Caesar et.al...

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# Review Paper

# The Challenges of Food Nutrition in Nigeria: A Preliminary Review and the Way Forward

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## Abstract

In recent years, nutrition as a public policy issue has become a major topic of discussion for an increasing number of persons and bodies concerned with social, political and economic development. Nutrition in Nigeria presents a complex dilemma; we have the challenge of nutritional deficiencies not only as a result of insufficient food; but also as a result of poor food choices among those who can afford to buy them. The problem is that it has not been adequately and critically analysed, despite various approaches at addressing these challenges. Instability of food supplies, poor food choices, policy inconsistencies and corruption, poverty and ethno-religious crises among others are some of the challenges facing food nutrition in Nigeria. However, various factors such as climate change and inter-annual variability of rainfall, lack of access to information and pervasive ignorance about the right choice of nourishment together with poor performance of agencies assigned to implement food and agriculture policies may have contributed to these challenges. Good nutritional status can only be realized and sustained when individuals within families and communities are food-secured. Nevertheless, the food nutrition situation in Nigeria is not a hopeless situation. Given the present scenario, cost-effective interventions such as Essential Nutrition Actions, should be deployed with focus on children, the poor and rural dwellers. All hands must therefore be on deck in combating nutritional deficiencies not only as a result of insufficient food; but also as a result of poor food choices among those who can afford to buy them.

**Key words:** Food Nutrition, Challenges in Nigeria, Way Forward

## Introduction

Over the years, food nutrition has continued to remain a key health challenge in developing economies, including Nigeria. Nutrition in Nigeria presents a complex dilemma; we have the challenge of nutritional deficiencies not only as a result of insufficient food; but also as a result of poor food choices among those who can afford to buy them.

Human nutrition according to Wikipedia encyclopaedia (2014) is the provision to obtain the essential nutrients necessary to support life and health. The most common non-infectious diseases worldwide, that contribute most to the global mortality rate, are cardiovascular diseases, various cancers, diabetes, and chronic respiratory problems, all of which are linked to poor nutrition. Poor nutrition is a chronic problem linked to poverty, poor nutrition understanding and practices, and deficient sanitation and food security

The problem of food nutrition in Nigeria has not been adequately and critically analysed, despite various approaches at addressing the challenge. The enormous amount of money spent in attempting to assure the food security of Nigerians without success calls for a fundamental review of the approach, to re-strategize and develop an approach that would ensure better progress is made towards achieving the objectives of first Millennium Development Goal. Since the majority of Nigerians (70 percent) live in rural areas, a review of the food and nutrition security status of rural dwellers will provide a clear picture of what needs to be done to assure food security in Nigeria with the attendant improvements in nutrition status when all the other necessary conditions, such as adequate health and care, are present (Akinyele, 2009)

# Food Nutrition defined

According to Encarta Encyclopaedia (2009), Human Nutrition is the study of how food affects the health and survival of the human body. However, nutrition is not just a study; it is eating the right kind of food in the sufficient quantity for good health and growth. While Wikipedia Encyclopaedia (2014) defines it as the provision to obtain the essential nutrients necessary to support life and health, the United Nations World Health Organisation (WHO) (2014) defined it as the intake of food considered in relation to the body's dietary needs.

# **Nutritional Status**

Nutritional status is a measure of the health condition of an individual as affected primarily by the intake of food and utilization of nutrients. According to the World Health Organization (WHO) (2014), health is not only the absence of disease but a state of complete mental and physical wellbeing in relation to the productivity and performance of an individual. Good nutritional status can only be realized and sustained when individuals within families and communities are food-secure.

## Malnutrition

Caesar et.al...

Vol. 4 No. 3

SSN: 2277-192

Malnutrition refers to insufficient, excessive, or imbalanced consumption of nutrients (Wikipedia Encyclopaedia, 2014). According to Latham (1997), Malnutrition has been defined as a pathological condition, brought about by inadequacy of one or more of the nutrients essential for survival, growth, reproduction and capacity to learn and function in society. The prefix 'Mal' simply means 'bad', hence, malnutrition literally means bad nutrition. In developed countries, the diseases of malnutrition are most often associated with nutritional imbalances or excessive consumption. On the other hand, according to WHO, the real challenge in developing nations today, more than starvation, is combating insufficient nutrition – the lack of nutrients necessary for the growth and maintenance of vital functions. People whose diets fall short of standard levels of intake for essential nutrients suffer from malnutrition that can be mild, moderate or severe, depending on the level of deficiency.

