

Chapter Eleven

EATING REGIMEN AND THE ECOSYSTEM: QUESTIONING THE SURVIVAL OF AFRICA

Aleke Matthew

*Department of Philosophy
Kogi State University Ayigba
Kogi State - Nigeria
toogood4god@gmail.com*

Executive Summary

Africa's vast landmass, ecosystem and biodiversity have the agricultural potentials of feeding the entire world. As a continent, the greater size of her land mass is blessed with arable land, abundant water and climate favourable to all year round production of cash crops and rearing of all kinds of animal. Between the north and south, suitable land could be found to grow nearly every type of food product known in the world. Despite all these, the continent still remain the world capital of food insecurity that the citizens have to substitute their eating proportion with synthetic food imported from abroad. Adopting analytical method, this paper sets up that the change in Africa's eating regimen due to food scarcity is step by step setting her health on time bomb because synthetic food runs parallel to Africa's organic make-ups and tropical conditions. Thus, agricultural based policies and implementations must remain the main and continuous target goal of government at all levels to ensure food security of the nation and not just rhetoric for electioneering campaigns and winning of elections. What's more, legitimate bodies entrusted to monitoring the standard and safety of foods imported as well as those manufactured in this nation should sit up to their responsibilities, else the entire health of the continent will be endangered in no distant future.

Keywords: Africa, Agriculture, Tropical Conditions, Organic make-ups, Health, Food, Synthetic Food.

Introduction

Human wellbeing is viewed from choosing the required reaction from among all that we eat which nature is equipped for giving. For example, "it has been demonstrated that food takes six to eight times longer to go through the digestive system in the Western nations than in parts of Africa and India where staple diet is wholefood" (Robert 129). When food eaten does not concur with the organic make-ups and tropical conditions, "body organs are typically subjected to pressure in order to separate it, in this manner subjecting our health to different kinds of foreign ailments" (129). Since it is in light of the necessity of what we eat in accordance with the organic make - ups and tropical condition that it has created to satisfy a scope of capacity it is able to do. When we neglect to keep to these standards our wellbeing decays. This is what happened in Europe (Change in eating regimen) in the nineteenth century. Same will soon happen to Africans if appropriate measures are not taken.

The Consumer and the Consumed

The asset of nature is something genealogically disseminated in accordance with their tropical conditions and organic cosmetics. The wellbeing of individuals in different topographical areas significantly relies upon their ideal utilization of their nature given sustenance. Just as those living in chilly climate decipher the world uniquely in contrast to those whose climate is hot. So likewise the organic make up and dietary way of life contrasts. To forsake one's nature given sustenance in line with his organic make-ups and tropical condition for the opposite is like putting a square peg in a round hole. The more we go for sustenance opposed to our nature given organic make-ups and tropical conditions, the more they imperil our wellbeing.

In a paper given to the Royal Society of Health in 1967 Dr. R. Logan, Director of Medical Care Research Unit, abridged the perils for moderately aged men as takes after:

1 of every 4 will suffer from chronic bronchitis; 1 out of 5 will suffer from coronary illness; 1 out of 12 a peptic ulcer; 1 of every 4 malignancy, of which 1 out of 30 will be cancer of the lung; 1 out of 12 will be admitted to a general hospital every year; 1 of every 300 will be admitted to a mental doctor's facility every year (9).

Lorgan additionally express, that a comparable picture for ladies can be condensed by saying that "1 out of 4 will be routinely going to a GP with a ceaseless ailment; 1 of every 8 will bite the dust of diabetes" (10). He concludes that, "coronary illness; peptic ulcer; growth, diabetes, another kinds of ailment is being seen in Western Europe simply because of the change in national diet" (11).

Research done by a senior medical specialist Mr. A. Elliot-Smith, at the Radcliffe Hospital, Oxford, demonstrates that:

There were just five instances of an infected appendix at the hospital between 1895 and 1905. There were currently more than 500 cases each year. Peptic ulcers were not recorded before 1890. However the most recent year 23,000 men were released from the armed force with this condition over a time of 30 months 1936-1941 (127).

