

# Determinants of Street Hawked Foods Consumption in Oyo State, Nigeria

Akin Alagbe

Faculty of Business and Communication Studies, The Polytechnic Ibadan, P.M.B. 022, U.I. Ibadan, Oyo State, Nigeria

## Abstract

This study investigated the determinants of street hawked foods consumption in Oyo State. A descriptive research design was employed to obtain data from 300 hundred respondents in two Senatorial District of Oyo State. Data generated through structured questionnaire were analysed using Probit model estimates and OLS regression model. Finding revealed that age, sex, level of education and household size have negative significant effect on the consumption of street-hawked foods, while income and occupation have positive significant effect on the consumption of street-hawked foods. Therefore, it was suggested that marketers in food industry should make right utilization of the market opportunities of high demand for street-hawked foods. Finally, street-hawked foods seller should ensure more nourishing, healthful and neatness of their foods to the consumers as these greatly influences street-hawked foods consumption.

**Keywords:** Consumption, Determinants, Marketers and Street-hawked foods

## 1.0 Introduction

In recent time, food consumption patterns have dramatically changed across the world. The common consumption pattern that is mostly shared by developing countries is the increasing expenditure on street-hawked food. This is evident in the growth of the street-hawked food market segment which has become very popular in recent years (Kant and Graubard, 2004; Adewuyi, Mafimisebiand Awe, 2007). The street-hawked food outlets have, however, surpassed the full-service restaurants as the main source of the food away from home (Akinyele, 1987; FAO and Food Basket Foundation International, 1991). Many scholars have attributed the growth in the food away from home market to a number of socio-economic/demographic factors such as income, age, urbanization, gender, household size and composition, time value, education level, and occupation, among others. For instance: Adewale (2005), Sowunmi et al (2009), Begum, et al (2010) and Akpan et al. (2013) all identified household income as an important determinant of household expenditure on street-hawked food. Specifically, Akpan et al (2013) found that the growth in street-hawked food was due to availability and more outlets closer to where people work.

Street-hawked food, as defined in this study is food that is readily available for consumption within the premise(s) or to be carried away. Despite the growing concern on consumer health (Ochieng, 2009), the street food in Nigeria has grown in the past decade. With a changing lifestyle and population growth in Nigeria, along with the growing number of high value markets like fast-food outlets and supermarkets, street-food outlets calls for increased investment in the production of both agricultural products (raw materials used in the production of street-food products) and the fast-food products. Consumption patterns keep changing thus affecting the availability and access to food through changes in agricultural production, procurement and distribution systems (Arulogun and Owolabi, 2001; Akpan et al, 2013)). This, however, requires knowledge of the behavior of consumers who eat street-hawked foods.

Given this change in food consumption patterns, there is need to assess the characteristics underlying the consumption pattern of street-hawked food as a means of informing marketers on how best to gainfully exploit this growing market. The understanding of these factors (i.e. consumer characteristics) will be pertinent for proper assessment of the food product market opportunities in Nigeria. That is by identifying characteristics of consumers and street-hawked foods desired by the consumers, food companies can design appropriate strategies to enhance the distribution of street-hawked foods to meet this demand. Though, researchers outside Nigeria have studied factors affecting street hawked food consumption pattern, few studies in Nigeria have been done on street-food and more so, determinants of street-hawked food consumption have not been studied. For instance, Kayemba (2000) investigated the growth and development of street-food services in a vibrant food industry; and Nawawejje (2006) studied the spatial distribution and development of takeaways in the provision of street-food in Jinja town. This study on the determinants of consumption pattern of street hawked food in Nigeria, and Ibadan Metropolis is the first of its kind in Nigeria. The main objective of this study was to assess determinant factors of street-hawked food consumption in Oyo State. The specific objectives of the study were to assess the factors influencing the probability of consuming street-hawked food, and to determine the level of consumption on street-hawked food in the State.

## 2.0 Methodology

### 2.1 Study area, sample and data

Oyo State is grouped into three senatorial districts namely: Oyo Central, Oyo North and Oyo South. Primary data were collected from a sample of 300 respondents using a multi-stage sampling procedure from two senatorial districts namely Oyo Central and Oyo North. Data collected through face-to-face interviews by use of pretested questionnaires include respondents' age, gender, occupation, education level, income, time spent away from home, household size, marital status, types of street-hawked food and reasons for consumption and non-consumption of street-hawked food.

### 2.2 Model Specification and Estimation

In this study, Heckman's two-step model propounded by Heckman, 1979 was adopted. In the first step, probit regression was computed to give the estimated probability that a given household participates in street-hawked food consumption. This regression was adopted to assess the Contrary Mill Relation (CMR) for every household, which was then adopted in the second step of the regression model (i.e. consumption). The probit model used to study data with binomial distributions is as follows: Assuming the decision to consume street-hawked food or not depends on unobserved utility index,  $I_i$  (latent variable) that is determined by explanatory variables  $x_i$  such that the larger the value of the index the greater the probability of the household consuming street-hawked food.

