

PROMOTING HOUSEHOLD FOOD PREPARATION AS A STRATEGY TO COMBATING NUTRITIONAL PROBLEMS IN NIGERIA: KEY TO SUSTAINABLE DEVELOPMENT

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Abstract

Household food preparation in this study simply indicates that family meals should be prepared at home to guaranty wholesomeness and adequacy in terms of nutrient composition and combination. The global campaign in nutritional adequacy among individuals, households and communities is geared towards eradicating extreme hunger to ensure a healthy nation in response to millennium development goals. These includes eradication of extreme poverty and hunger, reduce by half the proportion of people living on less than one hundred and fifty naira per day (1 US dollar a day), reduce the proportion of people who suffer from hunger and increase the amount of food for those who suffer from hunger. The goal also include the reduction of mortality rate among children under five by two thirds, ensure environmental sustainability, integrate the principles of sustainable development into country policies and programs, reverse loss of environmental resources, reduce by half the proportion of people without sustainable access to safe drinking water and achieve significant improvement in lives of at least 100 million slum dwellers, by 2020. The paper examined and proposes practical strategies on how nutrition can eradicate extreme hunger, reduce child mortality, improve maternal health and ensure sustainable environment by promoting household food preparation among individuals and families. A compilation of gross random sample of families and individuals that patronize commercial food vendors and fast food joints formed the data for this study. It was observed that high patronage of commercial foods constitute impediments to adequate nutrition among households in various communities. It is recommended that household food preparation in line with recommended dietary intakes (RDI) with a view to fostering nutritional adequacy devoid of excessive food addictives would enhance family nutrition thereby promoting sustainable development.

Keywords: Household, Food Preparation and Sustainable Development

Background to the Study

Food preparation involves the production of food commodity for consumption from its raw stage to consumable form. It generally requires the selection, measurement and combining of ingredients in an ordered procedure to achieve a desired result. It includes but is not limited to cooking. This effort to make food edible, preserve it, and transform its characteristics has sustained an ever-increasing population. Many techniques, including grinding, sifting, drying, salting, sealing, fermenting, and applying heat, are extremely important. Fundamentally new techniques have been introduced in the past two centuries, among them is microwaving. The main long-term change has been the shifting of tasks from the domestic floor to centralized factories. Homemade food preparation is a means of preparing foods for the members of the family to take care of the nutritional needs and wants of the members. It may seem expensive and time-consumingbut the major advantage is that it does not contain chemicals in the form of food addictives which can make household food unwholesome.

Commercial food preparation is a means of preparing foods on commercial bases to meet the food needs of the people which take few seconds to assemble, palatable and affordable. Foods prepared may be tasty, highly flavoured and could contain a large amount of oils and fats, uncontrolled carbohydrates which can cause a greater risk of diabetes; hypertension; make person look puffy and also implicated as a predisposing factor to heart attack (Being Human, 2010). The global advancements in technology had compounded the problem of food preparation, such advancements like introduction of genetically modified foods, usage of food additives, food preservatives amongst others. The advancements had rubbed many of consuming low nutrients foods and inorganic foods. With these many people consume foods that had lots of additive in such large quantities that had led to one nutrition problem or the other, hence, there is need to moderate the consumption of fast-food whose main aim is to make food attractive with enhanced aroma. The result of this is the excessive usage of food additives to enhance the colour, taste and flavour of the foods. WHO(2011) observed and suggested that the food industry has a role to play in adjusting the ingredients of its products (salt, fat and sugar content) this is an evidence that studies have been carried out to reveal that food additives have influence on human health.

All these advancements have their own advantages and disadvantages to human existence, although, the side effects of some of these foods are long term while some are intermediate. The intentions of the food manufacturers are to make food available and accessible to all in an enhanced form which is the major priority of all and essence of food security. According toDickinson (2009), the processes of food preparation might be divided according to their primary science, whether physical (such as extracting nuts from their shells), chemical (adding salt), or biological (brewing beer). Perhaps more helpfully, they might be categorized according to their intended purpose. Some foods are toxic until prepared properly. Others are scarcely edible until softened. Preparation can bring together nutritional variety. It can add intriguing flavours. Food preparation can also have negative impacts, especially on nutrients.