## Overview of the status of food nutrition in Nigeria

Food nutrition implies access to and ingestion of adequate amount of good quality food (Tollens, 2000). Adequacy of food intake is generally considered in terms of some minimal recommended level of food (usually energy intake but also protein, fat and the micronutrients) per period. A 2008 National Demographic and Health Survey showed that 41 percent of Nigerian children were stunted as a result of malnutrition. This makes Nigeria one of the six countries that account for half of all child deaths from malnutrition worldwide.

A recent report by the United Nations Education Fund (UNICEF) reveals that Northern Nigeria is at risk of Sahelian crisis, following increasing incidents of severe acute malnutrition in the Sahel region. Experts hinge the causes of the crisis on scarce rains in 2011, resulting in poor harvest, displacement of people and disruption of food production due to violence and conflicts, increased food crisis in 2012 and structural poverty of the region.

The fifth report on World Nutrition Situation states that stunting affects 147 million pre-school children in developing countries, with Nigeria believed to be home to 10 million of such children. Interestingly, the Convention on the Rights of the Child (CRC), domesticated in Nigeria since October 2003, states that access to good nutrition is a fundamental right, particularly for children under five years.

Recently, UNICEF set up 216 Community-Based Management of Acute Malnutrition (CMAM) sites in the seven Sahelian states – Gombe, Jigawa, Borno, Yobe, Adamawa, Bauchi and Kano. In the sites, children admitted with severe acute malnutrition (SAM) are given specialised feeding and therapeutic care to help rehabilitate them.

According to Nigeriantel.com (2013), annual CMAM admissions in these states increased steadily from 1,701 in 2009 to 18,118 in 2010, 57,185 in 2011, and 83,522 between January and September 2012. While there has not been maximum coverage, as it is in seven out of 10 states currently affected. Sites in the implementing states represent only 11 percent of the total wards, thereby affecting access to the treatment sites and consequently coverage. From January to July 2012, only 23 percent of children that could have been reached had access to treatment.

# The challenges of food nutrition in Nigeria

Food nutrition in Nigeria has seen some challenges despite various approaches both in the past and the present at addressing them. These challenges needs to be critically analysed with a view of adequately addressing them in the local and global context. The following are challenges facing food nutrition in Nigeria.

# **Instability of Food Supplies**

Stability of food supplies as explained by Wikipedia encyclopaedia (2014) refers to the availability of food for household purchase at all times despite climatic crisis, seasonal food insecurity or natural disasters. Food stability at the household level is thus critical to convenient family food nutrition planning.

Recent literatures have revealed new factors influencing the stability of the food supply, these include: climate change and interannual variability, alarming erosion, post-harvest losses, all of which affect agro-ecosystem and seasonality of prices, quality and quantities of food products Akinyele (2009). When food supply is irregular because of drought, flooding or fluctuation of prices, poor people are the most vulnerable.

# **Poor Food Choices**

Lack of access to information and pervasive ignorance about the right choice of nourishment are some of the major factors militating against proper nutrition in Nigeria. A recent study (National Bureau of Statistics, 2007) showed that beef, rice, yam, cassava, and bread constituted the main food items consumed in the south-Eastern part of Nigeria, while the South-West household members consumed more of Eko/Agidi, bread, yam flour, yam, and garri. Food items consumed in the South -South zone included garri, fresh fish, rice, yam, and beans. In a similar manner, yam, beef, fufu, rice, beans, and garri were the major food items consumed by household members in the North Central zone. The North East and North West zone consumption pattern was dominated by rice, dried fish, beef, palm oil, groundnut, beans, maize, yam, millet, and guinea corn (Oluwatayo 2008). A recent survey of inequality and welfare status of some households in rural Nigeria revealed that households had a diet made up largely of starchy foods with very little proteins and vitamins. These poor food choices characterised by over dependence on starchy foods is a menace that is common with both the rich and the poor.

# Policy Inconsistencies and Corruption

Frequent policy changes and poor performance of agencies assigned to implement food and agriculture policies have serious setback on food production and distribution. Each time a new government comes to power, the previous agricultural policies and programmes are abandoned and new ones are put in place, however, the new ones are not necessarily better than the old ones. It is

Caesar et.al.,

Vol. 4 No. 3

SSN: 2277-192

in a bid to create opportunities for graft. This creates no room for stability and progress in food production. Similarly, the dismal performance of some of the past programs like Operation Feed the Nation, Green Revolution, Lower River Basin Development Authorities as well as agencies like National Agricultural and Land Development Authority (NALDA) and the Directorate of Foods, Roads and Rural Infrastructure (DFRRI) have contributed to low agricultural and food productivity, hence poor nutrition in Nigeria.

