

DISCUSSION: STAPLE FOOD AS A FUNDAMENTAL SOLUTION TO MALNUTRITION

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I. GENERAL INFORMATION

Duration:	27. 05 - 26.06. 2008
Number of participants:	8
Number of Contributions:	8

II. INTRODUCTION OF THE TOPIC

I am Adetunji Olajide Falana. I am working with the Federal Ministry of Health, Nutrition Division, Abuja, Nigeria since 2001. The focus of my Division is policy formulation and implementation on nutrition and other health related issues. I am a desk officer on program administration and implementation. I hold a B.Sc in Biochemistry in 1997 and got my Master's in Human Nutrition in 2000 from University of Ibadan. Presently, I am a Ph.D student of the University of Ibadan and my thesis is likely to centre on **Breastmilk and Staple Food Contamination in Niger-Delta: Implication for Child Survival and Policy Formulation in Nigeria.** Niger Delta is a degraded area of Nigeria where people are facing a lot of food insecurity in addition to pollution at the highest level.

Solving malnutrition problem has to be linked with the multi-sectorial and multi-disciplinary nature of Nutrition itself. **However, several nutrition programmes and interventions in developing**

countries are more centred on either supplementation or fortification with little nutrition education on the important of diet diversification.

This has led to a **total neglect of energy aspect of the individual needs which can be provided by staple food consumption.** Staple food can also provide substantial amount of other important nutrients needed by the body. The shift from Protein-Energy -Malnutrition has no doubt hampered nutritionist to continue to see staple food as an important subset of their program implementation and interventions. Nutritionist and programmes planners are gradually forgetting the fact that consumption of diversified staple food will contribute at least 70-75% of all nutrients needed by the body in addition to energy. Most nutrition interventions, especially micronutrient deficiency control programmes, are not having remarkable success in developing countries because of the **lack of incorporation of energy aspect.**

Therefore, I would like to know your opinion and insights on the above issues. **What could be the solutions to the over-reliance on Short-to Medium strategies of supplementation and Fortification? What could be done to promote staple food?**

Your contributions will be very helpful to advance and form the basis for my thesis arguments, as well as to the work in my division.

According to me, the earlier the programme implementers recognise the importance of **staple food as a Corner Stone to reducing under-nutrition**, the better. This will encourage the holistic implementation of nutrition interventions. **The over-reliance on short-to medium strategies of supplementation and fortification as a messiah in solving nutrition problems should be discouraged.**

Government in developing countries should stop being a rubber stamp to any intervention introduced by donors or partners simply because the resources are coming from them. It is high time that those in charge of nutrition in government start demanding for holistic interventions that will have meaningful impact on the targeted population. Unless interventions at all levels accord a priority position to energy, and see other strategies as complimentary, malnutrition will remain for a very long time in developing countries.

Best regards,

Adetunji Olajide Falana

III. LIST OF CONTRIBUTIONS

Contribution by George Kent, Department of Political Science, University of Hawaii, USA

Regarding "Staple Food as a Fundamental Solution to Malnutrition," a useful first step would be to **document what Adetunji Olajide Falana believes to be serious energy deficiencies in particular areas.** Then there should be a review of the patterns of supply of staple foods, especially the traditional staple. Has there been a sharp reduction in per capita consumption levels? Has this been due to price increases? Have local farmers changed their patterns of production?

If problems regarding the **supply of staple food** can be documented, **strategies** should be developed to **strengthen** those supplies. Often it will be best to produce traditional staples locally. However, it may be that local farmers find other cash crop options more attractive, selling products to customers with higher incomes, whether locally or abroad.

We come then to the question, who decides? **Who would formulate the strategies for solving local nutrition problems?** The problems are not only nutritional, but also political. Who is making what decisions on whose behalf in the service of what interests? Are key decisions being made abroad, perhaps in Rome and Geneva? Are they being made by the national government,

by people who have little interest in or understanding of local nutrition problems? Or are they being made by the local community?

Even if the decisions are being made **locally**, there may be a question of **whether the decisions are being made in an open, participatory, democratic manner**.

