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INFLUENCE OF URBAN LOW INCOME WOMEN WORKLOAD ON FAMILY NUTRITION

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Abstract

This study determined the influence of urban low-income women's workload on their family nutrition. This was given impetus by the assumption that as a result of heavy workload, especially outside the home, most women hardly have time to plan, supervise and prepare their family meals. This results in most children depending on junk and public food which predisposes them to all kinds of danger including malnutrition and infections, which in turn have adverse effect on their academic performance. Four research questions were formulated and one hypothesis was tested. The study employed the descriptive survey design. The study was limited to only two local government areas which were randomly selected for the study. Two hundred and forty (240) respondents, consisting of sixty (60) respondents randomly selected from each of the four public primary schools were employed for the study. A structured questionnaire was the main instrument used for data collection. The descriptive statistics of simple percentage was used to analyse the data while the chi-square was used to analyse the hypothesis. The findings revealed that time pressure constraints most mothers from participating in meal preparation and supervision, such that most of them are only able to prepare dinner for their children; women's workload significantly influence the quality of family nutrition and majority of the households studied are not able to employ the services of house-helpers. Majority of the respondents skip breakfast and lunch because mothers were not available to prepare the food. The study further shows that most of the respondents feed on food items which are nutritionally inadequate which may expose them to some serious adverse effect of malnutrition. The study recommended among other things that mothers should be educated on the

need, not only to ensure adequate provision of food for the children but also they should create time to plan, supervise and prepare meals for their children and ensure that their children have the right quantity of food with adequate nutritional value.

Introduction

Food security, which is defined as “access by all people at all time to sufficient food required for a healthy and active life” (WHO 2005) is becoming a global problem, most especially with the current food crisis ravaging the whole world. More people, particularly in the less developed world, are finding it difficult to have access to adequate food supply. This situation portends great danger to the health of the people. It is, therefore, pertinent that increased attention be paid to adequate sourcing and proper harnessing of the available food in order to tap its full potential for the benefit of the general populace.

In any crisis situation, those that are mostly affected are those with low socio-economic status. Among this group again, women and children are more vulnerable. This, therefore, calls for adequate attention to be paid to the women and children in the low socio-economic level in the present food crisis situation.

The nutrition problem at the household and individual level has been related to many factors in addition to food supply (USAID, 1982). Physical access to markets, roads, transportation and production for auto consumption often limits the availability of food within and between regions in a country. Also, economic access and purchasing power are common limiting factors for the rural and urban poor. Other factors enumerated include high consumer prices, low income, low producer prices and seasonal component of food availability.

Apart from availability, eating together as a family, according to research, has some surprising effects on the family. These include stronger family bonds, children become better adjusted, family members eat more nutritional meals, less likely to be overweight and less likely to abuse alcohol and other drugs (Forthun, 2012).

Eating together also provides a daily time for the whole family to be together, and can give a sense of security and a feeling of belonging to children and the younger ones. It provides opportunities to develop a

better communication and they are more likely to eat healthy foods (Lyttle and Baugh in Forthun, 2012). It is also related to better adjustment in youth and children (Eisenberg et al in Forthun, 2012).

One factor that might have been overlooked, especially for urban low income women such as petty traders, market women and consumable item sellers is workload. Workload in this case, is the time spent doing both paid and unpaid work. Unpaid work includes housework, time spent managing the household, planning meals, paying bills, childcare and so on (Chesters, Baxter and Western, 2008). Besides household works, women engaged in income-generating activities spend a substantial amount of time in their jobs (Afsana, Ahmed, Mayeed, Roy and Karim, 1998). This is very typical of women traders in Lagos metropolis. This set of people spends much of their time on their business. In Lagos metropolis, a typical woman that sells pepper in the market has a time use of this manner - she wakes up around 5am in the morning to go and purchase the days goods, comes back between 10-11am and starts cleaning and preparing the goods for the buyers. Majority of the buyers leave office between 4pm and 6pm, she would wait for these and the late arrivals for her items to be sold. She therefore, does not get back home until around 10pm in the night. The same nature of time use, with a slight modification goes for the woman that sells provision in the market. These women spend much of their time on their business which yield low returns; they are vulnerable to environmental and government regulations effect and spend much of their income on food.

One major problem with this type of lifestyle is that hardly is there any time to supervise, plan and cook food at home. In most cases, there is also not enough money to give to the child to buy nutritious food from food vendors. The consequence is that, children especially, the young ones in primary school not only skip meals, but rely on snacks or go about eating whatever they could get around. All these are potent sources of malnutrition as well as food poisoning.

Heavy workload and time constraints have been regarded as possible threats to adequate child nutrition. To say that adequate nutrition is essential for effective learning, therefore it is to state the obvious that when children go to school without breakfast, their performance may go down especially if they are malnourished or from poor background

(Nigeria Health Review, 2007). Eating junk food outside both the school and home adds another dimension of possibility of infection, apart from possible malnutrition to the problem.

