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ECONOMY AND
PROTEIN MALNUTRITION AMONG THE DIGO

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INTRODUCTION. Protein malnutrition, commonly termed *Kwashiorkor*, is a common malady in Africa, especially among children. (A person suffering from *kwashiorkor* becomes progressively weaker and emaciated; his long hair turns first reddish, then white; his stomach distends greatly, and he loses effective control of his limbs.) In many areas of Africa such malnutrition is regarded by Western observers primarily to be the result of poor physical environment and inadequate methods of food production and/or distribution. That is, sufficient protein is presumed not to be available to the average African. In such cases it is felt that Western technology can help to eliminate protein malnutrition. For example, Western medicines and insecticides can successfully attack animal sleeping sickness and other diseases of livestock, thereby allowing Africans to raise cattle, sheep, and goats in areas now closed to such husbandry. Also, Western technology can open new areas to animal husbandry by increasing water supply or pasture, and it can improve the quality and productivity of domestic animals by careful breeding. New protein foods can be introduced to the Africans, and their current production of such foods can be increased. Finally, transportation can be improved so that needed foodstuffs may be marketed in areas of need. If nothing else can be accomplished, sources of protein such as powdered milk may be distributed to needy Africans as part of a medical and welfare scheme.

The above means of combating protein malnutrition have been in operation for considerable time in much of Africa and will certainly continue to be employed. Because of African cultural patterns, both overt (observable behavior) and covert (attitudes, values), these means have often failed to accomplish all that was desired of them, or they have caused other problems. For one, Africans have frequently not made sufficient use of available proteins because of their traditional patterns of food preparation and consumption. They have continued to prefer traditional foods low in protein but emotionally far more satisfying, such as maize, cassava, or yams. For another, the opening of new areas to animal husbandry has often

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led to considerable overstocking and overgrazing, with resultant denudation of the land and disastrous erosion. Also, African women have frequently mixed powdered milk with unboiled, contaminated water and have fed this to their infants, causing illness and even death.

In short, even where protein malnutrition is primarily a result of poor environment, economy, and technology, other, often less obvious, traditional cultural patterns must be taken into account in any development and improvement program. If *kwashiorkor* is to be eliminated satisfactorily, and if contingent problems are to be kept to a minimum, these other patterns must often also be modified.

The importance of traditional cultural patterns is perhaps best illustrated by an example of a people who suffer from protein malnutrition primarily because of them. The Digo tribe of coastal Kenya and Tanganyika, among whom this writer conducted anthropological field research from October, 1958 to May, 1960, provide an excellent case in point. In spite of an adequate food supply perhaps as many as 25% of Digo infants up to the age of about five or six suffer from *kwashiorkor*. Few individuals older than six have *kwashiorkor*, presumably both because of a change in diet at about this age, and because infants seriously afflicted die. In analyzing this situation, let us first briefly survey Digo environment, economy and diet. Then let us examine Digo concepts about and means of dealing with *kwashiorkor*. In conclusion, let us consider ways of combating *kwashiorkor* among the Digo.

I.

The Digo are a North East Coastal Bantu tribe, numbering about 100,000 persons. In general, the Digo live along the Kenya and Tanganyika coast in a belt of relatively well-watered, usually fertile land, varying in width from about 10 to 25 miles, and extending south from Mombasa in the Kenya Protectorate to Tanga in Tanganyika. Their eastern boundary is the Indian Ocean, their western boundary varies from the Usambara Mountains in the south to the *nyika* or semi-arid steppe and thorn bush wasteland in the north.

Digo have a long history of intimate social, political and economic association with the Arabs of the Kenya and Tanganyika coast, facilitated by considerable intermarriage. While accepting much of Arab culture, including Islam, Digo also contributed much to this culture as it developed in East Africa. The result of this and neighboring Arab-African acculturation is known as Swahili culture. Many elements of Swahili culture are very similar to or even identical with corresponding Digo elements, including patterns of food production, preparation, and utilization, and concepts about health and disease. The Digo language is very similar to Swahili, and most Digo use Swahili as a second language and *lingua franca*. Even more than English, it is the administrative language of coastal Kenya and Tanganyika. (Many Africans who are descended from slaves of the Arabs and who have lost their tribal identity use Swahili as a pri-

mary language. There is developing a tendency for such individuals to identify themselves as members of the Digo and other coastal tribes and to reject affiliation with the Arabs. No one refers to himself as a Swahili because such a term denotes slave ancestry.)

