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Research Article

Intake of Protein Food Item: A Major Aspect of Food Security among Pre-Primary Pupils in Oju Township, Oju Local Government Area of Benue State, Nigeria

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Abstract

In this study, intake of protein as a measure of food security among the pre-primary pupils in Oju township of Oju local government area of Benue State was investigated. The study population was made up of one hundred (100) respondents randomly selected in Oju township. The collected data were analyzed using descriptive statistic of mean and standard deviation. findings showed that the pupils in the study area were initially feed with accepted meals at acceptable level of protein derived from beans, eggs, milk, fish, meat, vegetable and fruits at home and school. Furthermore, the health and wellbeing of the pupils may suffer because of the decrease in the ratio of these same Sowers of protein with the hike in the prices of food stuff. It was therefore recommended that the government should help to reduce and control prices of food stuff to ensure their affordability to parents. parents should form welfare schemes which could aid in the purchase of food stuff at cheaper whole sale prices and get them shared among members this will go a long way to safe guard sustainable family food security.

Keywords: Protein, Pre-primary pupil, Food security, Family, Early childhood education.

Introduction

The pre-primary pupils are early school children of age range of three to five years (3-5 years) who are subjected to part of early child-rearing experiences provided naturally for all children in a formal school setting (Abubakar and Saa'd, 2012). Schooling according to the 20th century renowned educator Farrant

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(1980) is a form in which education is provided, while education describes the total process of human learning by which knowledge is impacted, faculties trained and skills developed. Other factors that have influence on the developing child include the family, community, media and polities.

Before the introduction of western education, families traditionally brought their children along to vocational activities, ensuring their holistic care, development, security, and education. With the advent of formal schooling and the rise of professional fields offering white-collar jobs, parents, both men and women, began working outside their homes and communities. This shift led to children being left in the care of others. Furthermore, women moved away from solely being homemakers within their communities to engaging in business ventures that required travel outside their villages and towns. This transition marked a significant change in traditional family dynamics and childcare practices.

These challenges paved way to the establishment of Day care centers and nursery schools to provide adequate care, education and security for the children aged 0-5years in organized settings while their parents went about their daily routines (Okosun and Onyeizu, 2012). History have it that early childhood development which was in the form of kindergarten and infant classes organized for children not yet ready for primary education. However, the grouping for instruction was not age-based then (Akpan and Olaitan,2003).

The idea of nursery or pre-school education seems to have reached Nigeria in 1948. According to Okosun and Onyeizu (2012) the proprietress of the children's home school in Ibadan decided to feed the children of highly placed Nigerians who were aged two years and above. This action-initiated school feeding programme for the parents who spend most of their times in offices and travelling out and around the country, and might have formed one of the bases of the government owned pre and primary school feeding programme of the administration of president Mohammed Buhari in 2016. Unfortunately, the programme was short lived because of fraudulent practices among the stakeholders.

Thus, parents solely have the responsibility to provide enough meals for their children and wards. The government all over the world has ever viewed both education and food as basic rights of children and prerequisite to healthy development of any child and consequently sustainable national development.

Proteins are used as fuel, especially during starvation and fasting However, their main functions is as a source of amino-acids which are raw materials for synthesis of new proteins for growth and repair of worn out cells and tissues and replacement of dead cells (Kent, 2000). The body cannot store excess amino-acids this implies that one needs a regular supply of protein in our diet which varies in amount with age (Kent, 2000; Shier and Lewis, 2010). Sources of proteins include meat, eggs, milk and cheese which are animal products. These are called complete proteins because they contain all the essential amino-acids.

Most plant proteins are incomplete because they lack one or more essential amino acids. Sources of plant protein include beans majorly however amino acids can be obtained in the meal made of variety of plant foods. For instance, eating a mixture of beans and maize or rice and beans. (Kurian, 2010)

Food security implies that all people at all times have physical, social and economic access to sufficient safe and nutritious food that meets their food preferences and needs for an active and healthy life (FAO, 2010).

Protein is a macronutrient that is vital for child growth and development. If a child is growing slowly or is small for their age, they may not be getting all the protein and nutrients needed for healthy growth.

Owoicho (2015) emphatically stated that children of food secured family with other healthy living conditions in place develop well, do better in mental and physical activities including work productivity and acquisition of skills and other values from the aging generation.

This work therefore seeks to investigate the present stature of protein intake of pre-primary pupils in Oju township, in Oju local government area of Benue State.

Research Questions

The following research questions guided the study

1. To what extent do you make proteinaceous food items available in your children meal?
2. What is the importance of protein intake to pre-primary pupils?
3. To what extent do the hike in prices of food in the market affect your children protein intake?

Research method

The design for the study was; The area of the study was Oju local government area. One hundred parents constituted the population. All of them constituted the sample for the study. The instrument used for data collection was research developed structured questionnaire titled “The protein intake of pre-primary pupils at school and at home questionnaire (PIPPSHQ)”. This was structured on four-point rating scale of very high extent, (VHE-4), High Extent (HE-3), Low Extent (LE-2) and Very Low Extent (VLE-1). The overall reliability coefficient of 0.88 the data collected were analyzed using mean and standard deviation. Mean values for statistical analysis 2.5 and above were accepted as positive while below 2.50 were rejected as negative.

Results and Discussion

The result was treated in accordance with the research questions.