Heavy workload and time constraints are possible threats to adequate child nutrition and that urban women of low socio-economic status devote much of their time to their work with little or no time for the home. Would they have time to prepare food for the family or get time to supervise what they eat?

Problem of the Study

The central problem of this study is to ascertain whether any relationship exists between urban low-income women's workload and family's nutrition. Specifically, the study examines the effects of time pressure on the women's participation in meal planning, food preparation and supervision.

Purpose of the Study

The objectives of this study include the following:

- to ascertain if there is a relationship between urban low-income women's workload and family eating pattern and the women's ability to prepare and supervise their family meals,
- to determine the number of eating times in order to determine the prevalence of meal skipping among the children,
- to ascertain how often children eat their meals from snacks and food prepared outside the home and
- to determine the dietary sufficiency of the food eaten by the children.

Research Questions

- 1 Do urban low-income women have time to prepare and/or monitor the type of food eaten by their children?
- 2 What is the rate of meal skipping among the respondents?
- 3 Do the respondents have three square meal every day?
- 4 Do the respondents feed on food items that are of adequate nutritional value?

Hypothesis

- Women's workload does not significantly influence the quality of family nutrition.

Methodology

Population

The population of the study consisted of school going children of all urban low-income women from all the identified local government areas in Lagos who are in primary three to six. This age group was considered because this is the age that children develop and form their eating habit, hence proper supervision of what children eat, when they eat and how they eat is very important to ensure adequate and sufficient quality of nutritional intake and proper development among primary pupils.

Sample

A total of 240 pupils were selected for this study. This comprised 60 pupils from each of the four selected public primary schools from the randomly selected two Local Education Authorities from the two local government areas for the study. To select respondents for this study, the state was first stratified into Local Education Districts (LED). Thereafter two LEDs were randomly selected from Lagos metropolitan area. These were Shomolu and Mushin. To do this, the names of the Local Government Areas belonging to the Lagos metropolis namely Shomolu, Lagos Island, Lagos Mainland, Ikeja and Mushin were written and put into a container and the pick and drop method was used to select the two local government areas employed for the study. This was done to ensure that all the five local government areas had equal and independent chance of being selected.

In Lagos State, every Local Government Area has a Local Government Education Authority. Therefore, the two Local Government Education Authorities from the randomly selected Local Government Areas, were involved in the study. There are altogether 139 primary schools in the two selected Local Government Education Authorities. Two public primary schools were randomly selected from each LED, making a

total of four schools. Sixty pupils, twenty each from the three arms (primary 3-5) were randomly selected from randomly selected two schools making a total of 240 pupils. The total number of pupils in the two Local Government Education Authorities was 54183 (Lagos State Ministry of Education).

Instrument

The instrument for data collection was a questionnaire designed by the researchers. The instrument was divided into three sections, A, B, C. Section A was used to elicit demographic information from the respondents. Section B elicited information on whether the respondents eat at home before going to school; take their lunch from home or whether they buy food from outside. It also sought information on the type and quality of food available to the respondents. Section C elicited information on the types of food the respondents normally eat for breakfast, lunch and dinner. The instrument was pilot tested before it was used for the main study. This was done to ensure the validity of the instrument and to ensure that it was suitable for the study.

Data collection and analysis

A total of 240 copies of questionnaires were distributed to the respondents by hand. This consisted of 60 copies of questionnaire for each of the four public schools employed for the study. All the copies of the questionnaires were returned and were found to be useful. The data were analysed using percentage.

Results from the study

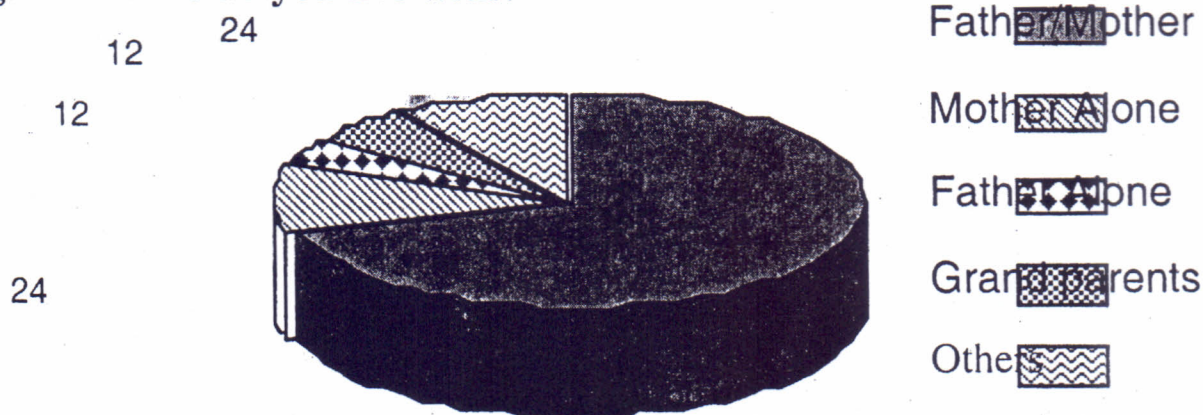
Table 1: Age of the Respondents

Age	No.	%
7-9	168	70
10 and above	72	30
Total	240	100

Information from table 1 reveals that majority of the respondents, 70 percent, are between ages seven and nine. This implies that most of the

respondents for this study are still within the age they depend on their mothers to plan and prepare their meals and for general sustenance.

