

# Cultural and anthropological factors in infant and maternal nutrition

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THE CUSTOMS, practices and attitudes making up the local 'culture pattern' have a profound effect on the daily interrelated nutrition of the mother and child, and this is especially so among the poorer segments of the population in many technically developing tropical countries (2).

It is often helpful to divide customary practices into 4 categories according to their apparent public health value, as judged by unprejudiced analysis in relation to the local ecology, including the geography, climate, communications, range of foods available, and the human and animal disease pattern, and on imperfect present-day scientific knowledge (2). These 4 categories comprise:

1) *Beneficial practices*, such as prolonged breast feeding for tropical village infants. These should be supported and adopted into local health teaching.

2) *Neutral practices*, such as massaging the limbs with oil 'to make the bones strong' as in parts of India. These, which appear to have no significant scientific value or otherwise, should be left alone.

3) *Unclassifiable practices*, such as pre-chewing of foods by mothers in some communities and 'tongue-feeding' their infants. These, for which different interpretations are possible, should also be left alone pending further observation and consideration.

4) *Harmful practices*, such as the failure to give young children fish in Malaya, where it is the main source of protein, because it is considered to produce worms. These are the main source of concern to the health worker and will require alteration by friendly persuasion and convincing demonstration—that is by health education—or by 'cultural integration' so that the ill-effects of a particular custom are modified while, at the same time, the essence of the culturally accepted practice is retained (3).

## AREAS OF IMPORTANCE

While all aspects of a culture pattern are of importance and, indeed, can only be artificially dismembered, the following are areas which are always of especial significance in relation to the nutrition of the mother and

her infant: 1) *pregnancy and childbirth*; 2) *food classification*; 3) *ideas as to disease etiology*, including methods of prevention and cure; 4) *methods of child rearing*.

## CULTURAL FACTORS AMONG THE BAGANDA

The Baganda, a Bantu people, form the biggest and most 'advanced' tribe in Uganda, where their 1.4 million constitute one-quarter of the total population; 44% of the population of the country are children and it is they who bear the brunt of nutritional illness. Half the admissions to hospital are children, mostly under the age of 3 years, and kwashiorkor is the second commonest diagnosis, accounting for 10% of pediatric admissions.

Most families in Buganda live in rural areas each on their own plot (*shamba*), where the food crops of plantain, sweet potato, cassava, beans and groundnuts are cultivated by the women, and the cash crops of coffee and cotton by the men. The average peasant is poor and has had but little education, there being as yet insufficient schools. Medical facilities are quite inadequate for the needs of the people—for example, there is only one doctor per 20,000 of the population.

It is against this background of tribal society in a rural setting with minimal socio-medical facilities that customs and attitudes assume great significance in both the causation and prevention of malnutrition.

Selected examples of practices found in the culture pattern of the Baganda people of Uganda can be considered in relation to their probable category and to their etiological significance in the development of malnutrition in the mother or child, especially kwashiorkor. It may be noted that these customs will be of greater importance among the section of the population least exposed to modern education, do not apply uniformly all over the region and, in many instances, are in the process of spontaneous modification in the rapidly changing cultural kaleidoscope that is modern Africa.

### 1) *Pregnancy and Childbirth*

a) *Food restrictions*. Apart from the foods prohibited for all women, certain items are specifically restricted during

pregnancy. Most of these can be classified as 'neutral', including the avoidance of such minor, uncommon and nutritionally less important parts of the local diet as white ants (*nswa*), the heads of fish and sheep, baked plantain (*gonja*), certain types of yam and hot food (in the temperature sense).

Salt must be avoided or the newborn baby will develop *ennoga*, a culturally defined disease, probably made up of several skin conditions. This practice falls in the 'unclassifiable' group. It is perhaps useful in avoiding an excessive salt intake in pregnancy, with its added risk of toxæmia, although, on the contrary, it means that there will be an avoidance of the protein-rich part of the diet, the sauce (often of groundnuts) which contains salt, as opposed to the unsalted largely carbohydrate staple—steamed plantain (*matoke*).