Their ulcers according to Elliot "were not because of armed force life or armed force cooking; the greater part of the volunteers brought their ulcer with them" (129). In his (Mr. Elliot-Smith) analyzed records of six separate London doctor's facilities from 1925 to 1929, he found a sensational ascent in ulcers over this period.

Mr. Elliot-Smith had worked in Africa and had seen among unsophisticated local people groups the nonappearance of

diseases most common among the Europeans. Back in Oxford, he attempted his examination to build up whether these illnesses were newcomers or in the event that they had dependably been available. He "found that they were new and their occurrence ascended with the adjustment in the national diet because of the new mechanical procedures of refining sugar and flour" (131). Different specialists who had worked among rural peoples noticed a similar contrast in the example of illnesses and they all speculated that eating routine must have an impact in causation of the 'cultivated' ailments.

For instance, Surgeon Captain Cleave saw that "Africans who eat Western nourishment built up the new Western ailments, while the individuals who were all the while eating their traditional sustenance did not" (Cleave 59). This view has been supported by Dr. D.P. Burkitt, a recognized specialist then of the Medical Research Council London, celebrated for his work in diet related sicknesses to various districts of Africa. Burkitt worked with a South African specialist, G.D. Campbell, looking at the hospital records in Western sustenance regions with those in less sophisticated ones: they found that "the Western ailments included significantly more than a ruptured appendix and ulcers; they stretched out to diabetes, heftiness, coronary thrombosis, dental rot, varicose veins, diverticulitis, constipation and several infections probably related to constipation" (Burkitt and Campbell 7). This view was also supported by other medical experts working in different zones in Africa where traditional diets are being superseded by Western diets.

The most evident contrast in the eating regimen between the two gatherings is that Western diets "have white sugar and bread, processed, packaged and synthetic, while the older peasant diets are based on unrefined cereals, fruits and sugar" (9). The latter is what is called wholefood by the diet reformers, since little or

nothing has been expelled from the grain and the sugar cane. Dr. Campbell and Dr. Painter (specialists at the Manor House Hospital, London) during the World War II observed that in war-time when "these refined sustenance were proportioned as well as the extraction of supplements and wheat from bread had been constrained by law, these illnesses declined, just to shoot up again when the limitations were removed" (Campbell and Painter 19). The reason is that during the time spent refining flour for white bread and other kinds of sustenance, almost all of the nutritive value of the grain is cleared out. One may contend that these nutrients can be obtained by eating a varied diet.

On the other hand, this means that we have to eat too much to get adequate nutrition. Obesity due to overeating is also a disease of our time. More important than that, however, is that bran which is removed, should serve the function of stimulating the movement of the bowels. This may not be a nutritive function but it "cures the white man's ailment of constipation at no cost" (21). In tests by Dr. Painter at his hospital where he encouraged whole food diet to every one of his patients, demonstrated that whole food diet "had surprising outcomes in restoring their health" (29). On account of refined flour, sugar as starch is processed and consumed as sugar in the body. Refined flour is relatively unadulterated starch so when we take refined flour we put our health to the danger of extreme sugar. Since the expanding utilization of starches and refined sugar can be so intently connected with the new infections, Dr. Cleave and his associates have given a gathering of them one name, as depicted in their book *Diabetes, Coronary Thrombosis and the Saccharine Disease*. "Saccharine rhymes with Rhine" (32), to recognize it from the sweetener.

In the event that a relationship has in reality been set up between dietary habits in view of overabundance of sugar (saccharine) in

the body it ought not to be important to anticipate a comprehension of how this causes infection before endeavouring counteractive action. As these ailments are the aftereffect of abstracting from the 'whole food, we are faced with another episode of deficiency diseases such as scurvy, beriberi and rickets. These kinds of dietary deficiency diseases caused by these concentrated fragmented sustenance develops gradually over half a lifetime and after that shows itself in this wide assortment of degenerative ailments both acute and chronic.