Food preparation is a core human activity that can be examined from the perspectives of many biochemical, nutritional, technical, cultural, social, historical, and economic sciences. It does not only entails preparing foods in the kitchen under hygienic condition and to the presentation of the foods but it has lot of activities involved such as from planting, nurturing, harvesting, sorting for grading, transporting, storing and distribution to the final consumer. At every stage stated, if utmost care are not taken there would be likelihood of consuming junks, roughages or foods with no nutritive values.

In Cooking, Cuisine, and Class, social anthropologist Jack Goody distinguishes five basic phases in the process of "providing and transforming food": namely, production (growing on the farm), distribution (market activities, including storage), preparation (cooking in

the kitchen), consumption (eating at the table), and disposal (clearing up). While such a production chain might seem straightforward, it can be misleading. Traditionally at least, food preparation included preservation and storage.

Statement of the problem

The number of hungry people in the world remains unacceptably high despite expected recent gains that have pushed the figure below 1 billion. FAO estimates that the number of people who will suffer from chronic hunger in 2010 is 925 million (FAO, 2007). Research studies shows that home made foods are prepared under utmost hygienic conditions but it really takes time compared with the fast food sold at the eateries, coupled with the stress associated to the modern day challenges in relation to type of job and realities of making up with the family needs. Time is limited to every one and if not well managed it becomes or causes constraint to good feeding. Food consumption forms the basis to human existence, for we are evidence of what we consume, hence food preparation becomes an issue that has to be handle with all seriousness. Foods from the eateries are more consumed than that of the home based on the attractiveness and time saving attribute it possesses, consequentially the aim of achieving one of the millennium goals; to eradicate hunger stands questionable. Based on this, this study tends to find out, could there be proposed practical strategies on how household food preparation be used to solve the problem of hunger? This makes this study relevant for studying.

Objective of the study

The main purpose of this study was to investigate and propose practical strategies on how nutrition can eradicate extreme hunger, reduce child mortality, improve maternal health and ensure sustainable environment by promoting household food preparation among individuals and families

Research question

The research question stated for this study was:

What is the extent to which promoting household food preparation among individuals and households eradicate extreme hunger, reduce child mortality, improve maternal health and ensure sustainable environment by?

Review of Literature

Child mortality and nutrition

Children suffer most from hunger, also referred to as malnutrition or undernutrition. Their mothers also suffer greatly from malnutrition, which affects the child before birth. There are two basic types of malnutrition. The first and most important is proteinenergy malnutritionthe lack of enough protein (from meat and other sources) and food that provides energy (measured in calories) which all of the basic food groups provide. This is the type of malnutrition referred to when world hunger is discussed. Under nutrition in children appears in three ways, and it is most commonly assessed through the measurement of weight and height. A child can be too short for his or her age (stunted), have low weight for his or her height (wasted), or have low weight for his or her age (underweight). A child who is underweight can also be stunted or wasted or both (UNICEF, 2009). Pelletier, Frongillo, Schroeder and Habicht (2008) revealed that malnutrition, by virtue of its synergistic relationship with infectious disease, has a powerful impact on child mortality (total PAR = 56%) and one that is much larger than suggested by the category of "nutritional deficiencies" in most routine reporting systems.

Maternal health and Nutrition

Globally, food insecurity is associated with micronutrient deficiencies, and an estimated 4.5 billion people worldwide are affected by some form of nutrient deficiency. Of this 4.5 million, the most vulnerable groups are young children and women of childbearing age (Dickinson, 2009). The micronutrients that are most important for maternal and child health outcomes include iron, vitamin B12, folic acid, vitamin D and selenium. The approaches available for increasing micronutrient intake include dietary modification,

supplementation, and food fortification. Dietary modification involves changing the type and kind of food consumed, while supplementation involves the addition of certain essential micronutrients and vitamins usually in pill form. Food fortification is the public health policy of adding micronutrients (essential trace elements and vitamins) to foodstuffs to ensure that minimum dietary requirements are met. The dietary modification approach has the advantage that once the population changes its diet, it is likely to sustain this practice. The disadvantage is that it is often difficult to change behaviors and established practices. The downside of fortification is that fortified, micronutrient-rich foods are often expensive, meaning that they may be beyond the reach of the poorest of the poor (De Benoist, 2008 and Kovacs, 2008). These literatures had pointed out homemade food is the ultimate in guaranteeing proper nutrition and sound health of mothers, hence mothers should imbibe the culture of preparing adequate nutritious for at home to enhance their nutritional status and health, thereby eradicating hunger to an extent.

