



## **CONSUMPTION OF FAST FOODS AND HEALTH OF ADOLESCENTS IN BORI TOWN, KHANA LOCAL GOVERNMENT AREA, RIVERS STATE NIGERIA**



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### **Abstract**

The main purpose of this study was to investigate the consumption of fast foods and health of adolescents in Bori town, Khana Local Government Area, Rivers State Nigeria. The study adopted the survey research. A sample of 150 respondents or parents was randomly selected from 15 clusters of Bori town. Furthermore, 2 experts (i.e. 1 Nutritionist and 1 Dietician) validated well-structured instrument titled “Fast Food Risk Assessment Questionnaire” (FFRAQ) with a reliability coefficient (using Cronbach Alpha (ra) method) of 0.813 necessitating its use for data collection analyzed using frequent count and percentage rating. The study revealed that 97% of respondents prefer and consume fast foods based on its nutritious, pleasant, convenient, easy to eat, appetizing, and tasty nature. While 87% of the respondents attested that the non-spicing of fast food with vegetables makes it unhealthy leading to weight gain, artery pains, heart attack, and other health issues. The study recommends among others that: nutritionists and dieticians encourage the consumption of nutritious, pleasant, appetizing and tasty fast foods especially during school hours. Alongside, parents and caregivers ensuring that they spice fast foods with vegetables which increase the antioxidants, micronutrients and nutrients that will prevent obesity, artery pains, heart attack, and other health issues.

**Keywords:** Fast Foods; Consumption; Health; Adolescents; Bori Town.

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## 1. Introduction

The society as an entity or system is constantly growing or changing in size and complexity, this dynamism also permeates into the humans living in a society to depart from the traditional practices by adapting to the trending social settings, nutrition patterns, and lifestyles triggered by these changes. In specificity, the changing lifestyles, work schedules, and school engagements has attracted a corresponding change in the nutritional patterns to suit the seemingly busy and fast living lifestyle especially in urban and semi-urban centers. This apparently justifies the emergence and preference of fast food eating as a habit, practice and pattern for the children, adolescents, adults and elderly to effectively meet their total dietary requirement or intake of carbohydrate, protein, micronutrients, and phytochemicals that will enable especially adolescents meet their busy activities and play their assigned roles and responsibilities in the modern society.

The United States Department of Agriculture (USDA) defined fast food as food purchased in self-service or carry out eating process without wait service. Similarly, the National Institutes of Health (NIH) stated that fast foods are quick and cheap after natives to home-cooked meals that are consumed as “take-away” or “on the run” food, diet or pastry. Fast foods include such items as pastries (i.e. meat pie, fish pie, fish roll, egg roll, doughnut, sausage roll, etc.), sweets (like cheese, ice cream, fruit juice, etc.), and other dishes like fried rice, cakes, hamburger etc. that are prevailing, preferred and patronized based on their taste, aroma, spice, and tantalizing or enticing (Olumakaiye, Ogbimi, Ogunba & Soyebó, 2010). Despite this, caution should be exercised in consuming or eating too much fast food especially those with high saturated fat or cholesterol, sugar, salt, calorie and fiber that predisposes consumers to nutritional diseases like obesity, respiratory disorders, etc. (Obasi, Uchechukwu & Eke-Obia, 2012).

Furthermore, the growing preference and consumption of fast food (either as breakfast, lunch and dinner) which has replaced the traditional menu, dishes and feeding patterns of individuals and families equally accentuates the growth of fast food restaurants or service centers across cities and even recently in urban suburbs in Nigeria. These fast food centers comprises local brands (like Genesis, Tantalizers, Kilimanjaro, Mr. Biggs, Skippers, Sizzlers, etc.) and foreign based fast food brands (like Spar, Happy bite, Macdonald, etc.) that are dominating in their areas of operation in compliance with global trends or norms in the tourism and hospitality industry. Literally, from the foregoing, fast food can be conceptualized as variety of foods that are quickly produced or prepared to meet the nutritional needs of the transiting, busy, and working/schooling adolescent and adult consumers.