Dr. Hugh Sinclair of Magdalene College, Oxford, a nutritionist, has for quite a while implicated some animal fats as a noteworthy reason for degenerative infections. He outlines his contention with lung cancer. Lung cancer is presently connected with smoking; however in Spain and Japan, where smoking is as common as in our own nation, lung cancer minimally exists. So there must be another factor: Dr. Sinclair believes it is the saturated fatty acids in animal fats. There are two kinds of fatty acids, one essential – the unsaturated fatty acid – and one not essential, the saturated fatty acids. The essential ones are not made in the body and must be taken in through sustenance. They have a tendency to be unsteady noticeable all around and turn rancid, so the manufacturers have discovered methods of changing their chemistry by saturating them. Here, then, we have another wellspring of deficiency. A deficiency of fatty acids "will weaken the membranes of our body cells, which serve to shield the cells from attack and infiltration by alien bodies liable to harm them" (118).

Dr. Sinclair did another test which his case demonstrates "that cutting edge high vitality bolstering of pigs additionally obliterates the basic unsaturated fats in their bodies" (15). In a letter to the *Lancet* (twelfth December, 1969) similar view was

upheld by Michael Crawford of the Nuffield Institute of Comparative Medicine, Crawford state:

Peoples have dependably eaten some fat, however just the cutting edge "high-vitality" bolster framework create a lot of saturated and mono-unsaturated short-chain fats.' In present day production line cultivating strategies 'fat appears to supplant functional tissue. We have examined 14 distinctive wild herbivorous species, and have been not able to discover any indications of such gross penetration, which prompts the topic of whether such lipid (fat) testimony is obsessive.' This fat is chiefly the inessential fat and isn't found on creatures ready to pick their own particular nourishment by free- range grazing (37).

Crawford trusts that just to quit eating sugar is not sufficient: we require additionally having the perfect measure of fundamental unsaturated fats keeping in mind the end goal to develop the supply routes of our body with appropriate auxiliary constituents. As Crawford says in his letter, "an endeavour at avoidance by modifying the harmed corridors through the correct eating routine ought to be sufficiently basic" (39).

We may include here that not only is the feeding of the animal indicated in modern agricultural methods but feeding of the plants as well. As the plants on which we and animals feeds are likewise fed by fertilizers and the cutting edge practice is to concentrate these similarly as flour and sugar are concentrated by extricating essential elements. This has been examined by Michael Blake in his book *Concentrated Incomplete Fertilizers*. There is no space here to examine it yet the standard is the same. "Nitrogen is amassed to the detriment of other imperative plant supplements which unbalances both the dirt and the digestion of the plant" (69).

Albeit hereditary control has brought about fowls and animals which change over sustenance all the more productively, it has additionally brought about less solid animals with diminished protection from sickness. Perpetual close constraint in structures and overwhelming stocking rates likewise militate against wellbeing. It has been questioned whether the circulatory framework in animals which has been denied practice can react satisfactorily to the additional requests put upon it by ailment. Regardless of all the examination into new antibodies and medications, ailment flare-ups in these structures appear to be unavoidable to achieve pestilence extents.

Where animals are kept in hundreds or even thousands "there can be next to no individual consideration and the training has developed of adding anti-infection agents to nourishing stuffs as a normal measure, as a prophylactic as well as a development promoter" (Belly 11). This has driven, throughout the years, to medicate protection in ordinary vegetation microorganism found in the gastrointestinal tract. Further, "this protection can be passed starting with one bacterium then onto the next and different protections can create against every known anti-infection. In specific conditions this protection has been passed on from creatures to man" (Copper 17). An expansive level of the consistently expanding revealed occurrences of sustenance harming every year have been followed back to abattoirs, poultry-pressing stations and homesteads of starting point. As indicated by the *Swann Panel Report on the Utilization of Anti-toxins in Farming*, "chloramphenicol ought to be pulled back aside from in uncommon instances of treatment and no anti-infection ought to be utilized as an encourage added substance in the event that it were utilized as a part of either human or animal treatment" (Swann 47).

