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**Enhancing Hygienic Practices among Food Vendors in Primary Schools in Uyo Local  
Government Area of Akwa Ibom State, Nigeria**

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**By**

**Dr Essien E. Udo, *fstan*  
Science Education Department  
University of Uyo, Uyo**

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**ABSTRACT**

*The study investigated the strategies for enhancing hygienic practices among food vendors in Primary schools in Uyo local government area of Akwa Ibom State, Nigeria. Two research questions and a null hypothesis guided the study. Descriptive survey was adopted for the study. The population of the study comprised all vendors and all primary school heads in Uyo. A sample of 185 respondents was drawn for the study. The instrument used for data collection was a questionnaire developed by the researcher. Cronbach alpha method was used in estimating the internal consistency of the instrument and a reliability of .76 was obtained. Mean score and t-score were used to present the data. The findings of the study revealed, among other things, that hygienic practices needed by the vendors include: wearing clean clothes, aprons and caps. It was recommended, among others, that hygienic practices and instructional material should be developed for food vendors in schools.*

**KEYWORDS:** Hygienic practices, food vendors, strategies, primary schools, Uyo Local Government Area Akwa Ibom State, Nigeria

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**Introduction**

The Federal Government in a bid to fulfil one of its campaign promises, and also ameliorate the economic hardship of parents decided to embark on “operation feed primary school pupils all over the nation”. It is imperative to investigate the hygienic nature of food given to the pupils in primary schools in Uyo municipality in particular and Akwa Ibom state in general. Hence, the need for this research.

Food is indispensable to human existence. It is a basic need of every individual in the society. Good nutrition promotes good health and at the same time enhances the social and psychological wellbeing of the individual. Food, as a basic human need, therefore, must be wholesome and safe so that it would not be hazardous to human health.

Onoja (2013) defined food as “any substance, prepared by people to take care of their physiological needs”. This implies that food is any substance processed, semi-processed, or even in raw state which is intended for human consumption to ensure normal growth and development of the body. Similarly, Ohiokpehai (2010) viewed food as “any liquid or solid material which when taken or ingested can provide the body with nourishment”. Thus, food is water, juice, fruit,

nut and any other substance which when taken, provides the body with nutrients needed for normal functioning.

Food hygiene ensures that the food the general public consumes is healthy. Clark and Fox (2009) defined food hygiene as “preventing harmful bacteria from growing in food, keeping the kitchen appliances, tools and oneself clean as well as washing, cooking, preserving and storing food properly”. Thus, food hygiene is very vital in health. It should be pointed out that food vendors that maintain proper food hygiene prevent harmful bacteria from growing in food thereby preventing food contamination and poisoning.

Food vendors are service providers that sell food. Their products range from normal dishes like bread, akara balls, moimoi, rice, beans, agidi, garri, fruits, drinks and different types of snacks (Onoja, 2013). Common observation shows that street foods compromise public health because most of the food vendors lack knowledge about safe handling of food. This is informed by the fact that the vendors are not regulated by the local health authorities, so they prepare food anyhow. The consumers of food more often than not fall victim of consuming from the vendors fatty and oily food that are high in salt and sugar and food that are not prepared hygienically. Unhygienic practices by food vendors expose the consumers to health problems like vomiting, abdominal constipation, abdominal pains, diarrhea and other forms of health risks in the environment. Also, some people have lost their lives as a result of contaminated foods. All this affect national development. Sequel to this, it is necessary to device strategies for enhancing hygienic practices among food vendors in our schools in Uyo. With a good hygienic practices, good and balanced diet food would be produced which will go a long way in promoting physical, mental, social, and all round stables school pupils, the consumers. This will in turn brings about healthy and conducive school environment and society at large. Barbara and Cambridge (2000), Adeoyo (2007) and Clark and Fox (2009) advocated that food vendors should maintained proper personal hygiene, using handkerchief while sneezing, clean mouth regularly and used disinfectant to keep the kitchen free bacteria and other harmful rodents. Oyechere (2010) proposed that seminars and workshops be organized for food vendors to sensitize them on the important of food hygiene in the society. Vendors are advised to stick strictly to the stated rules and regulations to ensure that food being served by the food vendors to the school pupils (consumers) was not contaminated but well preserved and processed following hygienic methods.