Figure 1: Who do you live with?



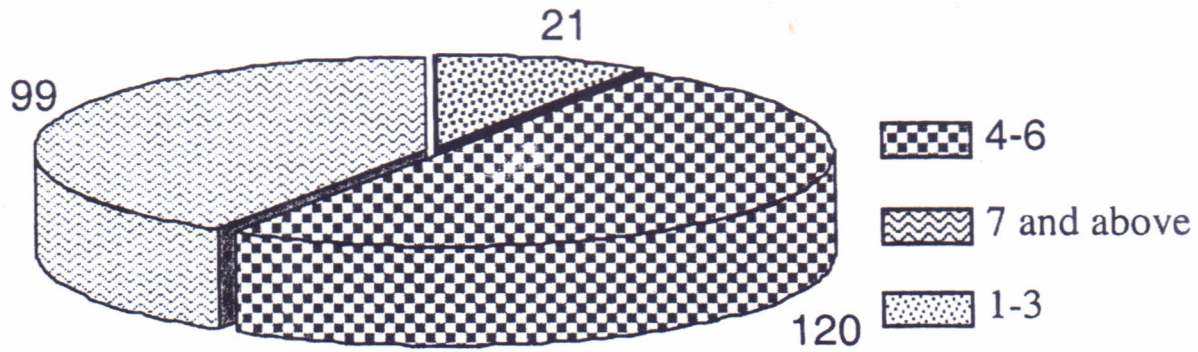
It could be observed from figure 1 that majority of the respondents, 70%, live with both parents. Only 10% live with mother alone while 10% live with other family members. This implication of this result is that in most of these households when the mothers are away attending to other responsibilities that do not allow them to be at home during meals, the children may likely depend on other unhealthy sources for their meals.

Table 2: Parents able to employ house-helpers

Response	No.	%
Yes	90	37.50
No	150	62.50
Total	240	100

As can be seen from table 2, most of the respondents indicated that their parents are not able to employ house-helpers. This implies that the burden of child care and food preparation in these households rests solely on the mothers and when they are not able to effectively perform these roles as a result of heavy workloads outside the home, the children are left at the mercy of outside food vendors.

Figure 2: Number of persons in the family



Information from figure 2 shows that 50% of the respondents are between 4-6 people in their family while 41.25% indicated that they are more than seven in the family. This result entails more responsibilities for the mothers.

Figure 3: Parents' occupation

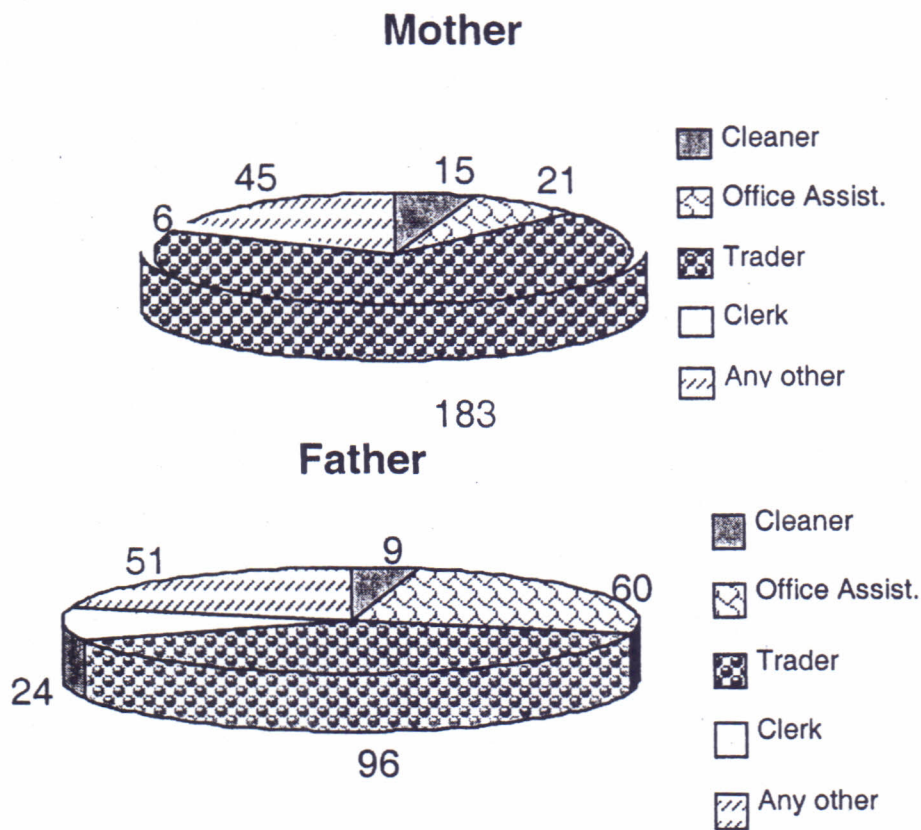


Figure 3 shows that majority of respondents indicated that their parents are mainly traders. For instance, while 76.25% indicated that their

