



Journal

**NIGERIA ASSOCIATION
FOR PHYSICAL, HEALTH
EDUCATION, RECREATION,
SPORT AND DANCE**

JONAPHER. SD

Vol 3, No 2 November, 2012

DIET AND NUTRITIONAL HABITS OF PRIMARY SCHOOL PUPILS IN OJO LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA

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ABSTRACT

The study examined the diet and nutritional habits of primary school pupils in Ojo Local Government Area of Lagos State. 300 pupils from six primary schools in the area participated in the study. A validated self-developed questionnaire ($r=0.78$) was used for data collection. Data were analysed using percentage and chi-square statistics at 0.05 alpha level. Findings showed that food consumed by the pupils were not sufficient for promotion of good health, as they were not adequate for proper growth and body maintenance. Further findings indicate that pupils do not take their meals at the appropriate meal times, and their nutritional practices were not hygienic.

INTRODUCTION

Nutrients are the nourishing substances that are obtained from food. These essential substances are vital for growth and maintenance of healthy body throughout life. According to Wardlaw and Kessel (2002), for a nutrient to be considered essential, two characteristics are needed. First, its omission from the diet must lead to a decline in certain aspects of human health, such as the function of the nervous system. Secondly, if the omitted nutrient is restored to the diet before

permanent damage occurs, those aspects of human health hampered by its absence should regain normal function.

Children need specific attention focused on them; they need to grow in a stimulating environment and they also need a sense of security from their parents in terms of nutrition. Because of the reduced appetite of school-age children, planning a diet that meets their nutrient needs poses a great challenge to care-giver (Wardlaw and Kessel, 2002). The pre-school and school years are the best time for a child to start a healthful pattern of living and eating, focusing on regular physical activity and nutritious foods. Parents and other care-givers are role models. If they eat a variety of foods, the children will eat a variety of foods (Shamir and Fisher, 2000). Sherman (2000) believed that parents serve as primary role models and have the most influence on their child's dietary habits. Similarly, Celebuski and Fan-is (2000) asserted that parents are primarily the cause of nutritional habits in their children.

Poor eating habits and overweight are primary risk factors for coronary heart disease and type 2 diabetes. These diseases are major pediatric problems in that poor eating habits are generally acquired during childhood. The 2001 U.S Surgeon General's report on obesity identified American children as becoming increasingly more physically inactive and overweight, therefore at increasingly greater risk for developing type 2 diabetes, heart disease and other life style related diseases. In response to the Surgeon General's report, the "Be Fit Kid programme" was created in the U.S to improve the nutritional habits in elementary school children and their families (Bellizzi and Dietz, 1999).

Fisher and McGill (1997) stated that rigorous and ongoing research shows that arteriosclerosis begins in children and the extent of early arterial involvement is strongly associated with LDL-cholesterol levels. When started in childhood, diet restricted in components that elevate LDL cholesterol have the long term potential to increase the frequency of coronary artery disease later in adulthood.

Recent surveys of childhood nutritional intake have shown averages of 33% to 35% of total food energy intake coming from fat, with 12% to 13% of calories from saturated fat. Despite

improvements compared with intake patterns of previous decades, both of these values are higher than those of the diets administered. However, the elevations are relatively modest, so that often only minor changes in food selection and dietary habits are necessary to achieve recommended goals (Fisher, Horn and McGill, 2003).

It is obvious that good diet and nutritional habits are vital to healthy living; therefore it is important to ensure these in children right from their childhood. This study was designed to investigate diet and nutritional habits of primary school pupils in Ojo Local Government Area of Lagos State Nigeria.

METHODS

Three hundred pupils were selected from public primary schools in Ojo Local Government using purposive sampling technique. Greater numbers of them (56%) were females and they were within the age range of 6-12 years in primary four to six.

The main instrument for data collection was a self-developed structured questionnaire with two sections. First section was on demographic data of participants such as age, sex and class. Second section was developed on Yes and No alternative response that sought information on diet and nutritional habits of pupils. The questionnaire was given to three professional colleagues for content validity. It was also subjected to test-retest reliability method, the Pearson's Product Moment Correlation Coefficient gave $r=0.78$.

Two trained research assistants and the researchers visited the selected schools for administration of instrument. The consents of the school authorities and the participants were sought before administration. Participants were seated in empty classrooms during break times where they were served with copies of the questionnaire. The participants were guided by the researchers and their assistants in filling the questionnaire. 100% retrieval was achieved in the administration of questionnaire.

Data collected were coded and analyzed using percentage and chi-square statistics and inferences were made at 0.05 alpha level to solve the problem of the study.