Instructively, adolescents (conceptualized as male and female children between the ages of 10-15 years that are either in or out-of-school) emphasized in this study are easily susceptible to malnutrition and infection (Uppal, Kumari & Sidhu, 2005). This makes it imperative for the consideration of the quality of food or diets they consume in order to ascertain their suitability to promote or enhance the health (dimensioned by food, wellbeing, and agility) of the adolescent evident in their proper metabolism, development, and productivity (Amosu, Degun, Atulomah & Olanrewju, 2011). Consequently, UNICEF (2013) emphasized that meeting the health of adolescents is dependent on their daily consumption of adequate foods or diets that meets their nutrient requirements. Hence the fast food (dimensioned as pastries, sweets and dishes) either provided or chosen by them both at home and school should have the right proportion of

micronutrients like calcium, iron, protein, vitamins, carbohydrate, minerals, fats and oil, and water that will give adolescents the energy, strength, and fitness to actively and intelligently function in their busy/play lifestyle, undertakings and learning.

Instructively, the intake of nutritious and organic fast foods (like ukpa, epiti, sobo, tigernut milk, etc.) spiced with vegetables rich in micronutrients and phytochemicals, and low in fiber has been associated with good health. Iron, vitamin A, vitamin E, and zinc are known for their anti-anaemic, antioxidant, immune boosting, enhancing fluid balance, energizing, and health stimulation (Saha, Frongillo, Alam, Arifeen, Persson&Rasmussen, 2009). The consideration of this is extremely important as adolescents eating of tasty and greasy or fried fast foods spiced with additives or preservatives and high cholesterol, sodium and fiber (like burgers, fries, hamburger with cheese containing 120 calories and 65grams of fat) has been linked to serious conditions like obesity, type-2 diabetes, dwarfism, rickets, kwashiorkor, faulty intelligent quotient (IQ), and heart attacks including their suffering greater insulin resistance as they reach middle adulthood of 30-45 years (Hanshaw, 2012).

Thus, subjecting adolescents to the intake of fast foods with the amount of fat and calories more than the daily recommend caloric and sodium intake (i.e. 2,300 milligrams per day) triggers high blood pressure, stroke and kidney malfunctioning which is extremely detrimental to the health of adolescents (Kris-Etheron & Innis, 2007). Just as nutrition induces diseases, this anomaly could be averted or remediated by consuming diets or foods (both home and school) as therapy against diseases that affects adolescents' healthiness. Instructively, the need for adolescents getting proper nutrition at all times whether at home or school, necessitated Yunusa, Gumel, Adegbusi and Adegbusi (2012) suggestion or assertion for the introduction of school feeding programme as catalyst and complement for the nutrition and development of the adolescents transiting to adulthood in Nigeria (in general), and Bori town (in particular). This is the nitty-gritty of the study and the point of emphasis will be the consumption of fast foods with the micronutrients and phytochemicals play significant roles in numerous body processes.

### **1.1. Statement of the Problem**

Unwholesome and greasy or fatty fast foods products (like doughnut, burger, egg roll, pies, caes, etc.) spiced with additives are generally characterized by high energy dense food which as such results in excess fat that impedes or slows the holistic development of adolescents towards adulthood. There is every tendency that where the rate of consumption of distasteful fast food products continues unabated will likely result in obesity, and other nutritional diseases. According to a joint WHO/FAO expert consultation (2015) report observed that some of the dangers associated with unwholesome, high calorie and fiber fast food consumption leaves adolescents with obesity, stroke (due to the blocking of the vessels that carry blood), risk of diabetes (due to glucose (or sugar) entering the blood stream), and risk of coronary artery disease (due to the heart not getting the blood).

Bori town, as one of the fast growing urban centers in Rivers State with high population influx in recent times has witnessed increasing number of fast food restaurants springing up. This springing up is one of the sophistication of the society as parents like social outing with their loved ones especially on weekends and public holidays. Also, the high rate of consumption of these fast food

products by these young teenagers or adolescents has led to the increased income and commercialization of fast food services. However, this scenario has given rise to home pertinent questions, especially on the seeming or apparent neglect or downplaying of the health risks factors associated with such frequent consumption of fast foods lacking or deficient in essential nutrients, micronutrients, and antioxidants that could prevent or avert nutritional diseases like obesity, heart malfunctioning, etc. that affects adolescents proper growth, articulation, mental stability, assimilation, etc.