Adetunji Olajide Falana said, "The over-reliance on short-to medium strategies of supplementation and fortification as a messiah in solving nutrition problems should be discouraged." One must ask, **whose strategies** were these? Is there some way in which the **local community** can gain **more control over its own nutrition situation**?

The local community should always be receptive to advice and information from outside, but it should insist that the **local community itself gets to make the final decisions**. And it should be prepared to **give information and advice to outsiders** who wish to help. That is the only way to ensure that the decisions will be based on the community's own interests.

Aloha, George

Contribution by Fadil Ahmed Ismail, Food Research Centre Khartoum-SUDAN

Dear all,

Notwithstanding the importance of staple food as an important source of nutritive stuff to solve the problem of malnutrition, we also need to **identify** the concurrent **factors** that affect/shape the **consumption patterns/habits of different nations** in their basic daily meals. This depends, and largely, on supply factors in each country in addition to the many other political, economic, and societal attributes/factors. I am of the opinion that, the policies made by the major players (supreme economic powers) in the food-oriented UN organizations can foster the success or failure of war against hunger, namely USA, EU, etc, if they want to do that.

Since Rome declaration (World Food Summit November, 1996), which reaffirmed " the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger", nothing genuine has been made on side of rich counties. On side of poor counties it is even worse as it seems there is no hope to eradicate poverty or hunger, and ambitious people look for messiah to solve the issue of food security. The shortfall on side of the poor is simply because it is beyond their capacity (financial resources, strategies, plans and expertise) to do so. On the other end, developed counties, favoured by their interest in having cheap energy -via alternative energy sources as biofuel- have even aggravated the problem of poverty. Again, and as professor Kent earlier mentioned is that those who have the power are not the ones who have the problem, and do not care enough about those who have the problem.

Twelve years ago, the good will of the World Food Summit which pledged national and international commitments to achieve food security for all by reducing the number of undernourished people to half of its level no later than 2015 is now faced by new challenges of soaring prices, particularly staple foods. Having this gloomy picture one would think of the following humble assumptions or expectations.

As the need is the sole motivator for invention, I am sure that under current soaring food prices poor (who are not capable to wait for international slogans to solve their problems) can **adapt more wild plants for their consumption almost at zero cost, except the effort to look for it**.

Our role as scientist is to help them identify and adapt these veld species for human consumption through research and processing. For instance, in Africa, there might be **a need to search for and also make research in veld or wild crops currently not under use but might be potentially nutritive and act as an important source of protein and energy**. Moreover, **wildlife** (if there is any left) and **livestock products** can act as a source of protein to poor, still problem is their availability and how could they be accessed and or processed in an edible

manner suitable for utilization, even though they might not be stable in terms of production continuity.

At the macro policy level, government interventions coupled with **appropriate policies and investments to help poor to access stable food include among others, rural infrastructure, public health and education facilities, appropriate technologies that can transform wild species to suitable forms ready for human consumption.** The support of nutritional education, which avails analytical information that shows chemical and physical composition of wild food species, might be an avenue to poor, wherever they are.

Fadil Ahmed Ismail

Contribution by Mathew Mbake Ireri, Ministry of Health, Kenya

I am Mathew IRERI a nutritionist working with the Ministry of Health in rural district in Kenya.

I wish to concur with both George and Adetunji on issue of staple foods and the decision processes.

First, the reliance on short term to medium term strategies to reduce malnutrition particularly micro-nutrients requires, besides supplementation and fortification, a community participation in understanding and subsequent decision regarding the problem, to mobilise community support.

The decision making process, taking example of my country Kenya, on programmes related to interventions to reduce malnutrition are done higher above, with little community involvement. This has led to programmes that do not reach the programme targets due to inadequate support from the community, due to low knowledge on the programmes and also due to ineffective implementation strategies.

Secondly, the involvement of the implementers in formulation and evaluation is an impediment since its inadequate leading to low motivation and support at implementation level.