Digo live in a relatively kind and productive physical environment. This environment can be roughly divided into agricultural regions, usually blessed with sufficient water and good soil; coastal fishing regions; cattle husbandry regions; and urban and plantation regions, where wage labor is obtainable from Europeans, Indians and other aliens. A well developed and integrated trading and marketing system ensures that the produce, services and wages which are the specialties of the various regions are distributed over the entire Digo country according to demand. For example, travelling traders and daily, weekly and four day markets facilitate the exchange of surplus vegetable produce for surplus fish, meat, or milk, either directly, by barter, or indirectly, through the medium of money, Urban and plantation Digo lack land, but purchase food with their wages. This system could probably be improved upon in various ways, but it is not noticeably defective.

A majority of the Digo are essentially agriculturalists, and their staple food crops are maize and cassava. Important secondary food crops are beans, bananas, sweet potatoes, coconuts, and dry (swamp) rice. Those Digo who live along the Uмба River near the coastal town of Vanga utilize the waters of the Uмба at its annual flooding to produce a large wet (irrigation) rice crop. Furthermore, Digo country abounds in wild grasses and roots of various types which Digo collect to supplement their diet. Digo will sell or barter some of their food crops, and most of them usually produce sufficient quantities so that such exchange does not compromise their basic subsistence. On addition to the above food crops, Digo produce various items chiefly for barter or sale, including copra, sesame, cotton, kapok, red peppers, and palm wine.

Digo who live along the Indian Ocean work either full or part time as fishermen. They usually catch more fish than they can consume locally and are able to sell their surplus to numerous middlemen for resale to Digo and others living in areas where sufficient fish is otherwise not available. Most Digo are thus able to eat fish, both fresh and preserved, an average of once every two days.

About 80% of the Digo live in areas where cattle cannot be raised because of animal sleeping sickness, however most of these Digo are still able to eat beef at least once each two weeks. In the first place, a majority of Digo household heads living in the regions closed to cattle are the absentee owners of one or more such animals which are herded by other Digo and neighboring Duruma and Kamba in pasture suitable for cattle husbandry. While such cattle are primarily considered as investments, in time of need they are sold or are brought to their owner and slaughtered to provide food for frequent feasts and various ceremonies. In the second place, Arab, Duruma, Kamba and Digo butchers regularly sell beef

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at least once weekly in about 60% of Digo locations and irregularly in most of the other areas.

Goats and sheep thrive almost everywhere in Digo country, and many families own from one to three of these animals. In addition, practically all families own a number of chickens. Such livestock is frequently butchered either for regular family consumption, for sale, or for ceremonial feasting. As a result, goat, sheep or chicken meat is eaten by the average Digo about once a week.

Finally, wild game is fairly plentiful and, although officially protected, many animals are killed and eaten or sold by skillful Digo poachers.

Digo like sour cow milk and *ghee*. Before 1946, many areas had to do without these products because of inadequate marketing, but now Duruma and Digo milk traders, using bicycle or bus, carry milk products throughout the coastal area. Frequently these same traders also deal in fish, beef and vegetables and other goods. For example, one enterprising Duruma takes milk by bicycle from his village of Mwena, where other cattle thrive, to the Digo village of Lungalunga, where he sells some of it and buys palm wine and maize. He then carries these items and his remaining milk to the Arab-Digo fishing village of Vanga, where he sells the milk and wine and buys fish, rice and bananas for resale, along with the Lungalunga maize, in Mwena. Unfortunately, a government milk purchasing and distribution scheme, while good in some respects, has caused prices of milk to rise artificially so that ever fewer Digo can afford it. Also, it competes with the indigenous trading system, about which the government knows little, and it threatens to hinder the effectiveness of this system by putting a number of traders out of business.

II.

Except during times of unusual drought or insect plague, almost all Digo are able to afford or obtain by individual efforts all foodstuffs necessary for adequate diet, although few like to admit this, fearing that if they do so their taxes will be raised and/or their relatives and other neighbors will attempt to wheedle food from them. For these and other reasons, too complicated to mention here, Digo customarily pretend that they are very poor and barely have enough to survive.