Instructively, the effectiveness of spicing fast food with vegetables indicates that adolescents are consuming ecologically sufficient, safe, economical and nutritious fast foods that will promote their wellbeing, cognitive development, school performance, and efficiency. It is based on the foregoing that this study examines consumption of fast foods and health of adolescents in Bori Town, Khana Local Government Area Rivers State Nigeria.

Specifically, the purposes of this study were to:

- 1) determine parents' perception of nutritional value of fast foods.
- 2) determine the frequent intake of fast food by children in Bori Town.
- 3) examine the health risks associated with fast food consumption by children

## 1.2. Research Questions

The following question guided the study

- 1) What is parents' perception of nutritional value of fast foods?
- 2) What is the frequent intake of fast food by adolescents in Bori Town?
- 3) What is the health risks associated with fast food consumption by adolescents?

## 1.3. Scope of the Study

This study centred on the consumption of fast food and health of adolescents. In terms of geographic scope, the study would be conducted in in Bori town in Khana Local Government Area, Rivers State, Nigeria. While in the terms of content scope, the study would be centred on the adolescents (male and female) who are frequently consuming fast foods that could influence their health. Furthermore, the independent variable is fast food (dimensioned as pastries, sweet and dishes), while the dependent variable is health (dimensioned via nutrition/food, wellbeing, and agility).

## 2. Methodology

**Research Design:** The research design utilized in this study was the survey research. The kind of survey applied here is public opinion survey which is designed to identify the general opinion of the people toward a current issue or event in a given place (Osaat, 2009).

**Study Area:** Bori, the traditional headquarters of the Ogoni ethnic nationality, one of the major indigenous people of Rivers State is situated in the South East senatorial zone of Rivers State. Bori is also one of major towns in Rivers State about forty kilometers (40km) from the state capital, Port Harcourt. Apart from the traditional headquarters of the Ogoni ethnic nationality, it is also the

headquarters of Khana Local Government Area with traditional occupations (like farming, fishing, lumbering and hunting) which is now transiting to trading and illegal refining of crude oil that is polluting the lands and rivers where farming and fishing respectively take place. The Ogonis are made up of four Local Government Areas which are Eleme, Tai, Khana, and Gokana. Furthermore, Bori town is gateway local government bordering Akwa Ibom State.

**Population of the Study:** The study population consists of all parents (male and female) in Bori Town, Khana Local Government Area. According to the National population census figure of 2006, Bori town has a population size of eleven thousand, six (6) hundred and ninety three (11,693) people.

**Sample Size and sampling technique:** A sample size of one hundred and fifty respondents (150) was utilized in the study. This was obtained through the simple random sampling technique. The one hundred and fifty respondents were randomly selected from fifteen (15) clusters of Bori town on the basis of ten respondents from each cluster to form the study unit.

**Instrument for the Data Collection:** The instrument for data collection was titled “Fast Food Risk Assessment Questionnaire” (FFRAQ) was designed for the study. The FFRAQ instrument was an example of structured close response questionnaire whereby the respondents are restricted to the options given by the researcher.

**Validation of the Instrument:** The face and content validity of the FFRAQ instrument was determined by the two (2) educational experts (one Nutritionist and one Dietician). The comments, suggestions, and reviews of these validates were effected during the final construction of the FFRAQ instrument.

**Reliability of the Instrument:** The reliability or internal consistency of the FFRAQ instrument was ascertained using Cronbach Alpha ( $r_a$ ) method to obtain a reliability coefficient of 0.813, which necessitated the use of the HGCEQ instrument for administration.

**Method of Data Collection:** The researcher in company of trained researcher assistants employed the face to face direct delivery of the 150 copies of the FFRAQ instrument to the respondents across the fifteen clusters of Bori town in Khana Local Government Area. After the filling of the instrument was completed, the copies were retrieved immediately from the respondents to enhance one hundred percent (100%) retrieval rate.

**Method of Data Analysis:** Data collected was analyzed using frequency count and percentage rating for both the demographic variables (would not form the decision in the study) and items used in answering the research questions. Also the data analysis were arranged and organized in form of tables.

