly (4), strongly (3), rarely (2) and not at all (1).

RESULT AND DISCUSSION

The personal characteristics of respondents measured are age, sex, marital status, household size, tribe religion and occupation. The age distribution of respondents shows that half of the respondents (50.0%) were between the ages of 41-50 years while 20.6% percent are above 50 years. This implies that 70.6 percent of the respondents are matured to develop or modify their food consumption patters. About 53.6% percent of the respondents are female and this implied that they have ability to determine the food consumption patterns of their households. That is the kind of food to include in the meal. The study revealed that majority of the respondents (79.3%) are married while only a few (14.0%) are single. They study also revealed that 64.6 percent of respondents has a family size between 6-10 members. The policy implication of this finding is that community nutritionists and home economics extension agents working in the study area should recognize that many of the rural dwellers have more than four children which might affect the quality and quantity of food available for household consumption. Majority of the respondents (70.0%) are Yorubas while few respondents are Igbos (7.3%) and Hausas (8.6%). The policy implication of this finding is that respondents from the same tribe are more likely to have similar culture and the foods available are most acceptable by them. Agricultural development trainers in the study area should be conscious of the fact that culture loads some food items with meanings and these directly affects consumer choices. Over half of the respondents (56.0%) are Muslims while 38.0% are Christians. Religions traditions may affect rural dwellers food consumption patterns. Findings also revealed that 60.6 percent of the respondents are farmers while some are traders (31.3%), and civil servants (14.6%).

Table 2 shows sixty three point four percent (63.4%) of the respondents' main source of water supply is rain while only a few 27.3% percent indicated stream/river water as their major source of water supply. Rural dwellers major source of cooking energy is firewood (82.7%) while just a few respondents (15.3%) use charcoal (15.3%) and sawdust (2.0%). Table 3 revealed that majority of the respondents eats two main meals in a day (72.7%) while only a few (21.3%) eat three times (Table 4). Findings from the study also revealed that over half of the respondents (55.0%) don't eat meat, fish or poultry everyday. Rural dwellers in the study area consume food products, roots tubers and not tuber products, more than three times in a week (95.5%, 53.0%) while only a few (36.%) consume legumes nuts and legume products more than three times weekly majority of the respondents (53.3%) don't consume food items from meats, and meat products at all (Figure 1). Which means that the respondents' food consumption patterns are starchy based while the consumption level of animal and plant proteins is very low. However, findings from the study revealed that over half of the respondents eat fruit and vegetables everyday (64.7%) (Figure 2). Low consumption of food items with animal protein will make their diet less nutrition and inadequate.

Table 5 reveals that income (78.0%) is the major factor that affects food consumption patterns. Other factors include food unavailability level (66.2%), family background (60.4%), health and allergies (34.9%) (34.9%) and taste (74.4%). Eighty seven point four percent of the respondents received their nutritional information from relations and friends, 11.9 percent radio while only 0.7 percent received from extension agents (Table 6.) The findings show that majority of the respondents do not receive information on nutritious and adequate food items from community nutritionists/home economics extension agents which suppose to be their main source of information on nutrition. This might be as a result of lack of experts in this area. This might lead to receiving wrong information.

The result also showed a very low food consumption pattern on figure 4. Table 7 showed that the chi square test revealed a significant relationships between primary occupation, marital status, family size, tribe and food consumption pattern. Level of food consumption patterns of respondents with smaller family size will be higher and richer than households with large family size. This means that households with large family size will have more people to feed. Respondents' sources of information and cooking energy also have a significant relationship with the level of food.

Table 1: (a) Distribution of Respondents' personal characteristics

Characteristics	Frequency	Percentage
Age (Years)		
20 –30	34	22.7
31 – 40	10	6.7
41 – 50	75	50.0
Above 50	31	20.6
Total	150	100.0
Sex		
Male	70	46.6
Female	80	53.3
Total	150	100.0
Marital Status		
Single	21	14.0
Married	119	79.3
Divorced	6	4.0
Widowed	4	2.6
Total	150	100.0
Family Size		
No. of children	31	20.6
1 – 5	21	14.0
6 – 10	97	64.6
11 – 15	1	0.6
Total	150	100.0
Tribe		
Yoruba	105	70.0
Igbo	11	7.3
Hausa	13	8.6
Others	21	14.0
Total	150	100.0
Religion		
Christianity	57	38.0
Islam	84	56.0
Traditional	9	6.0
Total	150	100.0
Occupation		
Farmer	91	60.6
Trader	37	24.6
Civil servants	15	10.0
Others	7	4.6
Total	150	100.0

Source: Field Survey, 2004.