The staple Digo foodstuffs are maize, cassava, and, to a lesser extent, rice and cooking bananas, and sweet potatoes. These are regarded by the Digo as most essential to life, and as the best of all possible nutrients. They are all categorized as *chakuria* (*chakula* in Swahili), a term which can best be translated simply as "food." All other available foodstuffs, including meat, fish, sour milk, wild greens, but excluding beans and bananas, are categorized as *chitoweo* (*kitoweo* in Swahili), a term which can be best translated as "relish." Beans and bananas, other than cooking bananas, are considered to be somehow intermediary between *chakuria* and *chitoweo*. Digo

feel that only *chakuria* "fills the stomach" and gives it "power." If beans and bananas are eaten in sufficient quantity and not merely nibbled upon or used as a dipping sauce, they come close to *chakuria*, but never quite equal it. *Chitoweo* is nice to have, for it makes the *chakuria* taste better, and enables a person to eat more *chakuria*. However, it is non-essential, and, indeed, too much of it is bad for the body.

Chakuria is usually prepared by boiling maize or cassava meal in water and coconut oil until a gruel or porridge of varying consistency is made. An alternate method is to boil cassava roots, sweet potatoes, rice or bananas until soft. This can be eaten plain, but is usually flavored with *chitoweo*, made by boiling meat, fish, or other items in water and coconut oil, or by roasting these ingredients and mixing them with salt, red pepper and sometimes oil. The *chakuria* is customarily held in the fingers of the right hand and dipped into the resultant *chitoweo* sauce or relish. Thick sour milk is often also used as a dip in this manner.

Digo eat their main meal in the evening, when the average Digo over eight years old usually consumes at least one quart of thick *chakuria* and one half pint of *chitoweo*. For breakfast, Digo either eat the cold remains of this supper, or a thin gruel, or only hot tea and raised cakes, locally made from maize meal or imported wheat flour. For lunch, they often have a meal similar to the average breakfast, but they may also eat roasted corn, or a "soup" of beans, or boiled, baked or fresh bananas. During the season of "hunger" between harvests perhaps 25% to 35% of the population has insufficient resources to provide food for more than one substantial meal per day. In rare occasions perhaps this number of Digo may be restricted to as little as a pint of *chakuria* and no more than a taste of *chitoweo* in a day. Such near famine seldom lasts for more than two months.

During most of the year each Digo from the age of about six or seven is able to attend and feast at an average of one ceremony, either pagan or Islamic, each week. Considerable food, including more than average amounts of meat and fish, is provided at these occasions.

Digo over the age of six, therefore, eat both *chakuria* and *chitoweo* in sufficient quantity to prevent *kwashiorkor*. However, infants up to the age of about five or six do not obtain such a diet, and it is here that protein malnutrition strikes. Digo feel that the best possible food for infants is mother's milk, and women attempt to breast feed their children during the first three or four years of life. In some cases, Digo women are able to provide enough milk for about a year, but few seem to be able to do more than this. In many instances, Digo women can provide adequate milk only for the first three months or so of the lives of their children, while a number cannot even accomplish this much. Breast feeding continues even where little or no milk is available. Indeed, older women with no milk whatsoever often suckle their infant relatives in order to comfort

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them. Weaning usually occurs in about the third or fourth year unless the mother has become pregnant at an earlier date. If children resist weaning they are often taken to live with a distant relative for some time, or they are given a breast which has been smeared with hot pepper or dung.

The first few years of a child's life are considered to be very dangerous. During this time the child is especially subject both to many of the ordinary illnesses which afflict the Digo, and to special illnesses and afflictions caused by sorcery, angry ancestral spirits, evil spirits and broken taboos. A woman should be able to devote considerable time to the rearing of her child during these years and she should be very careful of his diet. If she cannot provide sufficient milk of her own to feed the child, she may supplement this with cow, goat, or tinned milk, or with a very thin gruel made from maize or cassava meal. In rare cases she will be able to obtain a nursing kinswoman with surplus milk in her breasts to aid in suckling the child. In most cases the only supplement to her own milk will be the gruel, both because the additional milk is expensive and because such gruel is believed to be completely adequate in itself, especially if fed in large quantities. A Digo will never give the infant other vegetables, fruits, meats, fish or eggs, either separately or as relish for the gruel, for these are *chitoweo*. Only gruel, or *chakuria*, is a suitable substitute for mother's milk.

