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# GOVERNMENT FEEDING PROGRAMME AND REDUCTION OF HUNGER: AN ANALYSIS OF PUBLIC HEALTH NUTRITION AMONG ADOLESCENTS IN MAIDUGURI METROPOLIS OF NORTH-EASTERN NIGERIA

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This study assessed the impact of government feeding programme on reduction of hunger among adolescents otherwise referred to as secondary school students in Maiduguri metropolis of North-Eastern Nigeria. The population for this study comprised day public secondary schools in Maiduguri, Borno State, with a total population of nine thousand three hundred and thirty eight (9,338) students. Five public secondary schools were selected using purposive sampling technique. The sample of 934 students was selected using simple and stratified random sampling techniques. The instrument used for data collection was a self-developed questionnaire on government feeding programme among students in Maiduguri. The response mode for the instrument was a modified four points Likert type response mode of strongly agree, agree, disagree and strongly disagree. Descriptive statistics of frequency counts, and percentage scores was used to answer the research question, while, Chi-square test was used to test the hypothesis at 0.05 level of significance. The results showed that the school feeding programme in the state does not reduce or satisfy hunger due to inconsistency or irregular availability of school meals. Based on the findings of the study, it was recommended that Borno State Government should intensify efforts to ensure proper implementation and funding of School Feeding Programme in the state. Parents should also encourage their children to come to school regularly so that they would not miss their own ration of school meals. Furthermore, Government should employ qualified food scientists, nutritionists, dieticians and caterers to assist in running the programme to make them responsible for the purchase of needed food items to be cooked in schools. Donor agencies and stakeholders in education should ensure that schools have constant supply of food through committed food distribution channels so as to ensure that the children do not go hungry.

**Keywords:** Reduction, Hunger, School, feeding, Programme, Students, Government.



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# Introduction

School feeding is the provision of food on site or to take home, or the provision of food to school children. In other words, it is the provision of food to school children. The programme differs from country to countries, but they can be classified into two main groups based on their modalities. The first group is the in-school feeding programme where children are fed in school; and the second group is the take-home rations where families are given food if their children attend school. School feeding programmes are designed to provide food to school children in order to maintain and improve their physical, mental and psycho-social

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health, as well as to improve school attendance (Sullivan, 2002). School feeding programmes are powerful instruments for achieving many multi-sectional benefits such as education, poverty reduction, nutrition and health (Broca & Stamouli, 2003).

Adequate nutrition in diet is one that contains all the food substances in the correct proportions to keep the person in a state of good health. Such a diet must contain carbohydrates and fats sufficient to provide the energy for all the activities of the person concerned. Protein must be included for the necessary growth and repair of tissues (Benton, 2001). Although growing children need more proteins, no diet is complete without the protective foods which prevent deficiency diseases. These are mainly the foods rich in mineral salts and vitamins. The adequate nutrition in diet must also include water and roughages. An easy and sure way to ensure that the essential nutrients are included in a diet is to use the four basic food groups as a guide when planning meals. Each of the food groups serve to supply a specific food type. Food groups are milk group, meat group, cereal group and vegetable group. School children require optimal nutrient intake to meet the basic needs of growth and development. However micronutrients intake may also play an important role in chronic disease risk (Willet, 1994; Kallman, 2005); and nutrient intake recommendations that take into account amounts that may be associated with disease risks. Nutrient inadequacy or particular dietary pattern during childhood may be associated with adverse health outcomes during childhood, adolescence and adulthood (Law, 2000). Diets high in whole grains, lean meat, fish, fresh vegetables and fruit have a low energy density and a high content of vitamins and minerals (Ledikwe, Blanch & Khan, 2006). In many epidemiologic studies, their consumption has been associated with better health (WHO, 2003). Early malnutrition and/or micronutrients deficiencies have been linked to poorer cognitive functioning (Leslie, 1990; Worrobey, 1999), short term hunger was found to affect attention and interest in school children (Wilkins, 1983, in Lavinger, 1996).

School feeding programme originated in the United Kingdom and United States in the 1930s, with the explicit aim of improving the growth of children (Richter, Griesel & Rose, 2000). In the United Kingdom, a programme that subsidized milk for school children was initiated in 1934 and milk was provided free afterwards (Baker, Elwood, Jones, Hughes & Sweetnam, 1997). School feeding was introduced in South Africa in which the programme was based on supplying free milk to white and coloured school children in the early 1940s. Many countries have practiced and are still practicing one form of school feeding programme, for example, in 2004; the World Food Programme alone had school feeding *Copyright* © 2017, Scholarly Research Journal for Interdisciplinary Studies

programmes in 72 countries covering 16.6 million school children (World Food Programme, 2005).

The goals of school feeding programmes may differ from one country to the other but often include relieving short term hunger, improving micro nutrients status, growth, cognition and academic performance (Levinger, 1986; Allen, 2001). In developing countries however, school feeding also aims at increasing school attendance and enrolment and to encourage students to stay in school. Proponents of school feeding programmes point to a variety of logistical, empirical and moral factors that suggest the need for the programme. The school is, in principle, an important setting where health and education interventions can be implemented. School feeding programmes in principle improve educational outcomes such as increasing the number of years a learner will spend in school (Bennet, 2003).

