Practices Adopted by mothers in Selecting Food for their Preschool Children in Nsukka Urban

Ogbonnaya, E.K., Ugwu, E.I., Anowai, C.C.& Okoro, Josephine.Department of Home Economics and Hospitality Management Education
Faculty of Vocational and Technical Education
University of Nigeria, Nsukka

Corresponding author: ugwu.eunice@unn.edu.ng

Abstract

This study examined practices adopted by mothers in selecting food for their preschool children in Nsukka urban. Specifically, the study determine: points mothers consider in selecting food for their preschoolers, procedures mothers follows in selecting foods for their preschoolers and types of food mothers select for their preschoolers. Descriptive survey research design was adopted. The study was guided by three specific purposes and three research questions. population for the study was 658 mothers with preschool children. Simple random sampling technique was adopted to select 25 mothers with preschool children from eight preschools in Nsukka urban given a total sample size of 200 mothers with preschool children. Questionnaire was used for data collection. Data were analyzed using mean and standard deviation. Findings reveal 17 points mothers consider in selecting food foe their preschoolers. These include; aroma of the food after preparation, taste of the food after preparation, and children's acceptability of the food among others. Other findings are 11 procedures mothers adopted in selecting foods for their preschoolers. These include; determine food needs of the child, check nutrient composition of the food, and decide time of meal to be served among others. Further findings are 19 types of foods mothers choose for their preschoolers. These include; noodles, bread, rice, spaghetti, protein, fruits and vegetables and others. The findings suggest that preschool children need adequate diet with all the necessary food nutrients in their right proportion on a daily basis to avoid malnutrition. Food selection for the preschooler is of high priority in order to achieve proper growth and development.

Keyword: Food, Selection, Practices, Preschoolers, Mothers, Adoption.

Introduction

Preschool children are those children within the age bracket of three to five years. These children are still growing and developing physically, mentally, socially. They are also developing habits and preferences. It is also a period when children are being socialized to many life skills and habits such as sleeping,

washing, dressing, relating to people, eating and daily routine occasional activities (Brodribb, Fallon, Jackson, and Hegney 2010). This period is known as early childhood stage. Early childhood is a period of rapid growth and important phase for developing eating habits because the dietary behavior acquired during the early years of life may extend

to adulthood (Chandani, Marion, and Pam 2018). As children pass through many stages in life, their eating habits are being formed. This is transitional phase from infant to adult-type diet. It is important that their diet be high in nutrient dense foods. Poor nutrition during childhood is a major that impends the physical and mental development of children, and ultimately propagates the vicious cvcle malnutrition intergenerational (Agam et, al, 2020) and Olatidoye, et, al. 2011). Available reports indicate that malnutrition contributes to more than half of all under five childhood deaths throughout the developing world including Nigeria. This has been responsible directly or indirectly to about 60 percent of the 10.9 million deaths annually of which two third of these deaths. are often associated inappropriate feeding practices occurring during the first years of life {World Health Organization (WHO) 2018; child is UNICEF, 2018). Preschool sometimes described as a difficult child because the child's appetite is unstable (Pangborn et, al. 2008; Jemide et, al 2008). This emphasizes the importance of careful selection of foods that meet the nutritional needs of the preschoolers.

Preschool children need adequate for nutrients proper growth and development such calcium, as vitamins, iron and water. For instance, they need calcium for development of strong bones and also to prevent the development of osteoporosis. They also require about 500 - 800mg calcium each day. Fat is also needed for sufficient calorie (United Nations International Children Emergency Fund, UNICEF, 2018). Water is needed to regulate body

functions such as digestion and absorption of food in the body.

Several factors determine the quality and quantity of food available to a child in any given household. These factors include, among others, ability to secure food, mother's level of knowledge of food and nutrition (August, et, al 2002; Reiher and Mohammadnezhad 2017). A mother that can secure food and has good nutrition knowledge will provide adequate meal to the child.