Often western medical officials and community development workers in Digo country did not understand the difference between *chakuria* and *chitoweo*. To them, the African word for food of all types was the Swahili *chakula*. African interpreters had become so accustomed to this terminology that they used it as well in translating the statements of Europeans who did not know enough Swahili. The unfortunate result was that western officials customarily advised Digo to feed their undernourished children more *chakula*. Digo could only reply that their children obtain more than enough *chakula*. Digo need to be told that their infants require *chitoweo*, for it is this which they do not get. They must be made aware of the fact that their *chakula* is not enough. Telling them, in effect, that the children need more gruel increases misunderstanding.

Western officials also tried to combat malnutrition among the Digo by giving them powdered milk for their infants. The Digo were told that this was a type of medicine, because they could not quite believe that milk could come in a powdered form. Digo do not understand the germ theory of disease, do not believe that water can be contaminated, and do not wish to go to the trouble of boiling water before drinking it. They seldom give an infant water, *per se*, to drink unless they give him Western medicines which require dilution in water. Powdered milk comes under this category. Thus, children were often given powdered milk improperly mixed in contaminated water, and some became ill and died. They soon associated the milk with this illness and came to suspect both it and its donors.

To sum up, Digo children suffer from malnutrition primarily not because of poor food supply, but rather because of fixed attitudes about the nature and value of certain foodstuffs and patterns of food preparation and consumption. Mutual lack of understanding between Digo, government, and medical personnel has hindered programs to improve the diet of Digo infants.

Before turning to the subject of Digo concepts about *kwashiorkor* itself, it should be noted that Digo diet can be modified if the proper approach is taken. For one, it is apparent that the amount and nature of *chitoweo* consumed by the Digo has been changed during the past 20 years. Improvement in transportation and general economy has caused an increase in quantities and varieties of foodstuffs available for sale in markets and by traders. Taste and demand have been changed accordingly. Until about 1950, when fresh fish first began to be sold over the country by Digo and Duruma on bicycles, most inland Digo regarded such fish both as an unobtainable item and as a substance not really fit for human consumption except perhaps in the most minute amounts. Dried fish were more highly regarded, but the best *chitoweo* was considered to be that prepared from wild greens, and even today a few older Digo laud the virtues of such greens and condemn fish and meat. Fresh fish traders state that at first they had considerable trouble in selling their fish but that at length they were able to develop the present demand. Digo women, who have the arduous job of finding and preparing the greens, were, it seems, the first to recognize the superiority of fish. In one case, at least, the wife of a trader was instrumental in advertising the virtues of her husband's fresh fish to her female friends and relatives. Today a woman will ridicule her husband if he cannot provide her with fresh fish or meat at least every other day. These have become prestige items, and both men and women, but especially the latter, often feel it a great blow to their social standing and reputation if they are found using greens too often. I once complimented a woman gathering greens on her diligence and ability in this regard, only to have her sneer that "only animals eat grass" and that her husband is a poor fellow indeed, not to be able to buy fish or meal like the others do. To balance this attitude somewhat, however, Digo who use too much meat or fish are envied by their relatives, who then customarily demand generous helpings of these items. It seems probable that Digo will increase their consumption of meat and fish in the next decade, but that *chakuria* will remain the major item in their diet.

To take another instance of diet change, Digo seem slowly to be developing a taste for eggs. Digo traditionally have disliked eggs, and have preferred to let them hatch to increase their flocks. However, more and more young boys now gather, hard boil, and sell eggs as casual snacks to Digo waiting at bus stops, general stores, markets, etc. Women are more reluctant than men to eat eggs, but are also changing. For example, my wife showed a number of her Digo friends how to prepare custard from their traditional maize

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meal, eggs, milk and sugar, and encouraged a few of the most progressive to feed this to their children under six years of age. Since maize meal was the main ingredient of this custard, and since the children both liked it and seemed to thrive on it, others at least began to consider using the recipe. If the price of milk can be kept down, and if more eggs become available through increased trade in eggs and improved methods of chicken husbandry, perhaps such a custard will become popular over a large area and help to combat malnutrition.

III.

When Digo note the syndrome of *kwashiorkor* in a child they state that he is suffering from *chirwa*. *Chirwa* cannot in any way be translated as illness resulting from malnutrition. Digo have no term for or concept of malnutrition. They believe that *chirwa* is the result of the transgression of a number of basically sexual taboos by the parents of the child.