## Poverty and hunger

Poverty and hunger is one of the main factors militating against proper food nutrition in Nigeria Okeke (1996). The inability of many Nigerians to afford appropriate food items to make up for their daily nutritional requirements have led many into junk foods and sometimes starvation. In addition, many Nigerians place more attention on the quantity of food provided with little or no regard to balanced diet. Their argument is that they have eaten, whether the food make up their daily nutritional requirement or not is no more of concern to them. This is understandably so due to the prevalent economic situation in the country.

#### **Conflicts**

The ethnic or religious conflicts have devastating effects on the economic activities especially food production and nutrition in the areas that they take place. Conflicts here do not necessarily mean physical fighting of wars. It means a disarticulated country or society that is experiencing structural violence without official declaration of war. It will be wrong to say that there is peace in such a country like Nigeria where Boko Haram and other sects are threatening the unity of the country. Consequently, it is quite possible not to have peace even when there is no war (Oke Ibeanu, 2009). In conflict areas, women and children are most affected, the primary concern is often to escape death while placing little or no attention on nutritional dieting.

# The effect of malnutrition on national economy

# Intellectual Impairment

The relationship between nutrition and human resource development was best described by the 1992 International Conference on Nutrition (ICN) held in Rome, which, in its world declaration and plan of action for nutrition, stated that nutritional well-being of all people is a pre-condition for the development of societies and is a key objective of progress in human development.

In recent years, nutrition as a public policy issue has become a major topic of discussion for an increasing number of persons and bodies concerned with social, political and economic development. Poor food nutrition undoubtedly affects mental development, learning ability and intellectual performance in a negative way. Winick and Rosso (1969) compared the brains of 9 Chilean infants who had died of severe nutritional marasmus with those of 10 control children who had died acutely of accidents or poisoning. Using the same technique that they had used on rat brains, they concluded that there was a reduction in the number of brain cells in the malnourished compared with the control children. According to Latham and Cobos (1971) , there is no question that a strong association exists between malnutrition early in life and late manifestations of intellectual impairment. This could be as a result of poor mental development associated with malnutrition. The Nigerian government has come to this realisation and has thus embarked on certain remedial programmes such as school lunch programmes for the primary and basic school classes in some states sponsored by their various state governments, to improve the nutritional status of the school children. This intellectual impairment as a result of malnutrition directly or indirectly affects the Nigerian work force.

Physical productivity is another area where poor food nutrition affects the Nigerian work force. The relationship between food intake and physical productivity appears on the surface to be quite direct. Since physical activity requires an increased rate of energy expenditure, it would appear that food intake and physical output is directly related.

# Poor standard of living and Social Development

The state of hunger and malnutrition within a country is related to its level of development. A well-nourished, healthy workforce is a pre-condition for sustainable development. At the same time, the nutritional well-being of a population is a reflection of the performance of its social and economic sectors; and to a large extent, an indicator of the efficiency of national resource allocation. When human potential and resources are trapped in the vicious cycle of malnutrition, development goals and improved standards of living will not be realized. Hence, the International Conference on Nutrition (ICN) recommended that nutrition be at the centre of socio-economic development plans and strategies of all countries. This recommendation was based on the fact that significant improvements in nutritional status can result from incorporating nutritional considerations into broader policies of economic growth and development, food and agricultural production activities, health care, education and social development. Nutritional well-being is a prerequisite for the achievement of the full social, mental and physical potential of a population so that all people can lead full, productive lives and contribute to the development of the community and the nation with dignity.

# The way forward

The food nutrition situation in Nigeria is not a hopeless situation. Given the present scenario, cost-effective interventions such as Essential Nutrition Actions, should be deployed with focus on children, the poor and rural dwellers. All hands must thus be on deck in redeeming the situation with the major stake holders leading the way.

# The role of Government

There is a need for government to develop and implement food and nutrition policies that will address issues of sustainable food production, processing, distribution and consumption. The document should equally cover issues of optimal food quality and quantity as well as integration of multi-sartorial efforts for sustaining food and nutrition security.

The following policy suggestions will enhance food nutrition in Nigeria:

Caesar et.al.,

Vol. 4 No. 3

SSN: 2277-192

- Government should promulgate favourable policies and provide adequate support through funding of research institutes and universities, this will go a long way in promoting in-depth research and studies in food and nutrition, encourage private entrepreneurs and local food manufacturers in taking up research findings for commercialization.
- Dietary diversification for children, such as exclusive breastfeeding for six months and complementary feeding for 24
  months, as well as the use of micro-nutrient supplements, such as Vitamin A, iodised salt and zinc supplementation,
  should be encouraged.
- Loan and credit facilities with low interest rates should be made easily assessable for small and medium scale food
  processors and manufacturers while encouraging more large scale food banks and storage facilities in various centres and
  zones of the country.