### **Statement of the Problem**

Observation points to the fact that food vending in primary schools has come to stay as a good gesture of the Federal Government but despite all the effort from the government that food substances that get to the consumers are safe for consumption, some food vendors in schools in Uyo still do not have the interest of the consumer at heart. Some of these service providers do not maintain adequate food hygiene in terms of personal and environmental hygiene, procurement of healthy foods, preservation, storage, preparation process in kitchen and delivery to the customers.

This has been a serious matter of concern to many Nigerians. Thus, if unhygienic practices among food vendors are not checked, the purpose of this government’s gesture will be in jeopardy. It is against this background that this study investigated the strategies for enhancing

hygienic practices among food vendors in schools in Uyo Local Government Area of Akwa Ibom State.

### **Purpose of the study**

The purpose of this study was to determine the strategies for enhancing hygienic practices among food vendors in schools in Uyo.

### **Research Questions**

The research questions raised in the study were as follows:

1. What are the hygienic practices needed by food vendors in primary schools in Uyo?
2. What are the strategies of enhancing hygienic practice among food vendors in primary schools?

### **Hypothesis**

One research hypothesis was postulated and tested at .05 level of significance:

There is no significant difference between the responses of food vendors and the heads of Primary Schools on the strategies for enhancing hygienic practices among food vendors.

### **Methodology**

The study adopted a descriptive survey design. The population of the study included all 681 food vendors and 221 heads of primary schools in Uyo. The sample of the study included 140 food vendors and 45 heads of Primary Schools in Uyo local government area. Schools in Uyo are classified into categories A to D. A purposive sampling was used to sample three categories from the four for the study. The criteria for selecting three include:

1. schools with pupils population not less than 800
2. schools that are located near health centre or do have visiting health personnel
3. schools with bore hold water supply.

The instrument used was a questionnaire titled ‘‘Hygiene Practices for Food Vendors’’ (HPFV). The questionnaire was made up of 31 items which were divided into two subsections. The first section with 20 items focused on eliciting information on hygienic practices for food vendors, while the second section with 11 items focused on strategies for enhancing hygienic practices among food vendors. The respondents were instructed to rate the items on Likert 4-point scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). The instrument was validated by two health personnel from Quality Assurance Department of the Ministry of Education, uyo and one lecturer in Home Economics Unit, Vocational Education Department, University of Uyo. The validators were requested to vet the items for clarity of words, and adequacy in addressing the objectives and problems of the study. Their comments and corrections were incorporated into the final form of the instrument.

The research questions were answered using mean scores while independent t-test was used to test the hypothesis. The mean ratings of the respondents were categorized by using the

real limit of numbers of responses made. A mean score of 2.5 and above was taken as an index for agreement, while a mean of below 2.5 was taken as an index of disagreement. The researcher and 5 research assistants that were trained at a one-day workshop on administration of questionnaire helped the respondents to fill their questionnaire. The research assistants were Master's degree students who had already finished their course work at the University of Uyo, Uyo.

## Results

### Research question 1

What are the hygienic practices needed by food vendors in schools in Uyo?