Tests on eggs have demonstrated altogether less Cobalamin (vitamin B12) in battery eggs contrasted with strawyard eggs. The organic chemists answer (to Animal Defense Society for whom they did the tests) expresses: "The most emotional distinction is in the figures for Vitamin B12 (hostile to malevolent sickliness factor)" (56). This is not kidding particularly for veggie lovers.' A correlation of meat from oven chickens with that from unfenced chickens, completed by the Ministry of Agriculture, indicated "huge loss of thimine (vitamin B1) in the grill winged animals" (Brambell 51). Research has demonstrated that "there is just half as much iron in 'white veal' as in veal from regularly raised calves" (Harrison 29), an outcome not out of the ordinary since 'white veal' calves are sustained iron-inadequate drain substitute to keep their pale" (Vipond xxxviii).

Nutritionists Michael Crawford and Dr. Hugh Sinclair have discovered an adjustment from saturated to unsaturated fats in bolstered and free-range animals or brushing and slow down encouraged animals. The two researchers indicated an adjustment in cultivate frameworks as the reason. According to them:

... These bullocks are eating their natural food at present time, namely grass. But during the winter they will be stall-fed and would produce more saturated fat on them. The same is valid for pigs ... the broiler chicken have largely saturated fat as compared with free-running chicken, and same is true for battery egg as contrasted eggs from free-extending chickens. So the more we feed animals on their less natural food the more we produce saturated fat in their bodies and consequently in our own bodies (Sinclair 131).

Sinclair believes that "these abnormally large quantities of hard (saturated) fat are causing the epidemic of coronary diseases in man" (131).

Our ultimate survival depends on our ability to live in harmony with our environment, to work with nature rather than in spite of it. What is disturbing about the present health condition in Africa is that the tenets of good health – eating (diet) in conformity with her organic make – ups and topical conditions – which have been passed on from age to age – are being put far from the persons who tails them. We are getting to be mindful of the risks that emerge from the contamination and pollution of the earth: yet undermining as these may be, they are not any more hazardous than the adjustments in the synthesis of our food. The episode of foreign ailments in Africans is because she has demolished their health with synthetic food either imported or manufactured within. Synthetic food is hazardous to Africa health. At whatever point we Africa eats synthetic food our body organs are typically subjected to pressure in order to separate it, in this manner subjecting our health to different kinds of foreign ailments that we are experiencing presently.

Contextualizing the above painted scenario with what is obtained in Africa, Aleke Matthew writes:

Africa is a continent honored with immense arable land great climatic conditions that throughout the entire year, crops of different kinds can be cultivated and terrestrial animal of different sorts are raised. Plenteous ocean that a wide range of sorts of sea food could be reared in adequate amounts and between the Northern and Southern districts, fruits trees and vegetables of any kind can grow and make bounty yield without fertilizer in most of the places (26).

Yet the incongruity of the entire thing is that shockingly, many Africans are dying of different foreign ailments by consuming the hereditarily controlled, automated thus called "complex" precooked sustenance delivered and bundled from the West or Asia due to food shortage. Thus, Africa of today eats ten times

more sugar for each head than she did in the twentieth century. She has surrendered her eating regimen for the Western synthetic food as opposed to her nature given food in accordance with her organic make - ups and tropical conditions.

Among these nourishments obscure to our African legacy are: soft drinks, ketchup, organic product juice (with natural product enhancing artificially made), frozen chicken, fish, meat and yogurt, pies, cakes; treat of different pastries to mention but few. These nourishments with cosmic glycemic record come in whimsical names that float our consideration from the very truth that they are sugars such as: mannitol, dextran, sorbitol, and refiners' syrup, D-mannose, just to say however a couple. This very abbreviated rundown would be deficient without saying aspartame which is 200 times sweeter than sucrose, and saccharine which many people contend isn't possibly cancer-causing however have concurred that it has no sustenance vitality, no healthful esteem and is 300-400 times sweeter than sucrose. All these in various amounts are included for enhance upgrade and conceivable conservation.