The index therefore expressed as:  $I_i = x_i\beta_i$ , where  $x_i$  denotes vector of exogenous variables.

## 3.0 Results

The illustration in Table 1 present the result of probit model and this reveals the decision to consume street-hawked. Out of eight (8) determinant factors, the finding deduced that age, level of education, household size, income status and time spent away from home significantly determined the probability of consuming street-hawked foods. On contrary, sex, marital status and occupation of participants did not significantly determine the probability of street-hawked foods consumption. Furthermore, the finding revealed that income of the participants and time spent away from home were positively related with the probability of street-hawked foods consumption while age, level of education together with household size of the respondents signifies negative relationship with street-hawked food consumption.

As shown in Table 2, the illustration demonstrates the result of the step two of Heckman's model (i.e. the street-hawked food consumption). Among the four (4) variables postulated to determine the consumption level of street-hawked foods, three (3) namely, level of education, income status and household size were found significantly related with the consumption level of street-hawked foods, while sex indicates no significance. On the other hand, findings revealed that income status and contrary mill relation were positively significant with the level of consumption of street-hawked foods, while level of education, income status and household size of the respondents had significant cum negative effects on the consumption level of street-hawked foods. This indicates that, income status of the respondents sampled in Oyo State has a non-linear relationship with the consumption of street-hawked foods.

## 4.0 Discussion of Findings

The various types of street-hawked food consumed by people in Oyo Central and North Senatorial districts of Oyo State suggest more availability of street hawked foods which as a result influenced the consumption pattern of the people in the State. The finding confirmed that taste and convenient nature of street-hawked foods dominated the main reasons for their consumption. However, some people consumed street-hawked foods as a way of socializing with family members and friends or during casual gatherings while others did so because of their children's preferences. This finding is in support of Ajayi and Aneke (2002), Begum et al (2010) and Odusina et al (2011).

In addition, the relative effect of time spent away from home indicates that the more time people spend outside of their homes, the more they are likely to eat street-hawked foods. Statistically, one hour increase in of time spent away from home will predict 0.06% increase in the consumption level of street-hawked foods. These results are corroborated with the findings Ayo, Bonabana-Wabbi and Sserunkuuma (2010) who found that time spent away from home has a significant and positive on the consumption level of fast-foods.

Similarly, age has significant effect on the consumption of street-hawked, and this implies that one year increase in consumer's age would reduce the consumption level of street-hawked foods by 0.5%. This could result to a high preference for healthier foods as consumers grow older. These results are supported by the study of Adewale (2005) who found a negative relationship between consumer age and fast-food consumption. Hence, consumption of street-hawked food reduces as the consumer grows older. In addition consumption of street-hawked foods significantly increases as the income of the respondents increases. The study of Begum et al,

(2010) also reported an increase in disposable monthly income will encourage street food consumption.

However, level of education has negative and significant coefficient, and this exemplifies that an increase in the level of consumer's education by one year will lead to 0.8% reduction in the consumption of street-hawked foods. This result is not surprising because those who are highly educated are prone to have low consumption of street-hawked foods and this could be as a result of their knowledge of nutrition aspects of street-hawked. This finding is consistent with Odusina et al (2011) who found that level of education are more health conscious and therefore have lower consumption of street food. In the same way, the finding had a negative effect on the street-hawked food consumption. This finding is consistent with other studies Adewuyi et al (2007) who found that it is cheaper for bigger household size of more people to consume street-hawked foods compared to smaller household size.

The non-linear relationship between income and street-hawked food consumption signifies that increase in income leads to more consumption of street-hawked foods. The significant effect of the CMR on the consumption of street-hawked foods indicates that an estimation partiality would have took place had the street-hawked foods consumption been estimated without the consideration of the step-wise decision to consume street-hawked food.

## 5.0 Conclusion

The foremost study objective was to ascertain the determinants of street hawked food consumption in Oyo State. Specifically, the objectives of the study were: to assess the factors influencing the probability of consuming street-hawked food, and to determine the level of consumption on street-hawked food in the State. Results confirmed that rice, fruits (such as orange, mango etc.), snacks, soft drinks and solid foods such as amala, eba, iyan, semo were the main street-hawked foods consumed in Oyo State. Taste and convenience were found to be the most important attributes that consumer look for before consuming street-hawked foods. Results from the Probit model revealed that sex, level of education, income status and household size of the respondent significantly influence the possibility of consuming street-hawked foods.

## 6.0 Recommendations

Based on the above findings, the study recommended that marketers in food industry should make right utilization of the market opportunities of high demand for street-hawked foods in Oyo State. Finally, street-hawked foods seller should ensure more nourishing, healthful and neatness of their foods to the consumers as these greatly influences street-hawked foods consumption.