mothers are traders, 40% indicated that their fathers are traders. The implication of this finding is that majority of the parents in this study are traders while others engaged in one occupation or the other outside the home which may not allow the mothers enough time to effectively see to the nutritional health of the family.

Table 3: Whether parents are educated

Response	No.	%
Yes	117	48.75
No	123	51.25
Total	240	100

It could be observed from table 3 that 123 (51.25%) respondents indicated that their parents were not educated while 117 (48.75%) indicated that their parents were educated.

Table 4: Do you always eat breakfast at home before leaving for school?

Response	No.	%
Yes	100	41.67
No	140	58.33
Total	240	100

Information from table 4 reveals that majority of the respondents, 58.33%, indicated that they do not have breakfast before leaving home for school, while 41.67% indicated that they eat breakfast before leaving for school. The implication of this finding is that majority of the respondents go to school without breakfast, which is the most important meal for the day and this will have negative impact on their attention and concentration.

Figure 4: How many times respondents eat in a day?

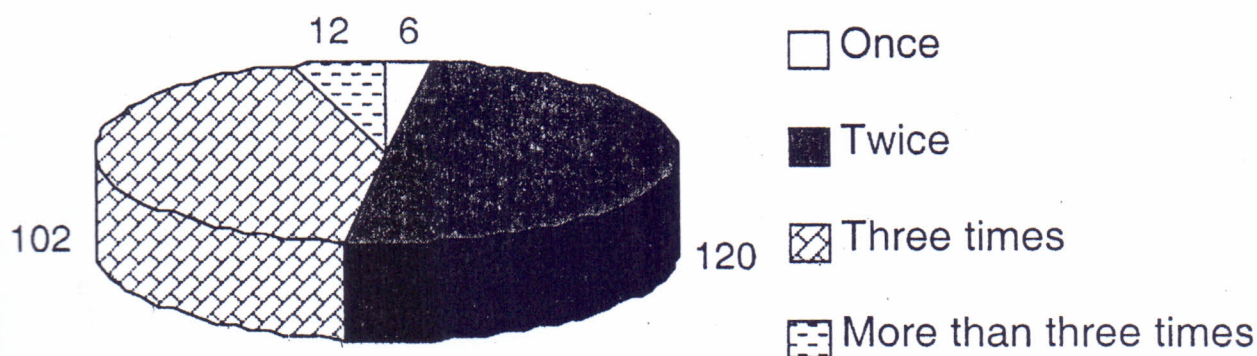


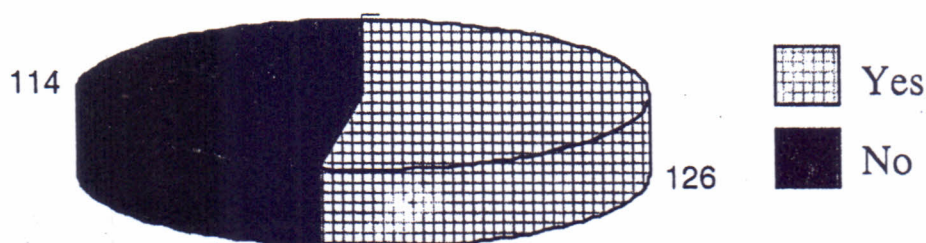
Figure 4, it could be observed that majority, 50%, of the respondents indicated that they eat two times a day, 42.5% indicated that they eat thrice a day and 7.5% eat once a day. These findings imply that a good number of the respondents skip some meals. This implies that they either go without food at such times or rely on unhealthy snacks for sustenance.

Table 5: Do you take your lunch from home every day?

Response	No.	%
Yes	117	48.75
No	123	51.25
Total	240	100

Table 5 shows that only 48.75% of the respondents take lunch from home while 51.25% do not. This finding is not unusual since other findings have shown that most mothers leave the home very early to either attend to their businesses or other job schedules, which implies that they will not have enough time to prepare and pack lunch for their children. This has an obvious implication because most of these children spend lunch time in school and do not get home till late so if they do not go to school with lunch, it means that they either skip lunch, buy lunch from food vendors or depend on snacks for their lunch.