Chirwa is the passive form of the verb *kuchira*, a Digo word meaning "to pass." Digo now seldom use *kuchira* in this general sense, but use it chiefly in the special sense of "to pass along a bad path," that is *kuchira njira mbaha*—"to do something very wrong." This is the usual way of saying "to break a taboo," usually a sexual taboo, and is seldom heard except in this regard. Digo feel that if adults break a sexual taboo they will often not be punished directly, but their children will be injured by vaguely defined and conceptualized supernatural forces. Their children will be *chirwa*-ed by by this transgression (*atachirwa na njira mbaha hii*) and will show the symptoms of what may be termed *kwashiorkor*. *Chirwa* is also used as a noun meaning the illness which results from this transgression.

The major sexual taboos the transgression of which results in *chirwa* are sexual intercourse between husband and wife during the period before a child born to them is old enough to be weaned, and adultery by either parent during this period or during the period of gestation of this child. Few Digo, if any, are willing to abstain from sexual intercourse for as long as the *chirwa* concept ideally requires. Digo admit that most men will begin to have intercourse with their wives as early as three months after childbirth. They should, however, prevent conception during the three-year danger period. The fact that most Digo siblings are from two to four years apart in age indicates that contraceptive practices are fairly effective. It is alleged that in a few cases, especially in urban areas, Digo practice abortion. If conception occurs and abortion is not effected, then everyone will soon know that the parents have sinned, according to Digo attitudes. The close relatives of the first born infant will accuse the sinners of trying to kill this child. Intercourse before the child is normally weaned is bad enough, but the conception of yet another infant, who will "steal the strength" of the former, is terrible. Many Digo also commit the sin of adultery during the

danger period, especially men whose wives are in the latter stages of pregnancy or who have very recently given birth to a child. If this comes to the attention of their spouses or other relatives, they will also be accused of trying to kill their children by *chirwa*.

Since Digo transgress their sexual taboos so often they have conveniently developed anti-*chirwa* magic in the form of amulets which protect infants from the results of these transgressions. It is not that the transgressions cease to be bad, but rather that they are countered by the amulets and that the infants are "immunized" against the effects of them. All Digo infants wear such amulets—just in case. For example, a Digo woman told my wife that she would certainly not do anything to *chirwa* her child, but that she could not be sure of her husband. Her husband told me that while he would not *chirwa* his child, he was not certain about his wife. Both wore anti-*chirwa* amulets themselves, and both wrapped such amulets about their child. Some Digo men readily admit that their flesh is weak and that they might at any time be seduced and commit adultery. Therefore, they always protect their infants with the amulets.

If Digo break their taboos and their children remain healthy it is not that the concept of *chirwa* is wrong, but rather that the amulets were effective. If the child is stricken by *chirwa*, it is not that the concept of anti-*chirwa* magic is wrong, but that the particular amulets used were ineffective, or that someone forgot for a time to use the amulets. If the parents of an afflicted child have intercourse during the prohibited period, then each will suspect the other of adultery. Perhaps in a few instances a couple will be certain that they absolutely did not *chirwa*, but then they attribute the affliction to the black magic of an enemy or to a neighbor who was jealous of the good health of their child. They say that it is possible to cause illness which appears like *chirwa*. In no case do Digo believe that the affliction is the result of diet.

The total concept of *chirwa* and anti-*chirwa* magic is based upon unscientific premises and therefore is not vulnerable to disproof by the logic of western science unless the premises themselves can be changed. Furthermore, the concept is backed up by some observable cause and effect relationships. If a woman does become pregnant before her previous child is able to fend for itself to some degree and to secure proper nourishment, it will often be adversely affected. As noted, Digo claim that the new child, both before and after birth, "steals the strength" of the former. This is a complement of the firm Digo belief that the former child will be very jealous of the newcomer, a belief substantiated by frequent and overt sibling rivalry.

Furthermore, adultery by either parent may also serve to reduce the nutrition and care given to a child. Digo are extremely jealous, and if an average woman suspects that her husband is fond of another female she often becomes mentally and physically disturbed to such an extent that Digo claim she is possessed by evil spirits. A new mother thought to be so possessed frequently cannot provide

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enough milk to nurse her child, and Digo claim that this is because the spirit drinks all her milk or causes it to dry up because it "hates the child." Also, an average possessed woman spends so much of her and her husband's time, energy, food resources and money in spirit treatment ceremonies that her children suffer. Of course, if the woman herself is committing adultery her children may also be denied proper care. If her husband suspects her infidelity and quarrels with her or divorces her, she may also become attacked by evil spirits.