Nutrition and Sustainable development

Sustainable development cannot be realized unless hunger and malnutrition are eradicated, FAO(2012) said in a policydocument prepared for the Rio+20 Summit held in June in Rio de Janeiro that, "We cannot call development sustainable while this situation persists, while nearly one out of every seven men, women and children are left behind, victims of undernourishment," "The quest for food security can be the common thread that links the different challenges we face and helps build a sustainable future. At the Rio Summit, the golden opportunity explored the convergence between the agendas of food security and sustainability to ensure what happens," it added. One of the great flaws in current food systems is that despite significant progress in development and food production hundreds of millions of people are hungry because they lack the means to produce or purchase the food they need for a healthy and productive life, according to FAO's report. "Improving agricultural and food systems is essential for a world with both healthier people and healthier ecosystems," (FAO, 2012). Food consumption and production systems must achieve more with less on the consumption side, we need to shift to nutritious diets with a smaller environmental footprint, and reduce food losses and waste throughout the food system. Without ending hunger, sustainable development is not possible (FAO.2012)

Fast food, homemade food and Hunger

Without realizing it, the food culture of our nation has been transformed. During this transformation, many households tend to choose a fast, cheap, convenient dinner that is fast food. Fast food meets your taste requirements at a very low cost rapidly; compared to the expensive, time consuming homemade meal. So, why would anyone want to spend his or her own precious time making a home cooked meal when there are fast foods down the street? The main concern is that, as people find fast food an easier way to satisfy hunger, they become addicted to this highly processed, fatty, over salted and excessively sugared engineered substances.

Obviously the general public is ignoring the health risks of eating fast food, because many are still relying on these giant corporations to satisfy their hunger. The health consequences of eating these foods include higher cholesterol, higher blood pressure, diabetes, heart disease and obesity. Additionally, fast food does not provide the basics of adequate nutrition. It lacks essential vitamins and mineral, fiber, and antioxidants. Another health constraint factor is that eating fast food in large amounts creates poison and increases free radicals in the body because there are so many additive chemicals for the preservation of the "food". So, in other words we can say that people are buying poison in the form of fast food. Maithany. (2007) stated that the fast food dining experience disconnects the consumer of the food completely from the place the food came from whether it be a farmer, a miller, the butcher or even the cook. The consumer simply interacts with a plastic sign, a cash register, a plastic tray and an unmotivated dude with a headset in a ridiculous uniform. While home cooked meals are typically nutritious,

fresh, balanced and prepared with care and consideration. Home cooked meals give you the choice of the ingredients and allow you to adjust the flavors to suit your taste preferences.

Advantages of Homemade foods

- 1. More creativity and freedom of ingredients in the dish.
- 2. The quality and flavour can be improved by changing the ingredients.
- 3. You know everything that is going into your dish.
- 4. Usually ingredients are less expensive than fast foods ingredients, thereby you save money.
- 5. You can make the meal more nutritious by reducing the amount of salt and fatin the dish.
- 6. You can make as much or as little as your family needs.

Make cooking time more efficient

Make the most out of your cooking time by getting organized. Try to do as much cooking at once and save some to warm-up later in the week. This will conserve your energy and energy in your home by heating your house up less often (Maithany, 2007).

Methodology

Research Design

Descriptive survey was applied to enlist the number of fast food joints and frequency of individuals / households that patronize fast food joints within mainland local government area of Lagos State.

Population

The total population for this study comprised all registered fast foods joints and households /individuals that patronise commercial food vendors and fast food joints in Mainland Local Government area of Lagos state.

Sampling and Sample size

Gross/cluster random sampling technique was applied to select 20 persons from 6 fast food joints comprising a total of 120 subjects selected for this study. Out of the 20, 5 were households who entered the fast food joint as a family while 15 were individuals. The selection was done on Saturday and Sundays respectively.

Instrumentation

The instrument used for data collection from respondents was a well structured questionnaire. It was administered by the researcher and collected immediately. It was validated by three experts from Home Economics Department and corrections were effected. The instrument was tested for reliability using Spearman correlation coefficient was used to analyse and the result was 0.76.