In realization of the central role of nutrition to education, the Federal Government of Nigeria in collaboration with New Partnership for African Development (NEPAD), World Food Programme (WFP), United Nations International Children's Fund (UNICEF) and other development partners, introduced the Home Grown School Feeding and Health Programme (HGSFHP. The programme was launched on Monday, 26<sup>th</sup> September, 2005 (Akande & Alayande, 2011). The overall goal of the programme in Nigeria is to reduce hunger and malnutrition among school children and enhanced the achievement of Universal Basic Education. The primary objective of the programme is to reduce hunger among Nigerian School children. Federal Government of Nigeria pioneered school feeding programme for secondary schools which serves as working guide for all the states of the federation. According to Vanguard News (2014), the programme was re-initiated in 2004 through the Universal Basic Education (UBE) Act. In April 30<sup>th</sup>, 2012, it was overhauled and rebranded. At the flag off of the official commencement of the free feeding programme by Governor El-Rufai of Kaduna State on January 18, 2016 at Aliyu Makama LEA Primary School, Barnawa, South local government area of the state, the governor unequivocally stated that the free school feeding programme was going to be among other benefits of providing education and ensuring that every child have access to basic nine years of free education notwithstanding the financial capability or otherwise of his or her parents. The governor declared a state of emergency in the educational sector in the state and went ahead to declare free education, free feeding and free uniform for primary school and secondary school children. This singular act saw to the increase in enrolment of students and pupils in government schools (Vanguard News, 2016). Borno state government just like many other states in Nigeria introduced school Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies

feeding programme to public institutions in the state. The school feeding programme in Borno state started way back in the 1970s during the military era. In the 1970s, most of the Borno state schools were boarding and feeding was done in the schools. Most schools later became day schools and feeding was not provided. The recent school feeding system in the state was introduced by Governor Kashim Shettima, who inaugurated a 19-man committee on the resuscitation of School feeding programme in the state on March 14, 2013. The Governor offered free meals and uniforms to all public school students who return to the classroom as part of its campaign to get children to defy Boko Haram. The government essence of establishing the program is to encourage enrolment, alleviate short time hunger, increase children's abilities to concentrate, learn and ability to perform specific tasks especially for undernourished and internally displaced children (Vanguard News, 2014). Precisely in Maiduguri, the programme was not continuously sustained by the previous governments in the state. A great deal of money is invested in these programmes but apparently no systemic investigation has been carried out to determine the impact of these feeding programmes on reduction of hunger.

## **Materials and Method**

The design adopted for this study was a descriptive survey method. The target population for this study comprised of day public secondary schools in Maiduguri, Borno state, with a total population of nine thousand three hundred and thirty eight (9,338) students. Purposive sampling was used to select five public schools on the basis that they are the only schools that run feeding programme in the state. A sample of nine hundred and thirty four (934) students was selected representing 10% of the population served as sample. Stratified random sampling technique and simple random sampling technique were used to select the sample. The students were stratified according to their levels. The procedure involved the use of fish bowl method. A self-developed questionnaire containing items on Impact of government feeding programme among secondary school students in Maiduguri was used for this study. The response mode for the instrument was a modified four points Likert type response mode of strongly agree, agree, disagree and strongly disagree. Descriptive statistics of frequency counts, and percentage scores was used to analyse the research question. Chisquare test was used on the hypothesis at 0.05 level of significance to analyse data.

### **Results**

**Research Question:** Does government feeding programme reduce hunger among secondary school students in Borno State?

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Table 1: Government feeding programme and the reduction of hunger

N = 930

S/N	Statement	Response Categories					
		SA(%)	A(%)	DA(%)	SDA(%)		
1.	I am served food regularly	100(10.8)	375(40.3)	420(45.1)	35(3.8)		
2.	I am served meal two times per day	75(8.1)	75(8.1)	759(81.6)	21(2.2)		
3.	Food served in school satisfy hunger greatly	38(4.1)	95(10.2)	626(67.3)	171(18.4)		
4.	School feeding is better than the food I get at home	69(7.4)	99(10.6)	459(49.4)	303(32.6)		
5.	School food is always served at the appropriate time	14(1.5)	100(10.8)	681(73.2)	135(14.5)		
6.	I would like the feeding programme to continue because food served satisfy hunger	4(0.4)	900(96.8)	12(1.3)	14(1.5)		