Mothers are the major care providers for the children during the first five years of life (WHO, 2018). They select foods needed for the children. selecting foods for children, knowledge about dietary needs is essential for good health and overall nutritional status especially when resources are limited. Sometimes mothers may lack knowledge and skills to select the right amount and types of foods needed by children to meet their dietary needs. Available reports indicate that many mothers of preschoolers in Nsukka urban lack the knowledge of nutrition they need in order to select adequate food for their children (Ezeanwu, 2013 Okechukwu 2014). Many such mothers depend on processed foods while others replace main meal with snacks. Some of the foods these mothers feed these children with include: noodles, bread and soft drink, okpa and soft drink, biscuits and soft drink, abacha, rice and stew, jollof rice, spaghetti and yam among others (Okechukwu, 2014). Furthermore, Ezeanwu (2013) explained that some of the mothers over cook the vegetables and even cook some fruits for instance in the case of corn pudding(Igbagwuoka) and (Agharahaoka), thereby destroving some of the important vitamins such as vitamin C. Eze and Njoku (2018), noted that vitamin C is very important in the food content for children because of its ability to fight against infections. Some mothers in the study area even do not include vegetables in the preschoolers' meal, reasons being that these children do not like eating vegetables which is full of mineral and vitamins that is required at crucial stage for brain development and other normal body functioning (Okechukwu, 2014).Although Nsukka has a variety of food (vegetables) that are nutritious but choosing and preparing the right food has been the major problem. Most mothers in Nsukka urban do not select the right food for their preschool children and the methods used in preparing the meals sometimes are not proper. All these could result to some preschool children stunted growth in the study area (Ezeanwu, 2013). It therefore becomes necessary to study the practices adopted by the mothers in selecting food for their preschoolers with a view to evolving ways of improving such practices.

Purpose of the Study

The main purpose of this study was to investigate the practices adopted by mothers in selecting food for their preschool children in Nsukka urban. Specifically, the study identified;

- 1. points mothers consider in selecting food for their preschoolers.
- 2.procedures mothers follow in selecting food for their preschoolers
- 3.types of food mothers select for their preschoolers.

Research Question

The following research questions guided the study;

- 1. what are the points mothers consider in selecting food for their preschoolers?
- 2. what are the procedures mothers follow in food selection for their preschoolers?
- 3. what are the types of foods that mothers select for their preschoolers?

Methodology

Design of the Study: The study adopted a descriptive survey design:

Area of the Study: The study was carried out in Nsukka Urban in Nsukka Local Government Area (LGA) which is made up of 25 autonomous communities. The communities are divided into three areas. There are many mothers with preschool children. Some of the primary school in the communities have primary schools with preschool sections, with preschoolers. There were a total of 57 registered preschool centres in the area of the time of the study.

Population for the Study: The population for the study was made up of all mothers with preschool children in the area of the study. The estimated number of the mothers was 658. Some of them were literate while others were illiterate.

Sample for the Study: Multistage sampling technique was used. At the first stage four communities that had high numbers of preschool centres were purposively selected from the communities. At the second stage, two preschool registered centres randomly selected from each of the four communities to give a total of eight preschool centres. Thereafter. convenience sampling techniques was used to select 25 pupils from each of the selected eight preschool centres to give a sample of 200 preschoolers. The mothers

of the 200 preschoolers formed the sample for the study.

Instrument for Data Collection: A

structured questionnaire was used to collect data. The it was developed based on the research questions and literature reviewed for the study. The questionnaire was broadly categorized into two parts 1 11. Part 1 provided general information about the background of the respondent while Part 11 was made of three sections A - C designed to obtain information on food selection practices of mothers for their preschool children. Five-point responses scale of: Very Often (VO) 5 points, Often (O) 4 points, Sometimes (S) 3 points, Not Very Often (NVO) 2 points and Not Often (NO) 1 point. The instrument was validated by three experts, in Food and Nutrition. Reliability of the instrument was established using Cronbach Alpha, and a coefficient of 0.82 was obtained.

Method of Data Collection: A total of 200 questionnaire copies of administered to respondents by hand. In the case of non-literate respondents, the questionnaire served as interview schedule. The researcher and assistant read out the questionnaire items to the illiterate mothers and completed the responses for them accordingly. Only 196 copies of the questionnaire were properly completed and retrieved. This gave a return rate of 98 percent.

Method of Data Analysis: The data were analyzed using mean and standard deviation. A `cut-off point of 3.50 on based of 5-point scale was used for decision. This implies that any item with a mean value of 3.50 and above (

was "agreed upon" by the respondents while any item with a mean value below 3.50 (was regarded as disagreed upon" by the respondents.