Data analysis

The data collected were analysed using mean and SD. A mean average of 2.50 and above was setcriterion for acceptance of items and vice versa.

Results

The results from the study on "what is the extent to which homemade food could be used to eradicate extreme hunger, reduce child mortality, improve maternal health and ensure sustainable environment by promoting household food preparation among individuals and families?" were presented with the following Tables:

Table 1a: Mean responses of the respondents on eradication of extreme hunger through household food preparation.

S/n	To eradicate extreme hunger through household	Mean	Remark
		Mean	Remark
0	food preparation		
1	There are always raw foods to cook in my house.	3.02	Accepted
2	The house is always stocked with perishable foods.	3.10	Accepted
3	Freshly prepared food are consumed in the house.	3.00	Accepted
4	Freshly harvested vegetables are used for cooking in the house.	3.66	Accepted
5	There are varieties of food commodities in my house.	3.24	Accepted
6	There are adequate cooking utensils, tools and equipment for cooking.	3.84	Accepted
7	There are adequate storing facilities for cooked foods. (refrigerator and freezer)	2.63	Accepted
8	There are adequate facilities for storing uncooked and raw foods for preservation.	3.20	Accepted
9	The family members must consume breakfast, lunch and dinner always at home.	3.86	Accepted

Table 1a reveals that all the items recorded means above the criterion level of acceptance. This indicates that the respondents accepted with the items that household foods can be used to eradicate extreme hunger.

 $\label{thm:condition} Table~2: Mean responses~of~the~respondents~on~reduction~of~child~mortality~through~household~food~preparation.$

В	To reduce child mortalitythrough household food preparation	Mean	Remark
10	Children should be properly breastfed.	3.33	Accepted
11	During weaning children should be given highly supplemented foods with adequate nutrients.	3.24	Accepted
12	Mothers should ensure foods are prepared with utmost hygiene.	4.35	Accepted
13	Children should be fed by an adult to ensure adequate feeding.	2.84	Accepted
14	Fruits and vegetables should be introduced to children during weaning.	2.85	Accepted
15	Clean and clear water and sugar free drinks should be introduced to children at weaning.	3.57	Accepted
16	Adult foods should be introduced to children as they are growing.	2.73	Accepted
17	Homemade foods should be used for feed children.	2.64	Accepted
18	Children should be discouraged against fast foods.	4.23	Accepted
19	Nutrition education should be introduced early.	3.33	Accepted
20	Children should be enforced to eat at home rather than buying foods outside the home.	3.84	Accepted

Table 2 reveals that all the items listed onreduction of child mortalitythrough household

food preparation got the mean score above 2.50. This implies that all these items if properly followed child mortality might be reduced to a noticeable extent.

Table 3: Mean responses of the respondents on improving maternal health through household food preparation.

С	To improve maternal health through household food preparation	Mean	Remark
21	Mothers should always prepare food for the family and eat from it always.	3.75	Accepted
22	Breakfast should be taken by mother always.	3.41	Accepted
23	Lunch should be taken by mothers always.	3.65	Accepted
24	Dinner should be taken by mothers always.	2.86	Accepted
25	Fruits and vegetables should be consumed by mothers.	4.24	Accepted
26	Adequate water should be consumed by mothers.	3.68	Accepted
27	Local foods should be used in preparing foods for the household.	3.26	Accepted
28	Convenient foods should be used in the home always.	2.36	Rejected
29	Fast foods should be introduced to the household.	2.23	Rejected
30	Food supplement should be taken to argument consumed food nutrients.	2.14	Rejected

Table 3 reveals that all the items all recorded mean score above 2.50 the acceptance level except for item no28 which recorded mean score below the acceptance level showing that the statement was not accepted by them. This indicates that maternal health can be improved upon through household food preparation.

Table 4: Mean responses of the respondents on ensuring sustainable environment for promoting household food preparation.