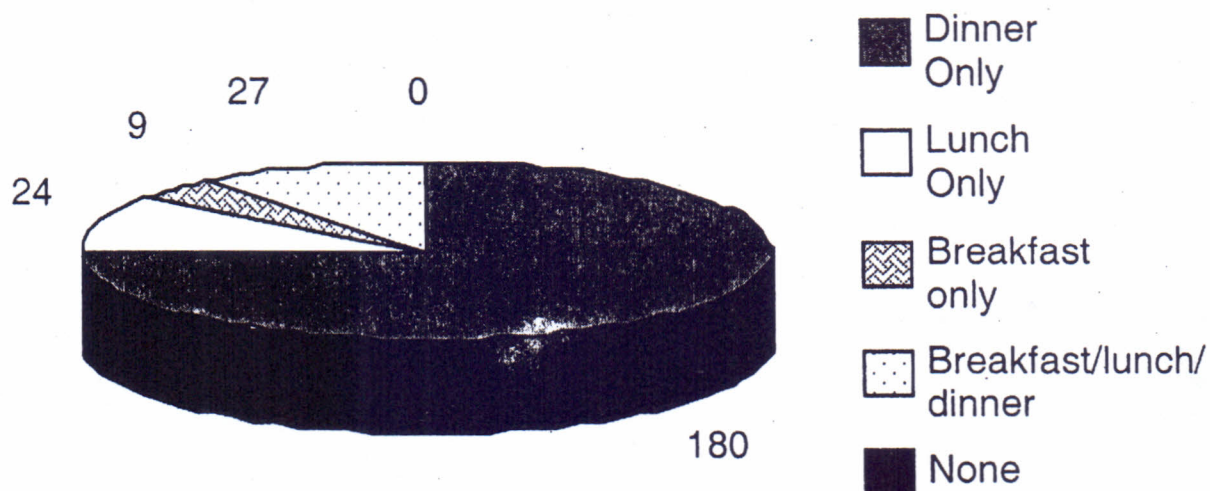
Figure 5: Do you always buy your food from food vendors?



It could be observed from figure 5 that majority of the respondents 52.5% indicated that they buy their food from food vendors. This finding shows that most of the respondents buy their food from outside which implies that their mothers do not prepare food for them. This trend may have negative implications on the children's nutritional status since it may

not be easy to guarantee the nutritional hygienic values of the food bought from outside.

Figure 6: The meals mothers prepare at home



Information from figure 6 reveals that majority of the respondents (75%) indicated that their mothers prepare only dinner for them while none of the respondents indicated that their mothers prepare breakfast, lunch and dinner for them. This result implies that these mothers are either not available at every meal time or do not have enough time to prepare the children's food at all meal times. The result of this situation is that most of these children either go about without food or rely on fast food or food prepared outside the home which in most cases may not be healthy for them.

Figure 7: My mother plans and supervises all our meal

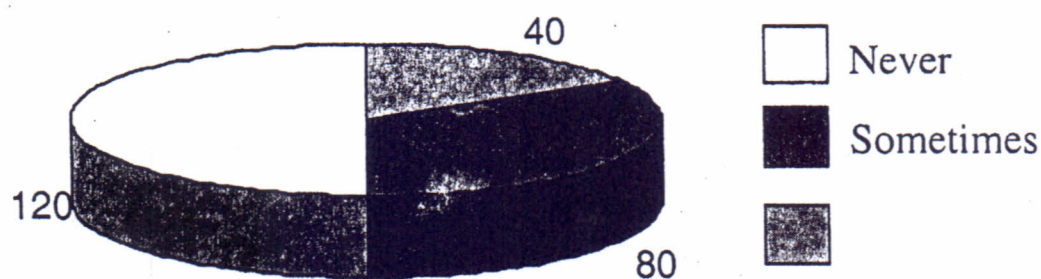


Figure 7 shows that 120 (50%) out of the total respondents stated that their mothers never had time to plan and supervise what they eat at home.

Information from the table also shows that only 16.67% of the respondents reported that their mothers always had time to plan and supervise their meals. The implications of the trend is obvious and show that the children are often left to source and eat whatever they can get whether it is nutritionally healthy for them or not.

Table 6: Do you have enough food in your family?

Response	No.	%
Always	93	38.75
Sometimes	141	58.75
Never	6	2.5
Total	240	100

Evidence from table 6 shows that while 38.75% of the respondents indicated that they always have enough food to eat, while 58.75% indicated that they sometimes have enough food at home. This finding implies that majority of the respondents may not have the right quantity of food available to them and quantity of food is very necessary for healthy growth.