In addition, the political will to support such programmes is low, with minimal budgetally allocation to promotion of staple food through nutrition programmes.

Lastly, developing countries are putting much efforts to "**quick-fix**" solutions to their problems which end up consuming much resources and finally not meeting desirable goals.

I therefore support the idea of **effective community participation, through informed decision processes** and more support to food and nutrition programmes that are implemented through collaboration of all stake holders with nutrition divisions of ministries of health being actively involved in all steps, from planning to social mobilisation towards sustainable food and nutrition programmes to fight malnutrition.

Irerri

Contribution by Virginia Melo, Universidad Autónoma Metropolitana –Xochimilco, Mexico

Dear Adetunji,

Africa is one of the continents with major malnutrition problems and they have many underutilized sources of nutrients, not only of plant sources but animals as well. Later this week I will e mail several sources of food with good nutritional value that probably are available in Nigeria. Changes in climate and erosion land lead to a low production of staple food.

Fortification or supplementation strategies are some times not as successful preventive measures, because there are several considerations that should be studied. Fortification or supplementation food should be consumed by a sizable proportion of population. It should be inexpensive so that can be consumed by low income groups which are the most vulnerable to

malnutrition. It should be distributed through a widespread network that can reach all regions of the country. There should be no change in taste, appearance or colour on fortification. There should be no loss of the nutrient in processing or cooking the food. I could mention many other inconveniences however I should say that there are some other strategies for modifying local food systems, such as home gardens to increase food production. In other hand, there are many micronutrient rich food sources readily available that population do not consume in adequate amounts or not intake at all because of a lack of awareness. Dietary diversification by promoting consumption of local underutilized food has been a success in different countries such as Thailand and others. Insects that are widely consumed in several countries of Africa, could help. I will send a list in a near future.

Best regards,
Virginia Melo

Contribution by Joseph Opio-Odongo, Policy Specialist – Environment, UNDP, Kenya.

Dear Virginia,

While your suggestion on the need to focus on staples is good, it begs a fundamental question of **why those sources of nutrients have remained underutilized in Africa**. Here are some clues:

The gradual but profound **changes in dietary patterns in many African communities**, partly driven by the modernization process and the bombardment by advertising media:

- **Changing food preferences**, due to factors other than the exotic taste - these include the out competition of staples crops by alternative crops that meet the producers' food and income needs, particularly where land is scarce; **changing cooking habits** that are prompted by the scarcity of fuel wood that remains a major source of cooking energy in rural Africa; **a weakening inter-generational transfer of knowledge, skills and values** related to production, processing, storage and cooking of the staples; etc..
- The perennial **neglect** of the staple crops **by the crop development programmes of the research establishments in Africa**, which has contributed to their vulnerability to devastation especially by new diseases and pests as well as the decline in soil productivity
- **Local stigma and taboos** that discourage the consumption of some of the nutritious alternatives such as the insects that you mention
- **National food and nutrition policies** that are **not** adequately anchored on knowledge of local food preferences, cooking habits, weaning practices and traditional methods of supplementation

While supplementation and fortification are good, they yield **greater benefits if targeted at vulnerable groups**, especially children in the context of a child survival programme.

It would be nice if you could shed more light on Thailand succeeded in promoting the consumption of local underutilized food.

Joseph Opio-Odongo

Contribution by Robert Mugubi Nalebe Nalebeson, ENHANCE Program, WVK

My names are Robert Mugubi Nalebe Nalebeson, I Coordinate ENHANCE Programme in World Vision Kenya.

I personally had a discussion with Adetunji Falana concerning the promotion of staple foods as a solution to malnutrition. I therefore wish to join George and Mathew in supporting Falana's argument.

It is of interest to note that in the event of some emergency the normal reaction is to apply "**quick fix solutions**" and unfortunately this has been taken to be **the norm** especially by many organizations that intervene **in nutrition programming**. I would say the reason could be because of donor specifications or limited budget but in the final analysis such interventions are not sustainable at the community level. First and foremost over reliance on supplementation is based on the premise that there are total deficiencies in macro and micronutrients within a certain locality. This is not the case and we need to carry out **more studies to find out the main cause or the confounders of malnutrition before quick fix solutions are applied**.

