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## MOTHER EDUCATION AND NUTRIENT INTAKE OF CHILDREN AGES 2-7 YEARS IN LAU LOCAL GOVERNMENT AREA OF TARABA STATE

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**Abstract:** The study attempts to determine mother's education and nutrient intake of children ages 2-7 years in Lau Local Government Area of Taraba state. Ten villages were randomly selected in the area and eleven respondents were selected randomly in each of the ten villages making the total of one hundred and ten (110) respondents which formed the sample size for the study. However, a total of 110 questionnaires were administered to the selected mothers. The result shows that most of the respondents were young mothers which majority of them (50.91%) were between 26 - 30 years. Very few of them (8.20%) were 41 years and above. Similarly, majority of them (57.27%) were married women, 25.45%, 9.10% and 8.18% of them were divorced, singles and widows respectively. The result more so, revealed that 63.64% of the respondents have 1 - 3 children and only 10.91% have 7 - 10 children in the area. This shows that most of them have a small size family. The study also shows that majority of the respondents (70%) have attended formal education which is a good omen to that community. The result on the nutrient status of the respondents' children which indicated that most of their family members (55.45%) depend on carbohydrate foods this is partly due to the major food crops grown in the area. Few (9.09%) have access to plant and animal protein. The result also shows that 61.82% feed their children twice daily and 96.36% give their children fruits but only 2.73% give them fruits three times per week. This shows that most of the children (42.73%) were weighing between 26-30kg at 2-7 years old. It was therefore, concluded that mothers education is rising in the area and nutrient intake is not balanced in terms of balanced diet. Therefore, there is need for improved nutrient intake by the children in the area to promote their growth and performance.

**Keywords:** Mothers Education, Nutrient Intake, Children.

### INTRODUCTION

When women are undernourished during pregnancy or when children do not consume necessary nutrients in their early years as stated by Johnson (1995) that the future consequences for such children's health can be severe and long lasting. Children specified nutritional needs must be met before they reach their full physical, mental and social potentials as opined by Melvin *et al.*, (1997). UNICEF (1990) reported that the conceptual frameworks of their aspects that must be considered to improve the quality of life of the children are nutrition, food consumption, good health and stimulative environment. However, Nelson (1994) stated that children are assets of the future generation and are expected to grow and develop optimally. One indicator of high quality human resources is intelligence; hence, high intelligence is obtained from proper nutrient intake by a child (Sandstead, 2000). This was also observed by Peltó (1998) that the cognitive ability of a child is based on a good nutrition from conception through trimester stages of pregnancy to birth and good breast milking.

The American Academy of Paediatrics (1994) recommended breast feeding as the best source of nutrients that promote infants health, growth and development from the period of twelve

months (12 months); that, this feeding practice is beneficial to children from healthy parents which provides immunological protection, resistance to allergies, risk and epidemic diseases. Similarly, it has been asserted that a well balanced diet and mother's education protect children against illness and infections (PAHO, 1998).

Education is a service which deals with the development of an individual for his/her own benefit and for the benefit of the society, Fafunwa (1969). However, Bordi (2002) reported that mothers education is important to the healthy eating habit among children and it plays a key role on the mental and physical development and it also promote growth and reduce many risk associated with long term health problems.

Therefore, mothers education plays a vital role on the type of food nutrients to be given to children between the ages of 2-7 years which invariably tends to affect the performance of the children, although other factors that may influence and/or affect the performance of a child may include environment, peer group etc.

This study was conducted to determine mothers' education and nutrient intake by children between 2-7 years in Lau local government area of Taraba state. The specific objectives were to determine the socio-economic characteristics of mothers in the study area, to assess the nutrient intake by children between 2-7 years in the area and to determine the types of nutrients commonly available to these categories of children.

## **MATERIALS AND METHODS**

### **Study Area**

The study was conducted in Lau local government area of Taraba state. It lies between Latitudes 10° 18' and Longitude 10 48' East of the GWM and Latitude 8° 13' and Longitude 9° 40' North of the Equator. It is bounded with Adamawa state to the North, Karim Lamido Local Government Area to the west, Jalingo and Yorro Local Government Areas to the East and Gassol Local Government Area to the South. It has a land area of 3,525 square kilometers with a population of 96,590 people (NPC, 2006).

The majority tribes found within the area include Bandawa, Jenjo, Mumuye, Nyandang, Lau Habe, and Hausa/Fulani. The economic activities of the people there are mainly agriculture with few people engaging in trading and carpentry work (Taraba State Diary, 2008).

### **Method of Data Collection**

The data for this study was obtained through the primary sources (structured questionnaires) which were distributed to some randomly selected mothers in the selected villages. However, secondary data were generated from printed materials such as textbook, journals, conference proceedings, periodicals and internet sources.