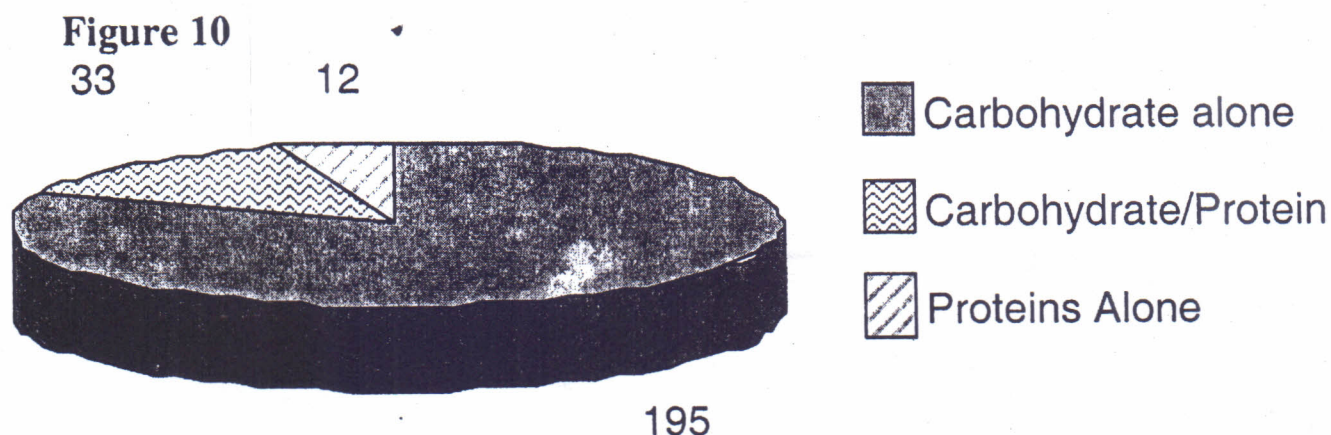
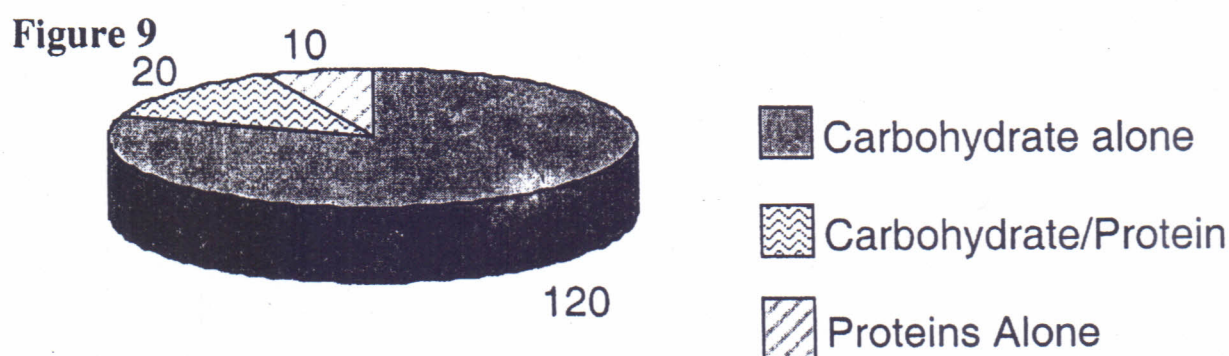
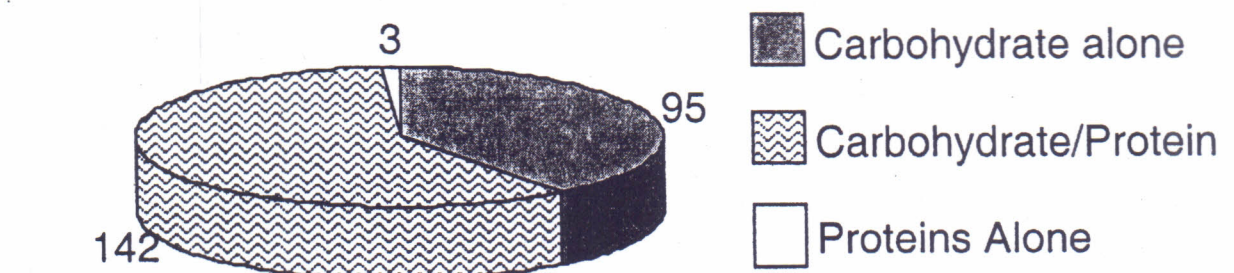
Table 14: Are you satisfied with the taste and the quality of food you eat?

Response	No.	%
Always	45	18.75
Sometimes	105	43.75
Never	90	37.5
Total	240	100

As shown in table, 14, 37.5% of the respondents indicated that they are never satisfied with the taste and quality of the food they eat. However, 43.75% indicated that they are sometimes satisfied with the taste and quality of food they eat. This result is not unexpected because most mothers may be too busy to plan, supervise and prepare good quality food and tasty for their children and when the food is not tasty, and as such does not appeal to the children; they may not eat enough to make them healthy.

The respondents were asked to indicate the various food items they eat at different meal times (Breakfast, Lunch and Dinner). The food items were further classified according to their nutritional contents. The result is shown in table 15, 16 and 17 below.