## The role of the media

The media has very important role to play in ensuring food nutrition in Nigeria. The following are some of the roles the media should play:

- The media should put more attention and effort in disseminating information on government policies and programmes on food and agriculture.
- Information on agricultural insurance, credit and loan facilities for farmers and agro-processors, import and export duties on various food items should be given far reaching publicity by the media.
- The media should lead the campaign on eating right. Varied feedback programs on food nutrition and proper eating habits should be initiated and aired regularly.
- The media should also support and encourage adverts by food manufacturers especially for foods with therapeutic benefits.

#### The role of educational and research institutions

The role of educational and research institutions in ensuring proper food nutrition and dietary habits in Nigeria cannot be over emphasised. These institutions should pay proper attention to research on appropriate, traditionally acceptable and cost effective therapeutic foods. Beyond therapeutic foods, supplementary feeding, which is the provision of food rations (either local staples or specialized foods) to vulnerable or malnourished persons to supplement the local diet and provide balanced and/or adequate daily energy intake, should also be encouraged.

Deliberate efforts should also be made in the development and dissemination of locally suitable and cost effective food processing, preservation and storage technologies.

## The role of the food industry

The food industry should intensify its efforts in maintaining food standards. Deliberate efforts should be geared towards maintaining standard food practices with minimum or no government supervision. Formulation and production of diverse fortified food products with therapeutic values should receive a core attention in the industry. The food industry is the only place where veritable research findings are put into production, thus the industry should encourage training and retraining of their operational staff

## The role of Non-Governmental Organizations (NGO's)

The mainstay in the management of food malnutrition even in hospital setting is diet therapy. There are packaged high-energy therapeutic foods like F75 and F100 being distributed by non-governmental organizations such as UNICEF for the management of persons admitted for severe food malnutrition. Similar preparations are made at the various hospital settings in Nigeria and go by names such as high-energy mixture (HERMIX), Kwash pap in Nigeria.

NGOs need to assist the government in circulating therapeutic foods at household level, plan and organise seminars and workshops on food dieting and therapy targeted at rural and urban women. Such seminars and workshops should be done using an approach that identifies affordable, culturally acceptable, effective, and sustainable practices that are already being used by individuals within a community to prevent malnutrition even with limited resources and access to services.

## Community level strategy

The community-based organizations also have a role to play in contributing to household food nutrition security. They can support communal farming and help set up "Food Banks" where good spirited individuals communities can donate food items to support the less privileged. At the community level, mothers, traditional and religious mentors, and women leaders could serve as veritable advocates of good food nutrition. Mothers can be taught how to prepare balanced diets and food menu charts for their families while community leaders will ensure sustainable training and retraining of mothers who will in turn train their children.

## Micronutrient Initiatives

Although malnutrition is associated with poverty, this does not mean that some forms of malnutrition do not exist among population groups that have enough food to eat. Micronutrient deficiencies continue to exist even among these population groups.

For example, moderate levels of iodine deficiency still exist in some European countries that have failed to take adequate, sustainable measures to overcome the disorder. Four main strategies have been proposed to combat micronutrient deficiencies.

Dietary diversification (availability and consumption of micronutrient-rich foods) through: social marketing of
micronutrient-rich foods; increasing consumption of dark green leafy vegetables; small-scale and community gardening;
and solar drying technology for preserving micronutrient-rich foods.

Caesar et.al.,

Vol. 4 No. 3

SSN: 2277-1921

- Food fortification (the addition of nutrients to commonly eaten foods to maintain or improve the quality of a diet). A
  fortification programme is usually undertaken in response to dietary, biochemical or clinical evidence of nutrient needs.
- Vitamin and mineral supplementation programmes and initiatives such as the Vitamin A Supplementation and the Expanded Programme on Immunization. These programmes incorporate the transition from reliance on universal supplementation to a mixture of fortification, other food-based approaches, and targeted supplementation.

#### Conclusion

Good nutritional status can only be realized and sustained when individuals within families and communities are food-secured. Nutritional well-being is a prerequisite for the achievement of the full social, mental and physical potential of the Nigerian population so that all people can lead full, productive lives and contribute to the development of the community and the nation with dignity. All hands must thus be on deck in combating nutritional deficiencies not only as a result of insufficient food; but also as a result of poor food choices among those who can afford to buy them.

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