**Table 1: Mean Rating of Hygienic Practices needed by the Food Vendors.**

S/N	Items on hygienic practices needed by the food vendors	Mean	SD	Decision
1	Buying and cooking only uncontaminated foods.	3.60	0.64	Agree
2	Wearing clean clothes, aprons and caps regularly.	3.46	0.66	Agree
3	Washing hands with clean water and soap after using the toilet	3.73	0.53	Agree
4	Using handkerchief to cough and sneeze.	3.12	0.69	Agree
5	Washing hands after coughing and sneezing	3.33	0.71	Agree
6	Keeping clean finger nails.	3.21	0.67	Agree
7	Bathing regularly.	3.27	0.72	Agree
8	Cleaning mouth and teeth with tooth brush and paste twice daily.	3.28	0.75	Agree
9	Covering open wounds with neat dressing.	3.02	3.77	Agree
10	Washing foods before cooking	2.70	0.90	Agree
11	Having a standard waste bin.	3.46	0.66	Agree
12	Covering waste bin always.	3.02	0.77	Agree
13	Using insecticide around the stores.	2.70	0.91	Agree
14	Washing the kitchen regularly.	3.28	0.75	Agree
15	Having enough stores for food items.	3.27	0.22	Agree
16	Washing plates with clean water and soap after use.	3.60	0.64	Agree
17	Ensuring that people do not urinate around the serving premises.	3.73	0.53	Agree
18	Using clean towel to dry-clean washed plates and hands.	3.12	0.69	Agree
19	Displaying foods in clean coolers.	3.43	0.71	Agree
20	Using clean spoon to fetch foods from the food warmer and covering it after serving.	3.21	0.67	Agree

*Criterion mean: 2.5*

Results from table 1 above indicate that all the items listed on hygienic practices needed by food vendors were agreed on by the respondents. None of the items was rejected.

## Research Question 2

What are the strategies for enhancing hygienic practices among food vendors in schools?

**Table 2: Mean Ratings of the Responses of the Respondents on Strategies for Enhancing Hygienic Practices among Food Vendors in Schools.**

S/N	Items on the Strategies for Enhancing Hygienic Practices Among Food Vendors in Schools.	Mean ( $\bar{x}$ )	SD	Decision
1	Setting up food committee.	2.86	0.84	Agree
2	The food committee should inspect the food before they are served to the consumers.	2.75	0.70	Agree
3	Seminar should be organized for food vendors every two months.	3.26	0.82	Agree
4	Developing food hygiene and instructional manual for the food vendors.	2.90	0.88	Agree
5	The general public should be educated on the need to eat healthful food.	2.92	0.86	Agree
6	Educating the food vendors to keep cooked food separate from raw foods to reduce the risk of contamination.	3.02	0.78	Agree
7	Sensitizing the vendors on the need to get adequate cooking utensils.	3.07	0.79	Agree
8	Banning any food vendor that appears dirty from serving in the school.	2.87	0.85	Agree
9	Free medical check-up should be conducted for food vendors to find out their medical fitness.	3.40	0.62	Agree
10	Food vendors should be educated on hygienic practices.	3.54	0.62	Agree
11	The food committee should trace food vendors to their houses.	1.83	0.83	Disagree

*Criterion mean: 2.5*

Results from table 2 reveal that more than 90 percent (90%) of the strategies that were listed for enhancing hygienic practices among food vendors were agreed to by the respondents.

## Hypothesis one

There is no significant difference between the responses of food vendors and the school heads on the strategies for enhancing hygienic practices among food vendors in schools.

**Table 3: Independent t-test analysis of the difference between the responses of food vendors and heads of the schools.**

Group	Mean	SD	df	t-cal	t-critical
Food vendors	140	2.82			
			288	-1.68	.87
Heads of schools	45	0.57			

Results on table 3 indicate that the calculated t value of -1.68 is less than the critical t-value of .87 for 228 degree of freedom at .05 level of significance. Therefore, the null hypothesis which states that there is no significant difference between the responses of food vendors and the school heads on the strategies for enhancing hygienic practices among food vendors in schools is accepted.

### **Discussion of Findings**

From the analysis of data generated for the study, the hygienic practices needed by the food vendors include; buying and cooking only uncontaminated foods, wearing clean clothes, aprons and caps, washing hands with clean water and soap after using the toilet, using handkerchief to cough and sneeze, and keeping clean finger nails. Others include; bathing regularly, cleaning mouth and teeth with tooth paste and brushing at least twice daily, covering open wound, washing food before cooking, having standard waste bin and covering waste bin always. The hygiene practices needed by the food vendors also include using insecticides around the stores, washing kitchen regularly, having store for food items, washing spoons and plates after used, ensuring that people do not urinate around the serving places, using clean towel to dry-clean washed plates and hands.