### **Sampling Technique and Sample Size**

The study employed a simple random sampling technique in the selection of respondents. Ten (10) villages were randomly selected as the sampling frame. Eleven respondents were also selected from each of the ten villages making the total of one hundred and ten (110) respondents, which formed the sample size for the study.

### **Data Analysis**

Descriptive statistical method was used in analyzing the data generated. The statistical parameters employed were; variables, frequency and percentage.

## **RESULTS AND DISCUSSION**

### **Socio-Economic Characteristics of Respondents**

Table 1 shows the socio-economic characteristics of the respondents in the study area. On the age distribution, the result revealed that 9.09% had an age bracket of between 20-25 years, 31.82% were of the age bracket of 26-30 years and majority (50.91%) had an age bracket of 31-40 years while only 8.20% were 41 and above years. This implies that majority (91.82%) of the respondents were young mothers below 42 years old who are strong, healthy and energetic to take care of the health and needs of their children and family.

On the marital status, the result revealed that majority 57.27% of the respondents were married, 25.45% were divorced, 9.10% were singles women while 8.18% were widows. This shows that most of the respondents in the study area were married, which is an indicator of being responsible especially when it comes to management of the family.

Similarly, the result shows the distribution on the number of children. It indicated that majority (63.64%) of the respondents had 1-3 children, 25.45% had 4-6 children and only 10.91% had 7-10 children in the area. By implication, most of the respondents had small family size which is somewhat moderate that they can take care of their nutritional needs adequately.

The result on the educational background of the respondents revealed that majority (70%) had formal education ranging from primary to tertiary level while 30% had no formal education was found to play a key role in the behavior and attitude of the people. It is expected that formally educated mothers will be able to know the relevant and the required food nutrients to be given to a child for optimal growth, development and performance of the child.

**Table 1: Socio-Economic Characteristic of Respondents.**

Variables	Frequency	Percentage (%)
<b>Age (Years)</b>		
20 – 25	10	9.09
26 – 30	35	31.82
31 – 40	56	50.91
41 and above	9	8.20
Total	110	100
<b>Marital Status</b>		
Married	63	57.27
Divorced	28	25.45
Widow	9	8.18
Single	10	9.10
Total	110	100
<b>Number of Children</b>		
1 – 3	70	63.64
4 – 6	28	25.45
7 – 10	12	10.91
Total	110	100
<b>Level of Education</b>		
No formal education	33	30
Primary school	39	35.45
Secondary school	22	20
Tertiary education	16	14.55
Total	110	100

Source: Field Survey, 2014

### **Nutritional Background of the Respondents**

The distribution of the respondents on their nutritional background (nutrient intake of their children) revealed that majority (55.45%) used carbohydrate food sources as part of their diet, 27.30% had access to protein, 4.54% had fats and oil to form part of their daily ration, 3.63% had minerals and vitamins available to their children while only 9.09% could access all the nutrients in their diet. This denotes that most of the respondents in the area of study consumed more carbohydrate than any other class of food. This may not be unconnected with the common food crops like, maize, sorghum, cassava grown in the area.

On the most frequently used nutrient by the respondents, the result shows that majority (67.30%) used carbohydrate, 22.73% used protein food materials, 5.45 % used fats and oil, while only 4.45% used minerals and vitamins. Based on the above results, most of the respondents would not have access to a balanced diet, because of their high consumption of carbohydrate food. Thus, consumption of too much carbohydrate may tend to be associated with too much sugar to such a consumer which invariably may cause diabetes.

The results on the daily protein and carbohydrate intake shows that most of the respondents (53.64%) consume between 600 – 700g/kg of protein and carbohydrate, 30.91% have 300 – 500g/kg daily and 15.45% of them consume between 800 – 1000g/kg of the combination of protein and carbohydrate. The result further revealed that the results on the sources of protein consumed by respondents children. It shows that majority (63.64%) have their protein source

from plants (crops) such as beans, soya beans and groundnut, while 27.27% get their own through animal protein, which is a complete protein. The result shows that only 9.09% have access to both plant and animal protein. This shows that most of the respondents in the area consume plant protein more than the animal protein.

The results further, revealed that majority of the respondents (54.55%) consumed "Tuwo" from gari, corn, pounded yam, fufu etc. 13.64% feed on the often, 17.27% used beans while 14.54% consumed both rice and beans. This result is in line with the nutritional background of the respondents which revealed that majority of them were carbohydrate inclined.

Table 2 also shows the distribution on how many times the children eat food/daily. The result indicated that majority (61.82%) feed their children twice daily, 27.27% feed once/daily and only 10.91% gives their children food thrice/day. This implies that, most of the mothers do under feed their children. This may likely affect the performance of their wards nutritionally because if all things being equal, children are supposed to feed at least 2-3 times/day.