Today, Africa is suffering from different kinds of foreign and unknown ailments because she has surrendered her nature given food for hereditarily controlled automated food. The food insecurity that put Africa in this mess is nothing rather that Africa problem is that she does not know her problems. The inability to know that her problems not even to talk of discussing what could be the reason and conceivable approach to turn away from it is because she has lost her social legacy and has cheapens herself in all part of human endeavour. Africa has lost hope and confidence on herself to the extent that she no longer believes on herself for anything at all. She has terribly rely upon the West for everything and sees whatever originates from West as prevalent and most solid notwithstanding when it is disservice to her life.

This reliance complex of Africa on the West made Pope John Paul II to yell at Africa though paternal, he said, "*Africa alzati e camina*" (Onuigbo 31) – Africa stand up and walk! Pope was basically requesting that Africa wake up and be confined from the Western autonomy. Yet, Africa does not just rely upon the West for what she can't do for herself but additionally on the one she can do for herself.

Instead of stabilizing her agricultural system to ensure adequate harvest and supply of the nature given sustenance in line with her organic make - ups, Africa has insensibly down tool every of her arsenals towards agricultural due to lack of political will and shortsightedness of her leader. Using Nigeria as an example, "it is disgraceful that Nigeria imports palm oil from Malaysia, a nation Nigeria thought how to plant and process oil palm" (*The Punch*, January 30, 2001, 32).

Revamping and Expanding Agricultural Extension Services as a way out of the Chokeholds

Good agricultural extension is the only way through which food sufficiency can be achieved in Africa. The principal task of contacting rural people and developing extension information, credit, productivity, imputes, processing and marketing services falls within the duty of the government. If farmers in Africa, especially those oriented to small and marginal farms "should be able to receive more intensive and continuous attention than the present system of spasmodic ill-equipped and insufficiently-motivated government" (Ebong 175-176). African will not only feed herself but the entire world.

In addition to making the services acceptable to their beneficiaries, project manager must ensure that each services are, in fact, accepted and used by the farmers. Thus, farmers must be induced and convinced that the new or allegedly improved

services, resources or techniques will actually benefit them and that the changes required in such areas as cultivation methods, water management or marketing procedure worth the cost and risk to them of accepting the change.

The Process and Content of Improved Agricultural Extension Services

Agricultural extension is “a process of rural education, by which the masses learn improved practices of production marketing, conservation and better quality of life” (176). It plays a crucial role in boosting agricultural productivity, increasing food security, improving rural livelihoods and promoting agriculture as an engine of poor economic growth. Typically they obtain their training largely by informal means, extension-type demonstration, meetings, workshops and related communication methods including mass media both in field and in the community.

In summary, the training comprises the following operations:

Establishing model farms to demonstrate modern techniques of production to farmers; laying out demonstration and experimental plots; formation of farmers’ Cooperative Association; arrangement for training of farmers with emphasis on farm management problems; imparting social education and encouraging cultural activities for inculcating a spirit of self-help and self-reliance amongst them. Teaching farmers the cropping practices like: increased plant population, proper plant spacing, followed by use of good seeds treatment. Proper tilling, weeding and improved seed bed. Nursery and land preparation. The use of improved varieties, better water control. Further inputs of fertilizes, better insect and disease control, and more efficient post-harvest technologies (Bottral 150).

Under rainfed conditions, the extension service plays the role of: “the identification of farmer’s problems and needs (and the referral of resulting information to senior official, research stations or other agencies, where necessary); the provision of advice to farmers about the techniques of agricultural production; co-ordination with agencies, responsible for the provision of inputs (seeds, fertilizer, pesticides, etc.) and credit” (151).

Here, it is important to note that “in every early stages of agricultural development (where aggregate demand for purchase may be small, private commercial activity is low and the public sector’s manpower resources are also very limited) there may be no alternative to giving the extension officer direct responsibility for input supplies as well as technical advice” (Ebong 177). However, once the demand for inputs and credit becomes substantial, the function should be separated among different special agencies, otherwise the extension staff will be prevented from performing their central advisory affectively because of heavy demands on their time from other quarters.