Б		3.6	D 1
D	Ensure sustainable environment for promoting	Mean	Remark
	household food preparation		
31	There should be adequate supply of food commodities to	3.60	Accepted
	the markets.		•
32	There should be accessible road to the farm gate or the		Accepted
32	market.	4.02	Accepted
0.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.70	A . 1
33	There should be no law and policy to hinder the use of	2.76	Accepted
	land for cultivation.		
34	There should be no middleman barrier to purchasing	3.54	Accepted
	food directly from farmers.		_
35	There should be adequate storage and preservation	3.40	Accepted
	facilities for farm products.		
36	•	2.96	Accepted
30	There should be adequate usage of food in season by the	2.90	Accepted
	household.		
37	Home gardening should be encouraged by all household.	2.74	Accepted
38	Households should imbibe the culture of preserving food	3.30	Accepted
	when in season against out of season or scarcity.		
39	Adequate power supply should be ensured to support	3.19	Accepted
33	storage of perishable food.	0.10	Accepted
4.0	9 1	0 7 7	
40	Adequate nutritional information, awareness on new	2.75	Accepted
	innovations, inventions, education should be made		
	available to the people for nutritional improvement.		

Table 4 reveals that all the items stated recorded mean score above the acceptance level of 2.50 and above. This indicates that sustainable environment can promote household food preparation.

Table 5: Mean responses of respondent on preference between homemade foods and fast foods.

s/no	Homemade foods versus fast foods	Mean	Remark
1	Fast foods are more attractive than homemade	3.45	Accepted
	foods.		
2	Fast foods is time saving than homemade foods.	3.73	Accepted
3	Fast foods contain too much salt and fat than	3.06	Accepted
	homemade foods.		
4	Fast foods are cheaper than homemade foods.	3.20	Accepted
5	Fast foods are more convenient than homemade foods	3.54	Accepted
6	Homemade foods are more nutritious than fast foods.	2.45	Rejected
7	Homemade foods are chemical free than fast	3.05	Accepted
	foods.		•
8	Homemade foods are healthier than fast foods in	2.25	Rejected
	term of preventing diseases like obesity, diabetes		
	and others		
9	Homemade foods have economics values than	2.35	Accepted
	fast foods.		
10	Homemade food PLS TICK Fast	120/100%	Fast food
	foods		preferred
	52 48.3% 68 51.7%		to
			homemade
			food

Table 5 reveals that most of the items recorded mean score above the set criterion for acceptance, except for items 6 and 8 which had mean scores lower than the set criterion. Also item No 10 shows fast foods had 51.7% over homemade foods with 48.3%.

Discussion

The findings of the study showed that household /homemade foods have a long way to go in solving the problems of hunger to a large extent. It was revealed that adequate attention needs to be given to adequate food production toensure food commodities are always available in the house so that food will be prepared as at when needed. Household home makers need to inculcate the attitude of cooking for the family members, serve and ensure everybody have a nourishing meal. It was also discovered that availability of storage facilities will help to encourage homemade food preparation so as to reduce hunger among households.

The study also revealed that when adults are involved in the feeding of children, they will have enough to eat and there will be low rate of hunger. The study showed that when fruits and vegetables are introduced early at weaning the children will have acquired their essential and non-essential food nutrients; developed immune system that will help them to fight against illness and diseases that might want to strike them, with this, child mortality rate will be lowered to an extent.

The study also revealed that when mothers prepare nourishing foods at home and consume from it each time, there would be improved maternal health, most especially when the homemaker is able to adapt and develop new recipes using medicinal herbs, spices and functional foods in preparing family meals. This was supported by Maithany,

2007 that more creativity and freedom of ingredients in the dish; the quality and flavour can be improved by changing the ingredients.

The study also showed that sustainable environment is paramount to the issues of good nutrition. When there is effective and efficient power supply food commodities will be able to keep appropriately in the raw form or processed form.FAO, (2012) pointed out that, improving agricultural and food systems is essential for a world with both healthier people and healthier ecosystems. When good facilities and intentions toward road networks, favourable laws and policies on foods issues and many other factors related to growth and development are provided; there will be an enabling environment for all and sundry in every aspect most especially in nutrition.

From Table 5, the study revealed that Homemade foods can not the compared nutritionally with fast foods. Maithany, 2007 asserted that, it is obvious that the general public is ignoring the health risks of eating fast food, because many are still relying on these giant corporations to satisfy their hunger. The health consequences of eating these foods include higher cholesterol, higher blood pressure, diabetes, heart disease and obesity. Additionally, fast food does not provide adequate nutrition. It lacks essential vitamins and mineral, fiber, and antioxidants.