Table 1 shows how government feeding programme reduces hunger in public secondary school students in Borno State. 100(10.8%) respondents strongly agreed and 375(40.3%) agreed that food were served regularly, 420(45.1%) respondents disagreed and 35(3.8%) respondents strongly disagreed that they are served food regularly, 75(8.1%) respondents strongly agreed and 75(8.1%) respondents agreed that they were served meal two times per day, 759(81.6%) respondents disagreed and 21(2.2%) respondents strongly disagreed that they were served meal twice a day. 38(4.1%) respondents strongly agreed and 95(10.2%) respondents agreed that the food served in school satisfy hunger greatly, 626(67.3%) of the respondents disagreed and 171(18.4%) respondents strongly disagreed that school food satisfy hunger. 69(7.4%) respondents strongly agreed and 99(10.6%) respondents agreed that school feeding is better than home feeding, 459(49.4%) of the respondents disagreed and 303(32.6%) respondents strongly disagreed that school feeding is better than the food they eat at home. 14(1.5%) respondents strongly agreed and 100(10.8%) respondents agreed that school food is always served at the appropriate time, 681(73.2%) of the respondents disagreed and 135(14.5%) respondents strongly disagreed that school food is always served at the appropriate time. 4(0.4%) respondents strongly agreed and a greater number of respondents 900(96.8%) agreed that they would like feeding programme to continue because it satisfies hunger while 12(1.3%) respondents disagreed and 14(1.5%) of the respondents strongly disagreed that they would like feeding programme to continue because food served satisfy hunger.

**Hypothesis** (**Ho**): Borno State Government School feeding programme do not significantly reduce hunger among secondary school students.

**Table 2:** A summary of Chi-square  $(\chi^2)$  test on the government feeding programme on reduction of hunger among secondary school students in Borno State.

N = 930

Hunger Reduction	SA	A	DA	SDA	Total	d f	$\chi^{^{2}}$	X <sup>2</sup> Cri t	P-val	Decisi on
Reduction.	7(3.60)	164(166.07)	10(8.90)	16(18.43)	197			7.815	0.1965	*Retai ned
No reduction.	10(13. 40)	620(617.93)	32(33.10)	71(68.57)	733	3	4.683			
Total	17	784	42	87	930					

 $\chi^2$ , df 3 = 7.815 (P>0.05)

Results of Chi-square ( $x^2$ ) analysis in Table 2 shows that the  $\mathcal{X}^2$  value 4.683 is less than  $x^2$  critical which is 7.815 at p-value 0.1965 is greater than the significance level of 0.05 with degree of freedom 3 (4.683<7.815,p=0.19650>0.05,df.3). The null hypothesis is retained. This implies that the state government feeding programme does not significantly reduce hunger among secondary school students in Borno State.

#### **Discussion**

Table 1 shows the outcome of this research revealed that Borno State government school feeding programme do not significantly reduce hunger. To this regard, the result is in concordance with Hicks (1996) who explained that School feeding programmes properly targeted impact on short term food security. Short term food security reduces hunger and enhances protein, energy and micronutrient status of students. Ritcher, Rose and Griessel (1997) who stated that the alleviation of short term hunger using breakfast in school have effect on cognitive functions such as memory and efficiency of information processing. Also, WFP (2007) reported locally produced food used for school lunch to satisfy hunger through WFP provides fortified food rations to complement the nutritional value. More so, United Nation (2005) ascertained that the Millennium Development Goals (MDGs) number 1: which is to eradicate or reduce hunger in school children will go a long way in encouraging them to go to school and United Nation Hunger Task Force (UNHTF) will help to achieve school feeding programme (SFPs) with locally produced foods rather than imported food. Also, Martens (2007) is of the view that school feeding programme could increase school attendance if hunger is reduced.

Table 2 also indicated that state government feeding programme does not significantly reduce hunger among secondary school students in Borno State. The result is also in consonance with a study done in South Africa by Labadrios (1999) indicated that Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies

approximately one out of five rural and urban black secondary school children as well as urban coloured secondary school children do not eat breakfast before going to school and so they feel hungry as a result of it, he suggested that breakfast in school will reduce hunger and improve their nutritional requirements thereby providing them with energy. Granthan-McGregor, Chang & Walker (1998) who reported that school feeding programmes are powerful tools for alleviating day-to-day hunger pains, and suggested that students should be given daily breakfast in school to improve their scholastic achievement. In addition, Jamison and Leslie (1990) opined that targeted that relieving short term hunger should focus on providing breakfast or a small snack shortly after students arrive at school. This result is contrary to the report that food distribution programme including school feeding are not always implemented sufficiently to show beneficial effects to problems with regards to supply, administration, storage and delivery inter alia. Therefore, the school feeding programme in the State does not reduce or satisfy hunger due to inconsistency or non-regular availability of school meals

#### Conclusion

Based on the findings and within the limitation of this study, it was found out that Borno State Government School Feeding Programme did not reduce hunger which was caused by non-regular availability of school meals, inconsistency, poor project implementation and oversight functions, lack of qualified personnel and adequate monitoring agencies, poor food quality and quantity. Therefore, Borno State Government needs to sit up to its responsibilities to make the School Feeding Programme successful.

#### Recommendations

Based on the conclusion made, the following recommendations have been advanced:

- 1. The Borno State Government should intensify efforts to ensure proper implementation and funding of School Feeding Programme in the state.
- 2. Parents should encourage their children to come to school regularly so that they would not miss their own ration of school meals.
- 3. Government should employ qualified food scientists, nutritionists, dieticians and caterers to assist in running the programme and make them responsible for the purchase of needed food items to be cooked in schools.
- 4. Donor agencies and stakeholders in education should ensure the schools have constant supply of food through committed food distribution channels so as to ensure the children do not go hungry.

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