The result in table 1 show that accept items 2,3,4,5 and 9, all other items obtained mean score above 2.50 mean benchmark. The result in table one (1) specifically show that eggs with 2.85 mean score, milk

with 2.93 mean score, vegetables with 2.70 means core, fruits with 2.93 mean score, fish with 2.71 mean score, vegetable with 3.00 mean score and beans with 3.00 mean score are proteinaceous food items included in children meal every week both in school and at home. Whereas nuts with 1.54 mean score, palm oil with 1.68 mean score and minerals with 1.55 mean score are protein food items that are not consumed in large quantity by children

Table 1. Mean response of parents on the extent to which proteinaceous food items are included in children's meal.

S/N	Items	Mean	Decision
1.	Beans	3.00	Accepted
2.	Eggs	2.85	Accepted
3.	Milk	2.93	Accepted
4.	Vegetables/Fruits	2.70	Accepted
5.	Fruit	2.71	Accepted
6.	Nuts	1.54	Rejected
7.	Palmoil	1.68	Rejected
8.	Vegetable oil	3.00	Accepted
9.	Fish/Meat	2.93	Accepted
10.	Minerals	1.55	Rejected
	Total	**3.04**	

Mean values: 2.5 and above accepted as positive. Below 2.50 rejected as negative.

Table 2. Mean responses of parents on the importance of protein in children's food intake

S/N	Items	Mean	Decision
1.	Protein can help to grow fast	3.00	Accepted
2.	Protein can boast children's immunity	3.31	Accepted
3.	Protein can act as protection to children lives	3.28	Accepted
4.	Protein can act as a defense to body during illness	3.25	Accepted
5.	Protein can help in fine skin development	3.41	Accepted
	Total	**3.31**	

Mean values: 2.5 and above accepted as positive. Below 2.50 rejected as negative.

The result in table 2 shows that all the items obtained mean score above 2.50 mean benchmark. The result specifically shows that protein can help in children's growth, boaster immunity, act as defense act

as skin protect etc. therefore with total mean score of 3.32 as shown in table 1, it implies that protein food items intake is important to the development of children in the pre-primary.

Table 3. Mean responses of parents on the extent to which hike in food price affect protein intake in their children's meals.

S/N	Items	X	Decision
1.	Eggs chop once in a day to once a week	3.04	Accept
2.	Bean intake drop in quantity in their meal	2.80	Accept
3.	Fish/meat consumption reduce drastically	2.78	Accept
4.	Fruits and vegetable are now twice a week	2.74	Accept
5.	Nuts are almost absence in their meal	1.48	Accept
	Total	**2.73**	

Mean values: 2.5 and above accepted as positive. Below 2.50 rejected as negative.

The result in table 3 shows that except item 5, all the other items obtained mean score above 2.50 mean benchmark. The result specifically shows that almost all the food items that are rich in protein dropped in quantity at consumption rate. Therefore, with a total mean score of 2.73 as shown in table 3, it implies that to a large extent parent know the values of protein food items but were constrained by prices in the market.

Discussion

The findings of the research questions in table one showed that proteinaceous food items are included in children's meal every day both at home and school menu this is because total mean score of 3.04 was shown in table 1, this finding collaborates the finding of Diehl and Ludington (2011)**.**

This study also found out that to a large extent parents confirmed the drop in proteinaceous food items quantity consumption rate as a result of hike in food item price generally in the market. Research shows that one in seven school-aged children do not meet their daily protein intake goals (Abbott Nutrition, 2018).

Protein deficiency causes tissue wasting, extreme weight loss and growth retardation, decrease the level of plasma proteins which in turn decreases the colloid osmotic pressure of the plasma resulting in fluids collected in tissues a condition called nutritional oedema. Furthermore, undernutrition impairs immunity, reduces physical and mental activity among school age-children. It extends school achievement and physical growth resulting in stunting. Stunted people do less physical work (Burgess, 2003).

According to Shier and Lewis, (2010) the body cannot store excess amino-acids implying that one needs a regular and adequate supply of protein in the diet which varies in amount with age. The decreasing quantity and quality of protein intake observed in this work is fulfilling of Burgess (2003) 's prediction that by 2020s, food insecurity and hunger will remain a problem in many places. Denga (2011) affirmatively stated that, improper feeding in school children expose them to social vices such as stealing, lying, bullying and in most cases, they are educationally disadvantaged.

Conclusion

This study has succeeded at finding out that protein intake of pre-primary pupils which are encouraging to high extent. Their importance in children development and growth cannot be emphasized there is drastic drop in quantity consumption per day and week which affect children intake of proteinaceous food, which is an earlier sign of food insecurity. School children particularly pre-primary pupils are in the developmental stage of growing and have high needs and are often hungry. Lucas and Gilles (2003) had earlier highlighted Hippocrates time-less advice to consider the effect of seasons to observe how men live, what they like, what they eat and drink or whether they love their work or not. Accordingly, a family is "food secure" if it has enough food to cover the nutrient needs of its members throughout the year. Family food security in a basic necessity for good nutrition of which protein requirements must be shared according to individual nutrient needs of which children of age 3-5 years must be in 26-30 grams on daily basis. Based on these results, the study recommends that Government should endeavor to reduce the cost of food items in the market. Parents are advice to supplement their menu with local sources of these proteinaceous food items and also form form welfare schemes which could aid in the purchase of food stuff at cheaper whole sale prices and get them shared among members this will go a long way to safe guard sustainable family food security. Additionally, teachers are to encourage the children to get adapted to new forms of protein sources in their locality.

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