Findings

Table 1: Mean Responses on Points Mothers Consider in Food Selection for Their Preschoolers

S/N	Points Mothers Consider in Food Selection for their		SD	R
	Preschoolers			
1	Number of children in the family	3.41	1.18	Disagree
2	Time of the meal	3.60	1.29	Agreed
3	Children's acceptability of the food	3.70	1.13	Agreed
4	Health condition of the child	3.60	1.29	Agreed
5	Mineral and vitamin content of the food	3.74	1.21	Agreed
6	Taste of the food after preparation	3.68	0.97	Agreed
7	Colour of the food after preparation	3.43	1.27	Disagree
8	Texture of the food after preparation	3.48	1.29	Disagree
9	Aroma of the food after preparation	3.90	1.13	Agreed
10	Ability/skill required in the food preparation	3.61	1.14	Agreed
11	Types of vegetables to be used in the food preparation	3.61	1.16	Agreed
12	The cooking method	3.66	1.25	Agreed
13	Type of protein to be include in food preparation	3.69	1.22	Agreed
14	Garnishing ingredients	3.66	1.16	Agreed
15	Nutritive value of food	1.68	0.86	Disagree
16	Safety of food	3.58	1.03	Agree

17	Cost of food items	3.56	0.74	Agree
18	Time spend in food preparation	3.71	0.84	Agree
19	Availability of food	3.67	0.88	Agree
20	Food that children need	3.59	0.84	Agree
21	Food that other children like	3.76	0.89	Agree
22	Culture	2.34	2.00	Disagree
23	Religion	1.99	0.49	Disagree

Note: = Mean; SD = Standard Deviation; R = Remark

Table 1 shows findings on points mothers considered in food selection for their preschoolers. The Table reveals that 17 items had a mean score ranging from 3.56 to 3.90 (.................. This implies that the 17 items were agreed upon by the respondents as points to be considered in

food selection for preschoolers. While item 1, 7, 8, 15, 22 & 23 had mean score of 3.41 to 3.48 (implying that the items were disagreed as points to be considered in food selection for preschoolers.

Table 2: Mean Responses on Food Selection Procedures Adopted by Mothers in Nsukka Urban

S/N	Food Selection Procedures		SD	R
1.	Determine food needs of the child	3.50	1.25	Agreed
2.	Plan for food needs of the child	3.72	1.08	Agreed
3.	Check for food items that are available at home	3.82	1.06	Agreed
4.	Make a food list	3.74	1.20	Agreed
5.	Purchase necessary food items	3.80	1.07	Agreed
6.	Decide on meal preparation procedure	3.70	1.24	Agreed
7.	Decide time of meal preparation	3.61	0.99	Agreed
8.	Decide time of meal to be served	3.99	1.00	Agreed
9.	Determine the shelf life of the food to prepare	3.92	0.65	Agreed
10.	Check the nutrient composition of the food,	3.79	1.76	Agreed
11.	Consider the age of the child	2.33	1.01	Disagreed
12.	Consider the money available	3.86	1.09	Agreed

Note: = Mean; SD = Standard Deviation; R = Remark

Table 2 shows findings on procedures for food selection followed by the mothers. The Table reveals that eight out of the 11 items had each a mean score ranging from 3.5 to 3.99 (. This implies that the items were "agreed upon" by the

respondents as procedures for food selection for preschoolers. Item No. 11 with a mean score of 2.33 (was "disagreed by the respondents as not a procedure for food selection for preschoolers.

Table 3: Mean Ratings of Respondents on the Types of Foods Mothers Choose for Preschool Children