Similarly, the result also shows that 96.36% allow their children access to fruits which is a vital source of vitamin C, which is good for young children. Although, 31.82% of these mothers give their children fruits once a week which is not adequate, 44.54% twice/week other give them thrice/week (20.91%) and only 2.73% offered fruits more than three times per week. This shows that the fruits consumed by the children are grossly inadequate. This is partly due to the fact that children are expected to be served with fruit at least once a day.

The result also revealed the distribution on the weighing of children between 2-7 years. The result revealed that 18.20% of the respondents had their children weight between 15-20kg, 27.27% weighed their children 21 - 25kg, 42.73% had their children weight between 26-30kg while only 11.81% of the respondents have their children weighing 31-40kg.

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**Table 2: Nutritional Background of the Respondents**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Types of Nutrient Available</b>		
Protein	30	27.30
Carbohydrate	61	55.45
Fat and oil	5	4.54
Minerals and Vitamins	4	3.63
All of the above	10	9.09
Total	110	100
<b>Most Frequently Fed Nutrient Source</b>		
Protein source	25	22.73
Carbohydrate source	74	67.30
Fat and oil	6	5.45
Minerals and Vitamin	5	4.54
Total	110	100
<b>Daily Protein/Carbohydrate Intake</b>		
300 – 500g/kg	34	30.91
600 – 700g/kg	59	53.64
800 – 1000g/kg	17	15.45
Total	110	100
<b>Protein Source of the Respondents</b>		
Plant source (Beans, Soya beans, etc)	70	63.64
Animal source	30	27.27
All of the above sources (milk, meat, egg)	10	9.09
Total	110	100
<b>Most Frequently Consumed Type of Food</b>		
Tuwo (Gari, Corn, Pounded yam, fufu)	60	54.55
Rice	15	13.64
Beans	19	17.27
Rice and Beans	16	14.54
Total	110	100
<b>Eating Times/Day</b>		
Once/day	30	27.27
Twice/day	68	61.82
Thrice/day	12	10.91
Total	110	100
<b>Do Your Children Eat Fruits</b>		
Yes	106	96.36
No	4	3.64
Total	110	100
<b>If Yes How Many Times/Week</b>		
Once/week	35	31.82
Twice/week	49	44.54
Thrice/week	23	20.91
More than thrice/week	3	2.73
Total	110	100
<b>Weight of Your Children Between 2-7years</b>		
15-20kg	20	18.20
21-25kg	30	27.27
26-30kg	47	42.73
31-40kg	13	11.81
<b>Total</b>	<b>110</b>	<b>100</b>

Source: Field Survey, 2014

## CONCLUSION

The studies revealed that majority of the respondents were between 31 - 40 years. This could be as a result of the norms and values of the people, where early marriage is not encouraged. Most of them have 1 - 3 children which is a good sizeable number that can be managed even by a peasant family. The result also show that majority of the respondents had formal education background irrespective of which category. This means that their children would be given attention in terms of moral upbringing and stimulative feeding regimes, thus, most of the respondents' families depend largely on carbohydrate food sources this may be partly due to the low income earnings of the respondents. The study shows that fruit consumption by children in the area is inadequate which may not be too good for the children.

Therefore, it could be concluded that mothers' education is increasing to a certain level in the area; also nutrient intake in the area is not well balanced in terms of food combination. Further study may be conducted to determine the need to improve on the current educational status of the respondents the remote causes of the inadequate consumption of a balanced food by the respondent's family and solutions should be proffered to that effect.

## REFERENCES

- American Academic of Pediatrics (1994). Workgroup on Breast Feeding. Breast Feeding and the Use of Human Milk, *Pediatrics* 100: 1035 - 1039.
- Bordi, P.L. (2002). Impact of Environment on Food Choice and Eating Habit of School Age Children.
- Fafunwa, B. (1969). Education as a Service that Deals with Development.
- Johnson, U. (1995). "Ethics and Child Nutrition" Food and Nutrition Bulletin 16 (4): 293 - 8.
- Melvin, D.G., Wright C., and Gadded, S. (1997). "Incidence and Nature of Feeding Problems in Young Children Referred to a Pediatric HIV Service in London: FEAD Screening" Child Care, Health and Development 23:297 - 313.
- Nelson, C.A. (1994). Threat to Optimal Development Integrating Biological Psychological and Social Risk factor, New Jersey.
- NPC (2006). National Population Commission, National Census.
- PAHO (1998). Nutrition, Health and Child Development. World Bank and Tropical Research Unit. No. 566 PAHO.
- Pelto, G.K. (1998). Promoting Healthy Growth and Development in African Children.
- Sandstead, H.H. (2000). Causes of Iron and Zinc Deficiencies and Their Effect on the Brain. *Journal of Nutrition*. 130:347S - 349S
- Taraba Diary (2008). Ministry of Information Taraba State.
- UNICEF (1990). Strategy for Improved Nutrition of Children and Women in Developing Countries.

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