The nature of extension function under irrigated condition has several distinctive features. One of which is that there tends to be greater predictability and homogeneity in cropping pattern and the timing of farming operations in irrigated than rainfed areas; “this is particularly so in cases where the operating agency deliberately sets out to control farmers’ choice of cropping pattern or else effectively limit the range of their choice through strict rationing of scarce water supplies” (178). Although relatively homogenous in physical terms, irrigated areas contain as much social diversity as rainfed area and wherever there are marked differences between resource endowments of larger and smaller farmers, the use of diagnostic, diversified approach is essential.

Therefore, under irrigated conditions, the task of the extension service should be that of:

the provision of specialist advice to farmers about methods of land preparation and frequency and depth of water application (water management extension); the development of farm plans which will encourage more economic use of expected patterns of water delivery; discussion with water distribution agency about patterns of water demand; short-term; local variations/deviations from seasonal plan; seasonal joints planning of expected seasonal distribution pattern; long-term e.g. change in frequency of channel rotations or amounts of water delivered per rotation; or major changes in cropping patterns or timing of water release from reservoirs (Bottral 152).

In order to monitor and evaluate the performance of agricultural extension staff in the case of under irrigation agriculture, the controlling agency or government should find out if detailed written procedures exist for planning, executing and monitoring the following activities:

Identifying farmers problems and needs; advising farmers about production methods; providing specialist advice to farmers about water management; developing farm plans designed to make more economic use of available water supplies; discussing short-term variation in water demand with water distribution agency; participating in seasonal and long-term strategic planning for water distribution. Coordinating with agencies responsible for providing inputs and credit (or directly providing these services themselves). Collecting and analyzing data for monitoring production performance, with respect to equity, check and see if procedures lay special emphasis on support to smaller farmers and/or on

the dimension of techniques which are easily assimilable by smaller farmers (153)

On the question of to what extent can the quality of the performance of extension staff be attributed to: organizational structure, procedures, technical skills, motivation, resources (Man power, equipment, especially transport; finance)? It is important to bear in mind the fact that, in broad terms, most commentators would probably agree that the following are among the most important ingredients of a successful extension program:

An appropriate organizational structure within the extension service; some form of local farmer grouping which will enable information to be widely disseminated; an effective management system (with particular emphasis on work programing and monitoring); adequate resources of manpower and transport; skills in communication with farmers (not only for the transmission of advice but for the prior diagnosis of farmers' problems and needs); good two-way flow of information between extension and research station, so that the content of extension message can be closely tailored to the variety of farmers' needs') and motivation of field staff (259-260).

The above process and content of improved agricultural extension services have been found to have extremely positive effects on productivity of the farms in other countries. This paper is very optimistic that if Africa should adopt it, the issue of food scarcity that forced her to changing her eating regimen which by extension is gradually eroding her wellbeing will be put to an end.

Conclusion

Government policies in Africa does not support farmers. Giving low interest rate credits to farmers or supplying them with low

cost fertilizer, high yielding grains and stems as done in other countries is, for Africa, rhetoric in elections campaign rally ground, pages of the national dailies, radio and television stations for wining of elections. Growth in science and technology has been faster in the last fifty years. What was previously neglected or considered impossible has been achieved, thanks to the continuous effort of scientists who have continued to work assiduously. As the world rejoices that other forms of fuel are possible, and begins to produce ethanol from crops in order to minimize emissions which are dangerous to the ecosystem. If the poor farmers in Africa are duly supported, they will produce enough food not just for consumption but also the ones that can be used to produce biofuel that minimizes emissions and environmental friendly as opposed to fossil fuel which emits large quantity of carbon dioxide. Therefore, governments of the continent at all levels (Federal, States and Local Governments) must as a matter of urgency, reorder their socio-political priorities and put in place policies and implementation programs and projects that will be agriculture based to lift the nation out of the food shortage trap into which she has fallen. Agricultural extension programs should be made a compulsory course in African tertiary institutions in order to encourage African graduates to go into farming than wasting time looking for white collar jobs which are not easily come by. The continent should also re-orient the minds of her citizens on lowering their appetites towards synthetic sustenance either imported or produced from within in order to avert the widening and obscure health challenges which have characterized the nation's well-being in the recent

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