S/N	Types of Food Mothers Select for Preschoolers		SD	R
1.	Rice (Oryza sativa)	3.80	0.98	VO
2.	Spaghetti(Cucurbita pepo)	3.60	0.92	VO
3.	Maize (Zea mays) with Vegetables	2.55	0.87	VO
4.	Plantain (Musa x paradisiaca)	2.00	0.98	NO
5.	Yam (Dioscorea)	2.20	0.60	NO
6.	Bread (Triticum aestivum) and Tea	3.65	1.06	VO
7.	Garri (Manithot esculenta) and Soup	3.78	0.62	VO
8.	Cassava fufu (Manihot esculenta) and soup	3.82	0.58	VO
9.	Cereals	1.99	0.50	NO
10	Sweet (Ipomoea batatas)	1.10	0.6	NO
11.	Irish potatoes(Solanum tuberosum)	1.20	0.60	NO
12.	Water yam(Dioscorea alata)	1.30	0.72	NO
13.	Noodles	4.00	1.88	VO
14.	Beans (Phaseolus vulgaris)	3.86	0.97	VO
15.	Plantain and Beans (Musa x paradisiaca/ Phaseolus vulgaris),	1.99	0.42	NO
16.	Rice and Beans (<i>Oryza sativa</i> and <i>Phaseolus vulgaris</i>)	1.88	0.54	NO
17.	Yam and Beans (Dioscorea and Phaseolus vulgaris)	1.66	0.48	NO
18.	Fruits	1.99	0.65	NO
19.	Vegetables	1.58	0.88	NO

Note: = Mean; SD = Standard Deviation; VO = Very Often; NO = Not Often; R = Remark

Table 3 shows that seven items out of nineteen (19) items had a mean score ranging from 3.60 to 4.00. All these means are above the cut-off point 3.50 (

. They are therefore termed as often chosen foods for preschoolers. This shows that seven (7) out of the 19 items were agreed upon by the respondents as the foods that are often chosen for preschool children in Nsukka Urban. The thirteen items - indicating that noodles scored the highest mean of 4.00. Therefore, the respondents saw this as the adequate food to choose for preschool children in Nsukka Urban. The table also shows that thirteen (13) items out of nineteen (19) items had a mean score of 1.10 to 2.55. This shows that these items were not often chosen by the mothers respondents, of preschool children in Nsukka Urban. Also, the degree of agreement in item 11 which was 1.10 was the least mean in the table.

Discussion of Findings

The study revealed that there are various points (factors) which were to a high extent perceived as determinants of food selection practices by mothers for their preschool children. The study revealed that factors such as palatability (taste of the food), time spent in the food preparation, preparation method of the food, food that other children like, availability of food, food that children want, foods prepared by other mothers, colour of the food and cost of the food were to a high extent perceived as determinants of food selection for preschool children by their mothers. This

is in line with Ozdoğan, Ucar, Akan, Yılmaz, Surucuoğlu, Funda Cakıroğlu, & Ozcelik(2012), that skills in food preparation is a factor influences food selection. The findings revealed that most less healthy foods are often selected by mothers. Some of these less healthy foods include fried yam, akara, fried fish, biscuits, cornflakes and fried potatoes among others. These less healthy foods mostly selected by mothers preschool children can lead malnourishment of the preschool children. The revealed study also showed that time is one of the factors that influences food selection practices to a high extent. The time for preparing a balanced diet affects food selection practices by the mother. Lack of time for adequate diet preparing leads malnourishment of the preschool children. This finding is in consonance with Bevan (2011) who noted that mothers complain of time constraints as a result of not being able to fit everything into their day; in effect, making compromises were the only way many of them cope by giving preschool children any food available without considering the nutritional value.

The study further revealed that the mothers follow a procedure while selecting food for their preschool children. From the study, they agreed that making a list of the available foods is the first step to take followed by ascertaining the shelf life of the available foods. The nutrient composition of the food in line with the child's daily requirement is then identified. Next, the time of the day the food will be eaten will be ascertained followed by how long it will take to prepare the food. The cost of the food is then considered followed by the money available for the food. Finally,

how long it will take to prepare the food is considered. This finding is in line with the work of some authors(Ahia, 2012; Eze & Njoku, 2018), who highlighted that considering the protective materials (nutrients) in a food, money available and food availability are vital points in food selection. The mothers in this study however, disagreed that considering the age of the child is not a procedure mothers should take during selection. This contradicts the opinion of Ahia (2012) who revealed that food requirements of the different categories of individuals in the family varies just as their age varies. This highlights age as a factor in food selection procedure. This discrepancy may be attributed educational qualification of the respondents in the study area.