RESULTS AND DISCUSSION

Table 1: Percentage and chi-square results on pupils' diets and health

Variable	Yes (%)	No (%)	df	X ² -cri	X ² -cal
Types of food consumed by pupils and promotion of good health	136.4	163.6	1	3.84	**2.47
	(45.5)	(54.5)			
Adequacy of food consumed by pupils for growth and body maintenance	141.7	158.3	1	3.84	** 0.92
	(47.2)	(52.8)			

*** Not significant at 0.05*

Results in table 1 show that fewer pupils (45.5%) consumed good food that promotes good health. Chi-square result on the data (2.47, $P > 0.05$) indicates insignificant consumption of food that promotes health among the pupils. Results in the table further show that fewer pupils (47.2%) consumed adequate foods that promote growth and proper maintenance of body. Chi-square result (0.92, $P > 0.05$) also indicates inadequacy of foods for growth and body maintenance among the pupils. Guarino (2002) reported similar findings in the United State of America that children live in homes with limited access to sufficient food supply. Food and Agricultural Organization of the United Nations (FAO, 2003) reported that good number of studies however revealed negative effects of consumption of inadequate foods and foods that are poor in

nutrients among children. According to some estimates, poor food consumption is a significant factor among the nearly 13 million children who die every year from preventable diseases and infections, such as measles, malaria, diarrhea and pneumonia; or from some combination of these (Food and Agricultural Organization of the United Nations, FAO, 2003).

In Zambia, Hautast, Tolboom, Kat-wembe, Musonda, Nwanakasale, Van-Staveren, Van'teHof, Saverwein, Willems and Monnens (2000) reported highly prevalent stunting among preschool children and this was directly linked with prevalence of malnutrition among the children. And in Nigeria, Walter, Scariano, Easington, Polaco, Hollis, Dasgupta, Pam and Glew (1997) observed moderate malnourishment among children between the age of 10 months and 7 years old in the Northern part of the country. In the Western part of Nigeria, Lawoyin, Onadeko and Kolude (2003) reported that morbidity and mortality rates associated with malnutrition are high among children from the low socio-economic class.

Table 2: Percentage and chi-square results on pupils' nutritional habits

Variable	Yes (%)	No (%)	df	X ² -cri	X ² -cal
Pupils taking meals at the appropriate times	143.6	156.4	1	3.84	**.055
	(47.9)	(52.1)			
Hygiene level of pupils' nutritional practice	133.2	166.8	1	3.84	** 3.76
	(44.4)	(55.6)			

*** Not significant at 0.05*

Result in table 2 shows perception of respondents that fewer pupils (47.9%) eat their meals at the appropriate time. Chi Square result ($X^2 = 0.55$, $p > 0.05$) indicates that the pupils do not take their meals at the appropriate time. Result in the table further shows that fewer pupils (44.4%)

are hygienic in their nutritional practices. Chi Square result (3.76; $p>0.05$) indicates that pupils' nutritional practices are not significantly hygienic.

The finding about inappropriate timing of meals among children may not come as a surprise; this could be as a result of inadequacy of food consumed by pupils that is reported in table 1 of this study. Getchell, Pippin and Varnes (1987) stressed the importance of proper timing of meals as healthy nutritional practices. It is important that children take their meals within the appropriate times of breakfast (6:00 am – 8:00 am), lunch (12:00 pm – 2:00 pm) and dinner (7:00 pm – 9:00 pm).

It is however essential that children learn and practice hygienic and healthy nutritional behaviours. Jodkowska (2001) found out in a study that it is very difficult to correct bad eating habits among children if they have started on a wrong footing. Studies have pointed out that parents have significant roles to play in their children's nutritional practices, as they stand as models for these children (Sherman, 2000; Celebuski and Farris, 2000). Indeed, Celebuski and Farris (2000) pointed accusing fingers at parents that they are primarily the cause of poor nutritional practices among children.

CONCLUSION AND RECOMMENDATIONS

It is concluded in this study that primary school pupils in Ojo Local Government Area of Lagos State, Nigeria were perceived not to consume foods that promote good health, as most of their meals are inadequate for growth and proper body 'maintenance. Such meals are not taken within the appropriate times of meals and their nutritional practices are not hygienic. It is therefore recommended that the schools in collaboration with the Parents Teachers' Association (PTA) should educate parents on the importance of diet and nutrition and formation of proper nutritional habits in children early in life. This can be done through seminars and symposia. The Primary school curriculum for health education should be reviewed to further emphasise diet, food and nutrition. Teachers should also help in monitoring nutritional behaviours of pupils in schools. In addition, the Lagos State government's programme on provision of mid-day meal

for pupils in public schools of the State is in good direction. This programme should be sustained and monitored for proper implementation.

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