Table 2: Distribution of Respondents' Source of Water Supply

Source	Frequency	Percentage
Rain	95	63.4
Well	11	7.3
Borehole	3	2.0
Pipe borne water	-	-
Stream water	41	27.3
Total	150	100.0

Source: Field Survey, 2004

Table 3: Distribution of Respondents on Sources of Cooking Energy

Source	Frequency	Percentage
Gas	-	-
Electricity	-	-
Charcoal	23	15.3
Firewood	124	82.7
Sawdust	3	2.0
Total	150	100.0

Table 4: Distribution of the Respondents on Number of Meals Taken Per Day

Number of meals	Frequency	Percentage
One	3	2.0
Two	109	72.7
Three	32	21.3
More than 3	6	4.0
Total	150	100.0

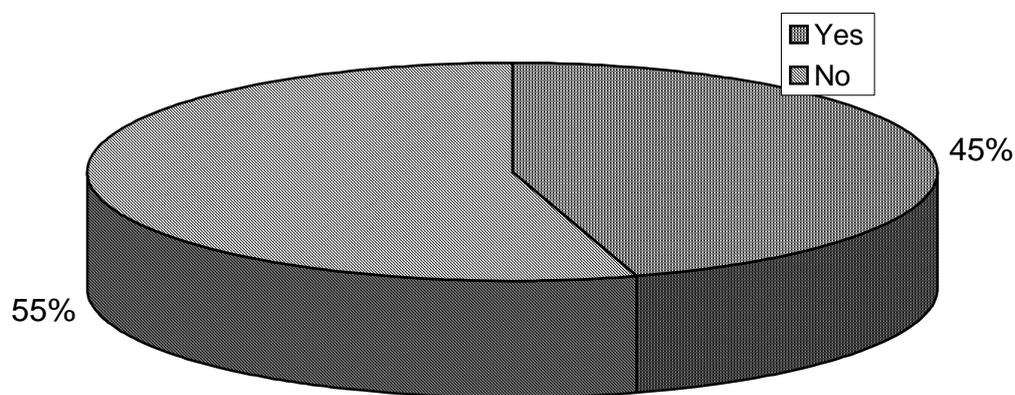


Figure 1: Distribution of the Respondents on Daily Consumption of Meat, Fish or Poultry

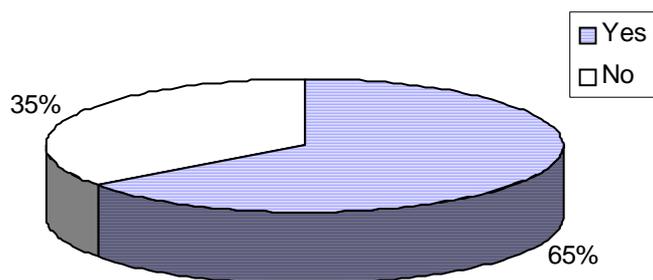


Figure 2: Daily consumption of fruits and vegetables

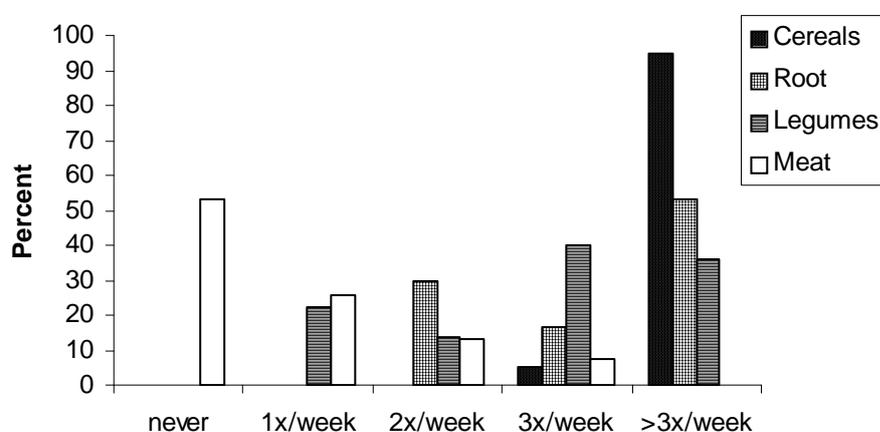


Figure 3: Distribution of the Respondents on Frequency of Consumption of Food type

Table 5 Distribution of Respondents According to Factors Affecting Food Consumption