Because of the *chirwa* concept, Digo are reluctant to take individuals suffering from *kwashiorkor* to western medical personnel. For one, they do not like to admit that their children have this affliction since it indicates that they have broken the taboos. If it is noted that their children have *kwashiorkor* their relatives may go so far as to accuse them of trying to destroy the child, as noted above. At the very least, they and their relatives will be greatly shamed in the eyes of the entire community. Of course nearly every adult has broken the taboos, but the trick is not to get caught at it. Therefore, Digo will go to great lengths to keep afflicted children from public sight, and will be very slow to admit to anyone that such children are not perfectly normal. Furthermore, Digo are usually loath openly to claim that the children of others have *chirwa* because those who are slandered in this way may revenge themselves on their detractors with black magic or counter by accusing them of similar or other sins.

When an infant's malnutrition becomes impossible to ignore, his parents will secretly employ various traditional anti-*chirwa* remedies. Since *chirwa* is caused by supernatural forces, remedies must be of a supernatural type. Western medicines cannot eliminate *chirwa*, and Digo feel that it is a waste of time to employ them. When all remedies for *chirwa* fail, Digo parents may then claim that the affliction is not *chirwa*, or that it is only in part *chirwa*. For example, they may state that it is an illness caused by evil spirits or black magic, and treat the patient accordingly, using traditional medicines and ritual. Their indigenous medical practitioners, called *aganga* (sing. *muganga*), often encourage them to believe that the affliction is not entirely *chirwa* in order to explain their failure to cure it. In desperation, when the patient is on death's doorstep, Digo may then turn to western medicine, hoping for some miracle cure from powerful, mysterious drugs like penicillin. They will never, however, admit that an essential aspect of the western treatment is the administration of protein and other nutrients. The affliction, they insist, has nothing to do with diet, so how could a change in diet effect a cure?

Digo parents may desire to pretend that the affliction is not *chirwa*, thereby absolving themselves from blame, however their relatives will demand that they employ all manner of anti-*chirwa* medicines before attempting other cures. Furthermore, such relatives often continue to give the patient anti-*chirwa* remedies long after his parents have turned to other means, and no matter what

the reason for the actual cure, they will attribute it to their anti-*chirwa* techniques. Indeed, this pattern of continuing traditional treatment along with western treatment holds true in the case of all Digo ailments so that western medicine is seldom given more than minimal credit for curing anyone.

The standard Swahili-English Dictionary used by European administrators in East Africa defines *chirwa* simply as "rickets." Europeans, including those on United Nations Medical teams, sometimes tour Digo and other coastal locations and ask to examine those suffering from *chirwa*. It is small wonder that few cases are made known to them, or that Digo feel this request is impertinent, to say the least.

It should be noted that all of the other tribes of the North East Coastal Bantu seem to have basically the same *chirwa* concept as the Digo and, indeed, use the identical terms of *kuchira* and *chirwa*. It also appears that their practices of and attitudes about diet are similar to Digo ones, and that at least some of their children suffer from *kwashiorkor* because of them.

IV.

In conclusion, it is shown that Digo children are afflicted with *kwashiorkor* primarily because of Digo premises about the value of certain foodstuffs and because of Digo patterns of food consumption. We have discussed how Digo conceptualize and attempt to prevent and cure *kwashiorkor*, indicating how different Digo patterns are from those in western culture. We have noted how misunderstanding has hindered western personnel from helping Digo combat *kwashiorkor*. It seems obvious that an attempt must be made by such personnel to learn about traditional diet and traditional concepts about malnutrition. Once they understand Digo patterns and terminology they will be better able to explain their own premises and to encourage Digo to modify their diet and treat *kwashiorkor* as it should be treated. For example, they will no longer use *chakula* to refer to meat or fish, and they will know that Digo hate to admit that their children suffer from *chirwa*. They will be able to use the latter fact to encourage Digo to believe, or at least to rationalize, that their children have *kwashiorkor* because of diet rather than because of parental sins.

We have also noted that Digo diet can be changed, especially if such change is promoted by Digo foodstuff traders, and if it does not require the use of completely alien foods. Properly prepared western personnel will stimulate desired diet change by using such traders to maximum advantage, by helping to improve trading and marketing systems, and by increasing food resources where necessary. They will also show Digo how to prepare traditional foods in more nutritious ways, often by the addition of newer foods as in the case of the egg custard.

A similar approach should help to combat malnutrition among other North East Coastal Bantu, and presumably elsewhere as well.