The **problem of malnutrition** should be addressed **in relation to the inter-relationships between adequate dietary intake, maternal and child care and portable water, health infrastructure and sanitation**. In terms of adequate dietary intake the link is availability and accessibility of adequate food and utilization at the household level through out the year. This point is reinforced by the ability of the household to access food and in this case for the low income countries whose economy and household's source of livelihood is dependent on agriculture, will be the staple foods available in a certain geographic zone. I strongly believe that adequate production, availability, access and utilization of staple foods at the household level would contribute to at least 70-75% of the nutrients in addition to energy needed by an individual.

Currently staple foods are facing challenges because of poor soils, poor climatic conditions, urbanization, rural urban migration, HIV /AIDS impact on agriculture and the introduction of fast foods. Few farms are put under cultivation due to inadequate labour and therefore shortage of staple food supply.

Therefore organizations and government should promote **the production of staple foods by creating markets in the rural areas**, build infrastructures that **support the farmers to produce more, subsidise** the prices of **fertilizers**, the **use of compost manure**, **avail loans to farmers**, improvement and increase yields through bio-fortification and make policies that motivate farmers to produce more staple foods. These approaches cannot be achieved without a national nutritional promotion that emphasizes on the importance of staple foods in nutrition. When this is well done then and then can we talk about documentation of the staple foods.

Robert Mugubi Nalebe Nalebeson

Contribution by George Kent, Department of Political Science, University of Hawaii, USA

Friends, in this thread, Adetunji Olajide Falana began by expressing concern about possible over-reliance on supplementation and fortification provided by outsiders, and called for increasing emphasis on staple foods.

He also said, "Government in developing countries should stop being a rubber stamp to any intervention introduced by donors or partners simply because the resources are coming from them." Mathew took a similar view, saying "programmes related to interventions to reduce malnutrition are done higher above, with little community involvement. This has led to programmes that do not reach the programme targets due to inadequate support from the community, due to low knowledge on the programmes and also due to ineffective implementation strategies."

We should separate the question of whether micronutrient deficiency is a serious problem, and the question of whether it should be solved through involvement of outsiders.

An **investigation** should be made **into whether there is in fact a deficiency in some particular nutrients**, possibly because of a lack of diversity in the diet. If there is a problem, **consideration should be given to all the different ways in which it might be solved**. It might be addressed by using local foods in different ways, or by introducing new foods. Or it could be addressed by using processed products from the outside. That would not be objectionable IF that decision was made after careful **considerations of advantages and disadvantages by local**

people.

Robert said, "I strongly believe that adequate production, availability, access and utilization of staple foods at the household level would contribute to at least 70-75% of the nutrients in addition to energy needed by an individual." He concluded with a plea for more support for local production of staple foods. However, there is **still a need for discussion about how to provide the other important nutrients that are needed.**

Aloha, George

Contribution by Imelda Angeles-Agdeppa, Assistant Scientist, Food and Nutrition Research Institute, Philippines

What Nalebeson and Falana have presented is undebatable but these should be coupled with what George Kent is saying that there is a need to dissect the problem and find the root cause. It might be that diversification of diet is not the only solution but the way foods are prepared and the composition of the meal itself or food matrix is of more concern/important.

Again, the causes of malnutrition are varied and therefore, should be approached in a multi-disciplinary manner and must be area-specific. Building alliance and defining true partners in identifying and implementing solutions are very crucial e.g. political support where funds for support are available. Open communication and dialogues with "outsiders" are really important especially in developing countries where funds are very limited. Fortification of staple foods and other commonly consumed foods are still the mainstay to solve micronutrient deficiencies. Let the community, the local leaders, politicians and other government and NGOs know and feel that there is indeed a problem that need urgent solutions. Open communication and good inter- and intra-personal relationships could be the key towards achieving support.

Imelda Angeles-Agdeppa