The findings of the study also revealed that there are about seven (7) types of food that preschool mothers give to their children. The foods given includes noodles, rice, spaghetti, garri and soup, cassava fufu and soup, bread and tea and sweet potatoes. This agrees with the findings of Agam, Anne, Philia, &Ogban(2020). The researchers found that the foods that were mostly given to preschool children are bread and tea (51, 42.5%), eba and soup (37,30.8%) and rice (27, 22.5%), for breakfast, lunch and dinner, respectively. The study revealed that the mothers had poor knowledge of body building foods and its importance for preschool children which the present study equally identified. These body building foods are not often given to preschool children which have resulted to ill health', stunted growth and eventually death. The present study is also in consonance with Unusa (2006) that mothers preferred bread (4.32 + 0.89)as against a decrease in preference for

milk and milk products (3.73 ± 1.03) for preschool children. The study revealed that carbohydrate-rich food, were selected in high extent while protein-rich food, fruits and vegetables were rarely selected as food by mothers for preschool children.

In the same vein, a study conducted by Sholeye, Akinpelu, Bankole & Diya (2016) revealed thata cross-section of women in South-Western Nigeria, found that foods such as beans, beef, cereals, cassava, and vam were not given to infants; rather, herbal concoctions were served to them. Similarly, Ekwochi, Osuorah, Ndu, Ifediora, Asinobi& Eke (2016) found that women refused feeding their young ones with snail, grass-cutter meat, and egg because of the belief that such foods would make the children to become sluggish, lazy, and predispose them to stealing. These perceptions led to the introduction of nutrition policies, plans, and interventions with the aim of caregivers' knowledge improving appropriate foods and feeding practices children. for their voung The interventions include protecting and advancing food and nutrition security in Yobe State; efforts to positively transform nutrition in northern Nigeria; improving maternal, newborn, and child nutrition in northern Nigeria; national policies on food and nutrition in Nigeria; National Plan of Action on Food and Nutrition (NPAN) in Nigeria; National Strategic Plan of Action for Nutrition (2014–2019); UNICEF implemented nutrition intervention programs; 2017 Nigeria Nutrition in Emergency Sector Response Plan; and 2018 Zero Hunger Initiative. More so, food supplementation, food fortification, and bio fortification of staple crops have been employed to address nutrient deficiencies among children and

mothers in Nigeria. Besides improving caregivers' nutrition knowledge, these policies and interventions are directed towards achieving the ambitions of the Nigerian dietary guidelines for preschool children.

Conclusion

Preschool children are children that are still growing and developing. For proper development, preschool children need adequate diet/meal at all times. Mothers of preschool children should prepare and give them food that contains all the food nutrients needed by the children more especially body building foods, since they are still growing. Processed food and carbohydrates should be given to the preschool children in the minimal. Again, fruits and vegetables should be given to preschool children by their mother, this will help to fight against infections which preschool children contacts easily. It can be seen that preschool children need adequate diet everyday with frequent fruits and vegetables in order to avoid the problem of malnutrition among the children. Conclusively, food selection for the preschooler is of high priority because adequate and quality food should be selected in order to achieve proper growth and development of the preschool child.

Recommendation

- 1. There should be proper and routine awareness by the governmental and non-governmental bodies on the role of nutrition on the preschool child.
- 2. The media (Tv and radio stations) should be involved in advocating healthy food during food selection for preschool children.
- 3. There should be awareness on the importance of the inclusion of fruits

- and vegetables in the meals of children especially preschoolers.
- 4. Local Governments with the help of Health officers and Nutritionist should through religious bodies and women community's meetings create the awareness of proper nutrition for preschool children.

References

- Ahia, C. N. (2012). *Principles and Practical of Meal Management*. Horin; Yolax Printing Press
- Agam EAyuk, Anne C. Edet, Philia A. Ayuk, &OgbanOmoronyia, (2020). Nutritional Knowledge and Practice of Pre-School Feeding. Comparative Study Among Mothers in Slum and Urban areas of Calabar, Nigeria. Global Journal of Pure and Applied Sciences (26): 85-90.
- Amosu, A.M., Degun, A.M., Atulomah, N.O.S. &Olanrewaju, M.F. (2011). A study of the nutritional status of under-5 children of lowincome earners in southwestern Nigeria community. Current Research Journal of Biological Science, 3(6):578-585.
- August, D., Teitelbaum, D., Albina, J., Bothe, A.L., Guenter, P. & Hafkemper, M. (2002). Guidelines for the use of parental and enteral nutrition in adult and pediatric patients. *Journal of Parental and Enteral Nutrition*, 26:1-4
- Bevan, A.L. and Reilly, S.M. (Mothers' efforts to promote healthy nutrition and physical activity for their preschool children, Journal of Pediatric Nursing, 26:395-403
- Brodribb, W., Fallon, T., Jackson, C. and Hegney, D. (2010). Breastfeeding review, 18(1):5
- Chandani E. Nekitsing, Marion M.