### 3. Results

#### The Social-Demographic Information of Respondents

Table 1: Distribution of the Gender and Age Brackets of the Respondents

S/No	Item	Frequency	Percentage (%)
1	<b>Gender</b>		
	Male	90	60%
	Female	60	40%
2	<b>Age Bracket</b>		
	20-24 years	7	4.67
	25-29 years	8	5.33
	30 – 34 years	10	6.67
	35 – 39 years	20	13.33
	40 – 44 years	25	16.67
	45 – 49 years	30	20
	50 – 54 years	20	13.33
	55 – 59	15	10
	60-64 years	10	6.67
	65 years and above	5	3.33
	<b>Total</b>	<b>150</b>	<b>100%</b>

Table 1 show that the male respondents dominated with 90 respondents representing 60% of the sample, while the female respondents were 60 representing 40% of the sample. In terms of age bracket the respondents within the age bracket of 45-49 years were 30 representing 20% of the sample, this was followed by 40-44 years with 25 respondents representing 16.67% of the sample, age bracket of 35-39 and 50-54 years (each had 20 respondents representing 13.33%), 55-59 years had 15 respondents (representing 10% of the sample), 30-34 and 60-64 years each had 20 respondents representing 6.67% of the sample, 25-29 years were 8 respondents representing 5.33% of the sample, 20-24 years had 7 respondents representing 4.67% of the sample, while the least was respondents 65 years and above with 5 respondents representing 3.33% of the sample.

Table 2: Distribution of the Occupational Status, Marital Status and Educational Qualification of the Respondents

S/No	Item	Frequency	Percentage (%)
1.	<b>Occupational Status</b>		
	Self-employed	10	6.67
	Business man/woman	20	13.37
	Civil/Public Servant	70	46.67
	Corporate Employee	50	33.33
2.	<b>Marital Status</b>		
	Married	100	67.67
	Single parent	15	10
	Widow/Widower	30	20
	Divorced/Separated	5	3.33
3.	<b>Educational Qualification</b>		
	FSLC	20	13.33
	WASC/ SSCE/ GCE	60	40
	BA/B.Sc./ B.ED/B. Eng	35	23.33

	HND/OND/NCE	25	16.67
	MA/M.Sc/MBA/M.ED Ph.D	10	6.67
	<b>Total</b>	<b>150</b>	<b>100%</b>

Table 2 reveals the four categories of occupational status of the respondents were: 46.67% of the respondents were civil/public servant; this was followed by corporate employees with 33.33%, business man/woman had 13.37% while the least occupational status was self-employed with 6.67%. The prevalence of the civil/public servant was because Bori town as a local government area headquarters also host a tertiary educational institution (like Ken Saro Wiwa Polytechnic including public primary and secondary schools and government health institutions. Furthermore, in the area of marital status, the married respondents dominated with 67.67% of the sample, this was followed by widows/widowers with 20%, single parents were 10%, while divorced/separated respondents were 3.33% of the sample.

The result in Table 2 also show the educational qualifications of the respondents with WASC/SSCE/GCE dominating with 40% of the sample, this was followed by the respondents with BA/B.Sc/B.ED/B. Eng with 23.33%, those with HND/OND/NCE accounted for 16.67% of the sample, the respondents with FSLC were 13.33% of the sample, while the least was educational qualification was MA/M.Sc/MBA/M.ED Ph.D with 6.67% of the sample.

Table 3: Frequency and Percentage Rating on the Perception of Parents of the nutritional value of fast food

	Response	No. of respondent	Percentage %
Fast food intake is very nutritious, pleasurable meal, convenient, and easy to eat because of its appetizing look and taste	Yes	145	97%
Fast food is an expensive and luxurious living meal eaten with a high health risk that affects adolescents	No	5	3%
<b>Total</b>		<b>150</b>	<b>100%</b>

Table 3 shows that 97% of the respondents attested that fast food is very nutritious, pleasurable meal, convenient, and easy to eat because of its appetizing look and taste, hence its preference and consumption by the adolescents. While 3% of respondent perceive that fast food is an expensive and luxurious living meal eaten with a high health risk that affects adolescents.