Equally, from the analysis of data generated for the study, the strategies for enhancing hygienic among food vendors in schools area; setting up food committee that would inspecting food before they are served, organising seminars for food vendors, developing food hygiene and instructional manual and educating general public including the schools on the need to eat foods that are not contaminated. Other strategies include: sensitizing the food vendors on the need to get adequate cooking utensils, banning any food vendors that appears dirty from serving food in schools, educating them on hygienic practices and the food committee should trace the vendors to their houses.

The findings of the study are consistent with the observations of Barbara and Cambridge (2000), Adeoyo (2007) and Clark and Fox (2009) that advocated that food vendors should maintain proper personal hygiene, use handkerchiefs while sneezing, clean mouth regularly and use disinfectants to keep the kitchen free from bacteria and other harmful rodents.

This finding agrees with the assertion of Onyechere (2010) that seminars and workshops be organized for food vendors to sensitize them on the importance of food hygiene in the society.

Also, the study revealed that no significant difference exists between the responses of food vendors and the heads of schools on the strategies to be used to enhance hygienic practices among food vendors. Both the service providers and the heads of schools responded positively on the strategies for enhancing hygienic practices among the food vendors.

### **Educational Implications**

Education can be seen as the sum total of all experiences which affect habits, thinking and decisions of individuals. It enables individuals to adapt themselves to their social environment and meet its demands with at least some measures of success. Thus, education is a weapon for acquiring skills, transmitting what is worthwhile to generations as well as accelerating national development.

From the findings of this study, the following implications have emerged. The state Ministry of Education should embark on mass literacy and enlightenment campaigns on food hygiene. Also, the Ministry of Health should develop food hygiene and instructional manuals that would regulate the operations of food vendors in the state.

### **Conclusion**

Food is indispensable to human existence and development. It is imperative therefore that the procurement, preparation and serving of food is hygienically handled. Food vendors who are service providers to the public should, as a matter of priority, have identity cards and they should be educated on the various aspects of food hygienic practices in order to promote good health among consumers. Food vending therefore calls for team approach among the stakeholders. The food Monitoring Committee, Sanitary Inspectors, Ministries of Education and Health and the Heads of Schools should adopt and utilize appropriate strategies in enhancing hygienic practices among food vendors in schools in Uyo Local Government Area of Akwa Ibom State.

### **Recommendations**

Based on the findings of the study, the following recommendations are made:

1. There is need to develop food hygiene and instructional materials for food vendors
2. Seminars and workshops should be organised periodically to sensitize the food vendors and the general public on the importance of food hygiene practice.
3. The government should through the health workers monitor the activities of food vendors.
4. The Heads of Schools in conjunction with the State Government, should set up food monitoring committees that would regulate the activities of the vendors and inspect the foods before they get to the pupils.

## REFERENCES

- Adeoye, G.O. (2007). *Improving the safety of the street vended food*. China: Cahner Books.
- Barbara, J. N., and J. E. Cambridge, (2000). *Specimen collection and processing in clinical and pathogenic microbiology*. Toronto: The Mosby Company.
- Bhat, J. O. (2005). *Food Microbiology* (2<sup>nd</sup> edition). McGraw: Hill Publishing Co.
- Clark, M. N. and M. Fox, (2009). Nutritional quality of the diet of US public school children and the role of the School meal programmes. *Journal of American dietetic Association*, 20 (2).
- Ohiokpehai, J. K. (2010). *Food hygiene in catering and retail trades*. London: H.K. Lewis Co. Ltd.
- Onoja, P. O. (2013). *Food hygiene and people*. Wilota Press, Benue State, Nigeria.
- Onyechere, C.U. (2010). *Street food vendors education and hygiene in Owerri*. Unpublished BSc Project. University of Nigeria Nsukka.