 Hetherington, &Pam Blundell-Birtill, (2018). Developing Healthy Food Preferences in Pre-School Children Through Taste Exposure, Sensory Learning, and Nutrition Education. CurrObes Rep. 7(1): 60-67.
- Ekwochi, U.; Osuorah, C.D.I.; Ndu, I.K.; Ifediora, C.; Asinobi, I.N. & Eke, C.B.

- (2016). Food taboos and myths in South Eastern Nigeria: The belief and practice of mothers in the region. J. Ethnobiol. Ethnomed. 12, 7.
- Ezeanwu, A. B. (2013). Assessment of preschool feeding practices in Enugu State. *Unpublished M.Ed. Thesis*.

 Department of Home Economics and Hospitality Management Education, Faculty of VTE, UNN.
- Eze, N. M. & Njoku, H. A. (2018). Foods and Nutrition Today Understanding Nutrition for Students in Tertiary Institutions.Nsukka; Grand-Heritage Global Communications
- Federal Ministry of Health. National Strategic Plan of Action for Nutrition (2014–2019): Health Sector
- Component of National Food and Nutrition Policy; Federal Ministry of Health: Abuja, Nigeria, 2014.
- Jemide, J.O, Ene- Obong. H. N, Edet, E.E, Udoh, E.E. (2016). Association of Maternal Nutrition Knowledge and Child Feeding Practices with Nutritional Status of Children in Calabar South Local Government Area, Cross River State, Nigeria. IJHS. 2(1):293-298.
- Olatidoye, Adebusoye, Adekola&Jatto 2011). Effect of maternal employment on nutritional status of pre-school children from low income households' area of Oyo State. Electronic Journal of Environmental, Agricultural and Food Chemistry 10 (7), 2574-2580.
- Okechukwu, F.O. (2014). Nursing mothers and their infant feeding practices in Udenu local
- government area of Enugu State. *Journal of Home Economics Research* JHER(20) 1,179-189.
- Ozdoğan, Y, Ucar A, Akan, L.S, Yılmaz, M. V, Surucuoğlu, M. S, FundaPınarCakıroğlu, F. P.&Ozcelik, A. O. (2012). Nutritional knowledge of mothers with children aged between 0-24 months. *Journal of Food, Agriculture and Environment*.10 (1): 173-175.
- Pangborn, J., Newman, L., Medhelarr, R., Collier, A. &Marr, S. (2008).

- Compositions and method for the treatment of autism. *US Patient App*, 12(15)444.
- Reiher, A,&Mohammadnezhad, M. (2017).

 Awareness and Characteristics of the Mothers of Malnourished Children under 5 years old on South Tarawa, Kiribati in 2016: A descriptive study. MOJ Womens Health.6(1):332-336
- Senorial, A. (2004). *Principles of meal planning*. Washington D.C. Academy Educational Development.
- Sholeye, O.O.; Akinpelu, A.; Bankole, E.; Diya, O. (2016). Knowledge of infant feeding among mothers in Sagamu, southwestern Nigeria: Implications for

- nutrition education. Am. J. Food Nutr., 6, 69–76.
- UNICEF (2018). Nigeria. Working to Improve Nutrition in Northern Nigeria (WINNN). Availableonline: https://www.gov.uk/government/publications/working-to-improve-nutrition-in-northern-nigeria (accessed on 20 March 2019).
- Unusan, N. (2006). University students' food preference and practice now and during childhood. *Food Quality and Preference*, 17:362-368.
- World Health Organization (2018) Nurturing care for early childhood development- A global framework for action and result. Geneva, Switzerland. WHO Press