Finally, a harmful practice, especially if carried to extremes, is a general restriction of diet in the attempt to avoid a large foetus and difficult labour.

b) *Clay earths*. A variety of clay earths (*emumbwa*) are traditionally eaten during pregnancy, intermixed with various chopped leaves believed to have medicinal properties. This practice cannot be classified, as the composition of the various earths is not known. It is possible that they may be sources of calcium, iron and other minerals.

c) *Drainage of the placenta*. It is customary for women to deliver in the kneeling position, and, after the baby is born, he will be left on a clean plantain leaf between the mother's legs until the placenta is expelled. This practice is probably beneficial in most cases, because, as the neonate is at a lower level than the placenta, maximal drainage of blood will occur, representing a valuable addition to the baby's iron stores.

## 2) Food Classifications

a) *Clan foods*. Each of the clans, of which the Baganda people are composed, has a totem, which may not be eaten by a clan member. These restrictions, which include grasshoppers (*nseene*), lungfish and one variety of bean, can be regarded as 'neutral', in that the item restricted is never a major or common food.

b) *Foods prohibited for women*. As in several parts of East Africa, eggs and chicken are proscribed, as are mutton and several species of fish. This is entirely harmful, assisting materially in the development of protein sub-nutrition in women, which is of especial significance in pregnancy and lactation.

c) *Foods in childhood*. Two fruits are thought to be especially 'children's food'—pawpaw and passion fruit, which is plainly a minor beneficial attitude. Unfortunately, there is no traditional emphasis on the need for high protein foods especially prepared for infants. In fact, there are some who hold the view that certain valuable protein foods are unsuitable for children. Thus, eggs (if given before the teeth have erupted) lead to stupidity, fish will produce a rash, and meat make the child greedy; while white ants (*nswa*) and beans lead to diarrhoea.

Unfortunate recently introduced 'neo-nutritional' harmful customs (4), which also have a direct relevance to protein-calorie malnutrition, are the alleged value of tea for infants and the increasing prestige value of tinned powered milk, bought in very small amounts and fed in homeopathic dilution from an unclean bottle, often resulting in the disastrous vicious circle of infective diarrhoea—malnutrition (5).

d) *Significance of matoke*. Probably one of the major harmful dietary attitudes in the feeding of young children is the overemphasis on the value of steamed plantain (*matoke*) as food, as opposed to other items of the diet which are regarded as insignificant.

While this is certainly unfortunate nutritionally, as *matoke* contains only 1% protein, it is necessary to realize the very great emotional and symbolic part the plantain plays in the local culture pattern. Not only is the legendary introduction of the plantain to the country considered to have been made by Kintu, the founder of the Baganda, but, in the present day, the plantain plays a role in every aspect of life. Beer (*pombe*) is fermented plantain. The placenta is buried under a plantain tree. Food is steamed in plantain leaves. The baby is born onto a fresh leaf and a shroud can be made of old leaves. The significance of the plantain, both as a symbol of the Baganda people and of general 'goodness', is emphasized by the fact that the badge of the Women's Clubs has a plantain tree on it; while when the traditional ruler, the Kabaka, attends a special function the roads along which he will pass are lined with freshly planted plantain shoots.

It is then apparent that, in this cultural setting, it is unlikely that health education attempting to persuade mothers that *matoke* is a poor food for their young children will have any success. It is more likely that 'cultural