Figure 8: Meals commonly eaten by the respondents for breakfast, lunch and dinner



From tables 15, 16, 17 and figures 8, 9, and 10, the main food intake by the respondents consisted of carbohydrate for almost all the three meal times. For instance, for dinner, carbohydrate consisted about 81.25 percent, the food items taken by the respondents; protein alone was only 5 percent while carbohydrate and protein made up of 13.75 percent.

This result shows that the food consumed by the respondents does not contain adequate food nutrients.

This result has serious implication in the growth and development of these children. This is because to be healthy, grow and develop appropriately, every child needs to take the right proportion of the different food classes and where this is not the case, the child maybe underdeveloped and maybe prone to different types of sickness and diseases.

Table 16: Chi-square analysis of the influence of mothers' workload on the quality of family nutrition

	Responses			Total
	Always	Sometimes	Never	
Mother's workload	40 (47.5)	80 (92.5)	120 (105)	240
Satisfaction with taste and quality of food.	45 (47.5)	80 (92.8)	90 (105)	240
Total	95	185	210	480

df = 2, critical $X^2 = 5.99$, confidence level 0.05

Evidence from table 16 shows that the calculated chi-square value is significant i.e. ($8.95 > 5.99$) given degree of freedom of 4 at 0.05 confidence level. This, therefore, implies that women's workload significantly influence their family nutrition. Consequently, the null hypothesis is rejected.

Discussion of Results

The findings of this study show that most of the pupils used for this study 70% indicated that they live with both parents who are mainly traders (76.25% mothers and 40% fathers). However, most of the respondents (51.25%) indicated that their parents are not educated. The result further shows that a good number of the respondents, (58.33%) do not always eat breakfast before leaving for school in the morning. This

situation has serious implication on the pupils and their academic performance. In the first instance, a child who is hungry will find it difficult to concentrate and as such will not understand whatever is being taught. Moreso, breakfast kick starts every individual for the day's activities so when a child skips breakfast, almost the whole day will be messed up because he or she will be drudge and weak and may not function effectively the whole day. Corroborating this fact, the Nigerian Health Review (2007), asserted that when children go to school without breakfast, their performance is grossly affected.

The result also indicates that a good number of the respondents (51.25%) do not take their lunch from home. The implication of this situation is that the children are either forced to stay without food until they get home for dinner or they are left with the option of buying whatever that is available outside as shown from table 10. This situation portends danger as the children may not only be exposed to foods which are not nutritionally adequate, but may be exposed to all kinds of contaminated and disease infected foods. In line with the finding of this study, Rabiee and Geissler (1990) argued that meal skipping is a dietary pattern that may expose children to the risk of inadequate food and nutrient intake and may affect their attention, behaviour and school performance.

The findings also reveal that majority of the respondents (75%) indicated that their mothers only have time to prepare dinner for them. This implies that most mothers do not have enough time to prepare food for their children. The reason for the inability of mothers to prepare food for their family could be attributed to the burden of the different jobs they do. In Nigeria, women engage in different types of job such as trading, teaching, and others to augment the family income. This has been found to take a toll on their childcare activities including food preparation. Stressing this further, Salami and Uko Aviomoh, (2003:14) opined that "lack of time is a major problem for an average housewife in Nigeria because they work in the office, business, and petty traders; they care for children, source for water, fire wood and other fuel, cook for the family and carry out majority of school run. In line with this assertion, Mascarenhas (1983), also found from the study of women's work and child feeding patterns in Tanzania, that in about half of the households

studied, the preschool children got only one or two meals a day and lack of mother's time was attributed to be the main reason for such low frequency of child feeding. There is a need to educate the women on ensuring availability of food at all times for their families despite their workload.

The study further reveals that majority of the respondents, 120 (50%) indicated that their mothers never had time to plan and supervise family meals which means that they hardly eat together as a family. Eating together according to Forthun, (2012) is essential in family health in that it helps to strengthen the family bond and provides a daily time for the whole family to be together. It further provides a sense of security, especially, for younger children. Further analysis using chi-square also revealed that mothers' workload has significant influence on the quality of family meals and nutrition. The finding of this study is therefore consistent with Mascarenhas (1984) who also found that nutrition is worse in households where the women were working.

This finding is in line with, Ottesen et al (1989) who confirmed that reduction in the time spent in food preparation, as a result of heavy workload may have negative effects on the nutrition situation in the household, particularly with regard to children. Other studies (Schofield 1979, Galvin, 1985; Nestel, 1985) have shown that children's nutritional status is at its lowest when low food availability coincides with periods of peak labour. In a study on the negative effects of mothers' working on children's nutritional status in Philippines, Popkin (1980) used mothers who engage in different types of work including trading and farm work. The data presented indicated that though mothers' participation in these activities was associated with increased food purchases, children's nutritional status (weight/age, height/age and indicator of vitamin A status) seemed to be negatively affected. The study also reported that Vitamin A deficiency seemed to be common among children in the lower socioeconomic groups whose mothers were working. This according to the study was evident because most of the mothers involved in this study made less use of preparations based on green leafy vegetables which are rich in Vitamin A in feeding their children because they did not have time for lengthy preparation.