## REFERENCES

- Adewale, J.G. (2005) Socio-economic determinants of consumption of soybean products in Nigeria: A Case Study of Oyo State. *Nigeria Anthropologist*. 7(1):57-60.
- Adewuyi, A.S., Mafimisebi, E.T. & Awe, O.P. (2007) Food expenditure patterns among urban households in Ibadan Southwest Local Government Area, Oyo State. *International Journal of Agricultural Sciences, Sciences, Environment and Technology*. Vol.2 (1), 13-24.
- Ajayi, A.R. & Aneke, M.O. (2002) Consumption and expenditure patterns of banana and plantain consumers in Nsukka Urban, Nigeria. *Infomusa*, 11:50-53.
- Akinyele, I. (1987) *Study on street foods in Ibadan, Nigeria: characteristics of food vendors and consumers – implications for quality and safety*. Rome: FAO and University of Ibadan.
- Akpan, S.B., Patrick, I.V., Udoka, S.J. & Okon, U.E. (2013) Determinants of food consumption expenditure among Agro-Based Firms workers in Southern Nigeria: Simultaneous equation approach. *Asian Journal of Agricultural Extension, Economics & Sociology*, 2(1): 69-84
- Akpoyomare, O.B., Adeosun, L.P. & Ganiyu, R.A. (2012) The influence of product attributes on consumer purchase decision in the Nigerian food and beverages industry: A Study of Lagos Metropolis. *American Journal of Business and Management*, 1(4), 196-201
- Arulogun, O. S. & Owolabi, M. O. (2001) Fast food consumption patterns among undergraduates of the University of Ibadan, Nigeria: Implications for nutrition education. *Journal of Agric Food Tech*. 1(16), 89-93.
- Ayo, S.A, Bonabana-Wabbi, J. & Sserunkuuma, D. (2012) Determinants Of Fast Food Consumption in Kampala, Uganda. *African Journal of Food, Agriculture, Nutrition and Development*, Vol 12(5): 6567-6581.
- Begum, S., Khan, M., Farooq, M., Begum, N. & Shah, I.U. (2010) Socio economic factors affecting food consumption Pattern in rural area of district Nowshera, Pakistan. *Sarhad J. Agric*, 26(4), 649-653.
- Ene-Obong, H.N. Enugu G.I. & Uwaegbite-A.C. (2001) Determinant of health and nutritional status of rural Nigerian women. *J. Health Population Nutr*. 19(4), 320-330.
- FAO and Food Basket Foundation International (1991) Street foods in Nigeria. Comparative study of socio-economic characteristics of food vendors and consumers in Ibadan, Lagos and Kaduna, Nigeria. Rome and Ibadan FAO & Food Basket Foundation International.

- Kant, A.K. & Graubard, B.L. (2004) Eating out in America 1987-2000: Trends and Nutritional Correlates. *Pre Med* 2004; 38: 243-249.
- Kayemba, G. (2000) The Growth and Development of Fast-food Outlets in Kampala City. Thesis presented for the Award of Bachelor of Tourism, Makerere University, Kampala.
- Namawejje, J. (2006) Spartial Distribution and Development of Restaurants and Take-a-ways in the Provision of Fast-food Service in Jinja Town. Thesis presented for the Award of Bachelor of Tourism, Makerere University, Kampala.
- Odusina, O.A., Akinsulu, A.A. & Ijagun, I.O. (2011) A double hurdle analysis of determinants of protein consumption pattern among rural households in Egbeda local government area, Oyo state. *International Journal of Agricultural Economics & Rural Development*, 4(2):1-10.
- Ochieng H. (2009) Eating to Death. *Sunday Monitor*, 109: 1-2. Kampala, Uganda.
- Sowunmi, F. A., Aroyeun, S. O., Okoruwa, V. O. & Biobaku, M. O. (2009) Tea Consumption in Ogun State, Nigeria: Prevalence and Characteristics of Consumers. *Journal of Social Sciences*, 1(1),24-30.

**Table 1: Determinant Factors of street-hawked foods consumption**  
*Probit model estimates*

Variables	dy/dx	Z	p-value
Age	-0.005	-1.28	0.052*
Sex	-0.004	-1.06	0.321
Marital status	-0.006	-0.54	0.485
Level of education	-0.008	-1.81	0.081*
Income status	1.523	1.69	0.068*
Household size	-0.005	-1.61	0.081*
Occupation	0.006	0.51	0.731
Time spend away from home	0.006	0.60	0.085*

\* significant at 0.01

**Table 2: Ordinary Least Squares Regression Model of Determinant Factors on consumption level of street-hawked foods**

Variables	Coefficient (r)	Std. Error	t-value	Sig.
Sex	-1782.015	4683.626	-0.35	0.571
Level of education	-1638.635	563.051	-1.57	0.006**
Income status	0.130	0.007	9.52	0.000***
Household size	-1568.002	1241.235	-1.91	0.052*
Income2	-5.461	1.091	-4.20	0.000***
CMR	312.362	6541.301	0.01	0.068*

\*, \*\*, \*\*\* Significant at 0.01, 0.05 and 0.001 respectively

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

### CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

### MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