Proposed practical strategies on how nutrition can eradicate extreme hunger Based on the findings of the study and reviewed literature the following strategies to which nutrition can be used to eradicate hunger are suggested:

- I. Improving information for consumers, in particular by way of nutritional labeling, the overhaul of which is currently being studied by the Commission. Another related aspect is that of the rules concerning claims made by the manufacturers of food products, in order to monitor the reliability of the scientific and nutritional information communicated by manufacturers;
- II. Promoting codes of conduct for advertising and marketing where the message is intended to influence eating habits, especially those of children;
- III. Developing specific education and information campaigns (e.g. on poor nutrition and overweight) for vulnerable groups, in cooperation with the Member States and the stakeholders concerned.
- IV. Promote and practicelocal cuisines that are the indigenous food should be brought back to the menu list.
- V. Encourage and enforce Home gardening among the less privileged household and provide them with seedlings that has high yield properties.
- VI. Educate households to be practicing local food preservation in order to have adequate when out of season.
- VII. Improving agricultural productivity and incomes and promoting better nutritional practices at all levels and improve on programmes that will enhance direct and immediate access to food by the neediest
- VIII. Accelerate progress towards an open and fair international trading system. Progress is particularly needed on issues of market access, export subsidies and trade-distorting domestic support in agriculture.
- IX. Focus policies and investments on rural areas and agriculture. The fight to meet MDG 1 will be won or lost in the rural areas of developing countries, home to up to 75 percent of the poor and hungry, who derive their livelihoods from agriculture and related activities. Enhancing food security in the rural areas entails scaling up actions to improve the productivity of smallholder agriculture in ways which, in the first instance, contribute to improved standards of nutrition and thereby open up opportunities for further performance improvements and broadened participation in market-led growth. It also implies promoting the sustainable use of natural resources; improving rural infrastructure, research and communications; facilitating the functioning of markets; and enhancing rural institutions. Productivity-induced agricultural growth has a wider impact on rural areas through the strengthening of off-farm activities, rural employment

- and wages. The development of rural strategies in the context of Poverty Reduction Strategies will help to target poverty where it is concentrated in developing countries.
- X. Give priority to actions in hotspots. Programmes and investments must focus on poverty and hunger "hotspots" those areas withinthe country where a significant proportion of people suffer from malnutrition and a high incidence of poverty. Implementation of plans of action for country groups or regions (the New Partnership for Africa's Development [NEPAD], should be supported in the context of the strategies to achieve the MDGs, tailored to their specific circumstances.
- XI. Set targets and agree on coordinated actions. This involves profiling the poor and hungry, agreeing on priorities, targeting, roadmaps and timetables, exploiting synergies among the goals, mobilizing resources and allocating them strategically.

Conclusion

This study was on promoting household food preparation as a strategy to combating nutritional problems in Nigeria: key to sustainable development. It explored eradication of hunger, child mortality and nutrition, maternal health and nutrition, homemade foods and fast foods for promoting sustainable environment. It was able to identify how fast foods have taken over the homemade foods in the name advancement and technology and all other related matters such as saving time, energy and cleaning up not minding the consequences on the health of individuals and households. An environment with less hungry and healthy people with sound nutritional status is such that will have adequate manpower to inspire growth and development of that environment, the government should endeavour to enact functional nutritional policies and provide enabling environment to achieve sustainable development.

Recommendations

The following recommendations were made based on the findings of the study.

- 1. Awareness campaign geared towards encouraging and enforcing home food preparation should be encouraged; this will help in the eradication of hunger among households and the public at large.
- 2. Households should imbibe the culture of maximizing the usage of food in season, preserve some; engage in home gardening with fruits and vegetables instead of ornamental plants.
- 3. Government at the federal, state and local levels should provide an enabling environment for all round sustainability, growth and development mostly in the area of nutrition.
- 4. Policy to monitor and limit the establishment of fast foods centers and eateries should be formulated and enforced to cut down the rapid increase of fast food centers that serve unwholesome meals to consumers.
- 5. Homemakers should be educated on the use of fruits and vegetables, functional foods and bioactive compounds and ingredients.

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