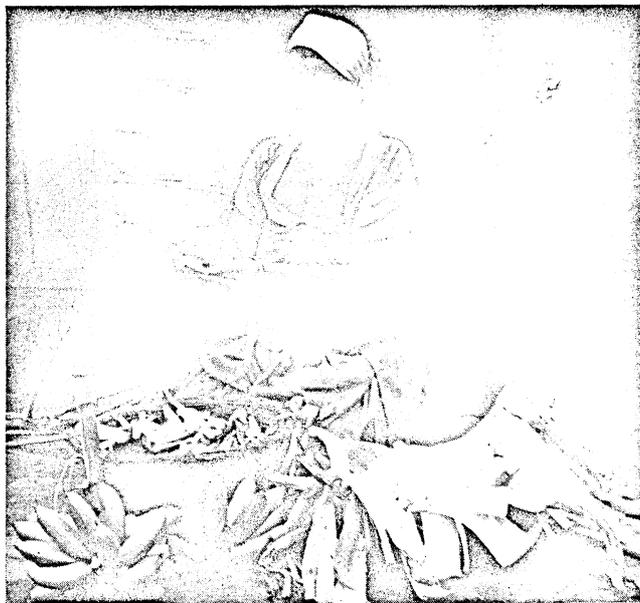


FIG. 1. Plantains being peeled by Muganda woman for preparation of *matoke*.

integration' may be achieved by teaching that *matoke* is a good food as a source of energy, but is even better when given with other items, such as legumes.

### 3) Ideas as to Disease Etiology

Cases of kwashiorkor of different stages of severity and with the main emphasis on different signs are called by a number of names:

a) *Obwosi*. In this the young child becomes weak, miserable and stops crawling. It is recognized that this occurs when the child is displaced from the breast by a younger sibling and often sent away to a relative.

b) *Omusana*. These cases—scientifically comprising a mixture of children with mild kwashiorkor and others with hookworm anaemia—are recognized by the light-coloured hair and pallor of the skin. The condition is thought to be due to the effect of the sun's rays.

c) *Empewo*. This word, meaning 'cold' in Luganda, used because affected children have cold oedematous feet and also because they are thought to have been affected by cold when put out of the mother's bed to avoid the 'heat' of pregnancy.

d) *Obusoro*. Diagnosis is based largely on the finding of a very distended abdomen. The condition is considered to be due to certain "little animals" getting into the child's body. Treatment consists of the child being gently beaten with twigs of the same plant so that seeds are scattered about, and the 'cause' of the disease symbolically driven out.

These attitudes are essentially harmful, as, in common with many parts of the world, the malnutrition actually responsible is not recognized, although the situational diagnosis implied by *obwosi*, shows the same understanding of the social etiology as did the word 'kwashiorkor' itself in the Ga language.

### 4) Child Rearing

The main aspect of child rearing of importance in the etiology of kwashiorkor is the practice of sending the

young child away to a relative on the arrival of a younger sibling.

It seems likely that this is still practised by the majority of parents. Reasons for doing so were more tangible in the past when this was recognized as a way of raising the status of the child by sending him to an eminent relative and ensuring that he would inherit within the clan. The reason nowadays is largely that it has persisted as a local custom, while probably rationalized explanations are that it is to comfort an elderly relative; it cements clan solidarity, avoids spoiling the child, ensures schooling, enables the child to benefit from a relative's knowledge of medicinal herbs or allows the mother to resume her cultivation without having two small babies to look after. Conversely, according to some, not to send a child implies a distrust of relatives.

The sympathetic observer may agree with some of these reasons, while, at the same time, realizing that the practice is nutritionally harmful. Not only is the child suddenly cut off from the probably small amount of breast milk he may be receiving but, in addition, it has been shown that the psychological trauma of this abrupt geographical separation results in the development of an acute maternal deprivation syndrome in which anorexia is a marked symptom (1).

### CONCLUSION

A knowledge of the culture pattern is essential to a full understanding of the factors underlying the local disease picture. More important, the division of customs into the various categories suggested permits the health worker to proceed within the framework of people's ideas, attitudes and beliefs, actively supporting beneficial practices and modifying or dissuading away from those considered on mature judgment to be harmful.

The bare bones of scientific fact function more certainly and harmoniously when clothed by the muscles and sinews of the familiar and trusted local culture pattern.

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