Factors	Not at all	Rarely	Strongly	Very Strongly
Income	-	-	33 (22.0)	117 (78.0)
Religion	102 (67.9)	32 (21.3)	10 (6.6)	6 (4.0)
Family background	5 (3.3)	9 (6.0)	45 (67.5)	91 (60.4)
Taste	-	-	39 (26.0)	111 (74.4)
Food availability	-	-	51 (34.0)	99 (66.0)
Health/Allergies	9 (4.6)	29 (19.3)	47 (31.5)	67 (44.6)

Figures in parenthesis are percentages

Source: Field Survey 2004

Table 6: Distribution of Respondents According to their source of Information

Source of distribution	Frequency	Percentage
Relatives and friends	131	87.4
Radio	18	11.9
Extension/Agents	1	0.7
Newspaper/books	-	-
Total	150	100.0

Source: Field Survey 2004

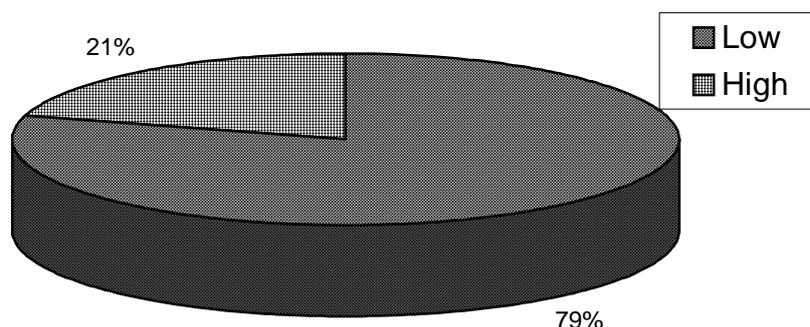


Figure 4: Level of Food Consumption patterns of Respondents

Table 7: Relationship between some Independents Variables and Level of Food Consumption Patterns

Variables	PPMC value	χ^2	df	P-value	Decision
Primary occupation		$\chi^2 = 11.75$	3	0.02	S
Marital status		$\chi^2 = 2.09$	3	0.02	S
Family size		$\chi^2 = 0.68$	3	0.02	S
Tribe		$\chi^2 = 0.50$	3	0.02	S
Sources of Information		$\chi^2 = 12.08$	3	0.02	S
Source of cooking energy		$\chi^2 = 10.07$	4	0.03	S

Source: Field Survey 2004

CONCLUSION AND RECOMMENDATIONS

Factors that affect food consumption patterns include: income, family background, food availability allergies, taste and religion. But the most severe factors are income and food availability. This could be as a result of poverty, therefore lack of awareness on the nutritional and health implication of poor food consumption patterns has made the respondents not paying particular attention to pattern of consumption even when they can afford them. This is because of the nutritious food items are not cheap. So they are tagged as having low food consumption pattern.

The following recommendations are hereby made based on the conclusions of the study:

- The State Agricultural Development Project need to activate other information sources which rural dwellers have not been using. These sources will include nutrition educators/home economics extension agents through Women in Agriculture Program, radio, leaflets, books and newspapers and non-governmental organizations.
- The future generations should be encouraged to study developmental oriented courses like home economics and human nutrition during Youth service and domestic science in primary schools in order to enhance creativity of their food habits.

REFERENCES

- ACC/SCN (2004); Fifth Report on the World Nutrition Situation. UN Standing Committee on Nutrition General, in collaboration with the International Food Policy research Institute, Washington. P9
- Ezzati, M. Hoorn SV Rodgers A (2003); Comparative Risk Assessment Collaborating Group Estimates of global and regional potential health gains from reducing multiple major risk factors. *The Lancet* 362 (9380); 271-80.
- FAO, (2001); Feeding minds: Fighting Hunger: A World tree from Hunger food and Agriculture Organization of the United Nations, Rome p9
- Jama, P.P. (2002): A healthy diet: *Journal of the American Medical Association*. 283:2198, 2000.
- WHO/CMH (2002): Improving Health Outcomes of the Poor, the report of Working Group 5 of the Commission on Macro Economics and Health. Online: http://www.who.int/whosis/cmh/cmh_papers/e/pdf/wg5_summary.pdf.
- Wright, H-Sandsims, L.S. (1981): *Community Nutrition: People, Policies and Programmes* Jones and Bartlett Publishers, pp 238.
- Yahaya, M.K. (2000): Food and Nutrition. In Akinbile, L.A. and Odebode, S.O. (eds.) *Ibadan External Studies Programme Series*, pp. 11.