The result also shows that majority of the respondents (58.75%) sometimes do not have access to enough food. However, 38.75% indicated that they have access to enough food in their families. This implies that majority of these families or households are not food secured because they lack access to the quality and quantity of the food their family members need to lead active and healthy lives. This is because according to WHO (2005), availability of food and access are two essential determinants of food security.

The study further reveals that although majority of the respondents agree that they are satisfied with the quantity of food they are served, 37.5% indicated that they are never satisfied with the taste and quality of food they eat at home. Taste may affect the quantity of food taken, and when this persists for a long time, it may lead to malnutrition among children. This implies that people should not only have access to sufficient food at all times but must have access to safe, tasty and healthy food that meet their dietary need and food preferences for active and healthy life (Nigeria Health Review 2007). There is a need to educate women on the importance of not only ensuring availability of food but to ensure that every family member, especially, children have access to tasty and quality type of food.

Evidence from the study reveals that the respondents' meals consist mainly of carbohydrates with very little variety. This also shows that essential protein fats and oil, vitamins and mineral are grossly inadequate in most meals eaten by the respondents. This situation shows that either that the mothers are too burdened by their income generating jobs that they hardly have enough time to source and prepare food with adequate nutrition for their children or they are ignorant of what constitutes adequate nutrition and the right way to combine the various food items. Corroborating this view, the Nigerian Health Review, (2007) asserted that in Nigeria, most young children are fed complementary foods which are inadequate in quality and quantity. Such foods lack the essential nutrients which children need for their survival, growth and development.

The importance of adequate dietary in-take, especially, for children cannot be over emphasized. This is because inadequate dietary intake's result is malnutrition and malnutrition according to Nigeria Health Review (2007) reduces children ability to learn, affects school performance,

affects retention rates and contributes to high rates of disability and mortality. There is need to make effort to increase in-take of food with adequate nutrition value and this will in turn improve the nutrition and well-being of family members.

In addition, efforts should be made towards developing other and cheaper sources of protein that are easily affordable to low income earners in order to alleviate malnutrition. This is essentially necessary because Odun (2001) believed that meat, fish and egg consumption was found to be low because of their high cost. Government should also institute welfare for low income earners which will provide essential food items at little or no cost for them. This will also ensure that every growing child in the country has access to adequate food with the right nutritional value at all times.

Summary of finding

The main focus of this study was to ascertain whether the workload of urban women with low income influence their family nutrition. Specifically, the study attempted to establish if these women's job schedule has any influence on the quality and quantity of food available to the family.

The major findings of this study include:

- women's workload significantly influences the taste, quantity and quality of family nutrition,
- most of the respondents do not take breakfast at home before leaving for school,
- most of the respondents do not take their lunch from home, which means they either skip these meals or eat whatever they can buy from food sellers outside,
- majority of the respondents buy their food from food sellers outside,
- most mothers are only able to prepare dinner for their children,
- the quantity and quality of food eaten by the respondents are sometimes not adequate,

the bulk of the staple food eaten by the respondents is made up of carbohydrates and others which are deficient in vital nutrients needed especially by growing children,

- as a result of the low socioeconomic status of most of the mothers in this study, they are unable to employ house-helpers to assist them in food preparation and general child care and
- family members do not eat together most of the time and this affects younger children sense of security and feeling of belongingness, provides opportunities to develop better communication as well as eat healthy food.

Recommendations

Based on the findings of this study, the following recommendations were made:

- through adult education nutrition programmes, mothers should be taught how to select and combine food item to ensure consumption of adequate food nutrients at every meal time,
- mothers should be educated on the need to make out time to plan, supervise and prepare meals for their children,
- mothers should also be educated on the need to prepare and package lunch for the children before they leave for school in the morning,
- mothers in particular should be educated on the need to ensure that children are fed with foods that contains adequate amount of food nutrients for proper development of their children,
- there is need to discourage excessive reliance on fast foods, especially, for growing children who needs adequate nutrition for growth and development and
- the government should ensure that school feeding programme that is already being implemented in some states in the country is made a national programme as this will ensure that every child has access to at least one nutritionally balanced meal per day.

Conclusion

Based on the findings of this study, it is concluded that there is an obvious relationship between the urban low-income women's workload

and family nutrition. This implies that as a result of heavy workload, they either do not have enough time to see to the nutritional well being of their families or they are ignorant of the nature of adequate nutrition or both. This, therefore, calls for adequate awareness and education of these women to sensitize them of the dangers of malnutrition and the need to ensure access of adequate food supply to the family at all meal times.

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