Table 4: Frequency and Percentage Rating on the Rate of frequent intake of fast food

S/No	Item	Response	Frequency	Percentage (%)
1.	Adolescents love for fast food enhanced their regular in take	Yes	128	85
2	Adolescents are compelled to consume fast food regularly because it is suitable time saving for parents who may not have time to cook at home	No	22	15
	<b>Total</b>		<b>150</b>	<b>100%</b>

Table 4 shows that 85% of the respondents agreed that adolescents love for fast food enhanced their regular intake, while 15% of the respondents attested that adolescents are compelled to consume fast food regularly because it is suitable time saving for parents who may not have time to cook at home.

Table 5: Frequency and Percentage Rating on the Health Risk Associated with fast food consumption by Adolescents

S/No	Item	Response	Frequency	Percentage (%)
1.	The non-spicing of fast food with vegetables makes it unhealthy leading to weight gain, artery pains, heart attack, obesity as health issues regularly noticed on adolescents consuming fast food	Yes	130	87
2	Fast food is a healthy and nutritious food	No	20	13
	<b>Total</b>		<b>150</b>	<b>100%</b>

Table 5 above show that 87% of the respondents attested that the non-spicing of fast food with vegetables makes it unhealthy leading to weight gain, artery pains, heart attack, obesity as health issues regularly noticed on adolescents consuming fast food, while 13% of the respondents disagreed that fast food is a healthy and nutritious food.

#### 4. Discussion of Findings

The result in Table 3 revealed that fast food was preferred and consumed because it is very nutritious, pleasurable meal, convenient, easy to eat, appetizing look and taste. This finding is in agreement with Ogbimi and Ogunba (2011) who emphasized that the nutritious, easy to eat, tasty and appetizing nature of fast foods enhances their preference and consumption for the healthy living, growth, mental development, articulation, performance and wellbeing of school children.

The result in Table 4 revealed that adolescents love for fast food enhanced their regular intake even when compelled due to the limited time for their parents and caregivers to cook at home. This finding is consistent with Olumakaiye et al. (2010) that fast foods like pastries like meat pie, egg roll, doughnut, etc.), sweets (like cheese, ice cream, etc.), and other dishes like fried rice, cakes, etc.) are liked and frequently consumed by children and adolescents even when compelled.

The result in Table 5 revealed that the non-spicing of fast food with vegetables makes it unhealthy leading to weight gain, artery pains, heart attack, and other health issues regularly noticed on adolescents consuming fast food. This finding is in agreement with the views of Eze, Oguonu, Ojinnaka and Ibe (2017) emphasized that the presence of vegetables and fruits to any food, meal or fast foods increase the of source of carotene, ascorbic acid, iron, calcium, vitamins, protein, carbohydrates, antioxidants, low fiber, anti-nutrients which provides the nutritional support, health, and sustenance for adolescents against malnutrition, alongside, diseases like obesity, artery pains, and other health problems that adversely affects their normal growth, development, and wellbeing (Olusanya, 2010).



## 5. Conclusion

The study concludes that the nutritious, pleasant, convenient, easy to eat, appetizing and tasty nature of fast food enhance their preference and regular consumption of fast foods even when compelled by their parents and caregivers who are unable to cook at home. However, the non-spicing of fast food with vegetables makes it unhealthy and lacking the antioxidants, micronutrients and nutrients that will prevent weight gain, artery pains, heart attack, obesity as health issues regularly noticed on adolescents consuming fast food.

## 6. Recommendations

- 1) Nutritionists and dieticians should encourage parents and caregivers to consume nutritious, pleasant, appetizing and tasty fast foods especially during school hours.
- 2) Parents and caregivers should endeavor to complement home cooked foods with fast foods to enhance adolescent's health.
- 3) Nutritionists should encourage families/people to engage in the production of nutritive organic fast foods spiced with vegetables enhance the nutrition, health, and physical development of the adolescents in both at home and in the school.
- 4) The present administration's "school feeding programme" should be sustained as an innovative strategy to both supports the feeding of adolescents with healthy fat foods.
- 5) Parents and caregivers should ensure that they spice the fast foods given to their children (otherwise adolescents) with vegetables which increase the antioxidants, micronutrients and nutrients that will prevent weight gain, artery pains, heart attack, and other health issues.

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