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## NUTRITION EDUCATION

by

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### Precept and Practice

Much could be done to prevent nutritional disease if we could apply what is already known. An effective means of closing the gap between what is known and what is practised in everyday life is education, if by that we mean providing the different members of the community with the necessary knowledge, and helping them to use that knowledge.

### Professional Education in Nutrition

A pre-requisite of successful nutrition education is therefore that all the potential educators - doctors, nurses, teachers, agricultural and social workers have sound up-to-date knowledge of the nutritional facts and the problems of nutritional origin common in the countries in which they work. Unfortunately, this is not always the case. Most training in medicine and nutrition is modelled on systems which have developed in the more highly industrialized and wealthy countries, where malnutrition has not been an important problem in recent years, and where it is therefore not regarded as an important subject in the curriculum. Also the teaching of paediatrics has only recently begun to be considered seriously, and it is in children that the most damaging effects of malnutrition are to be found.

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WHO is conscious of this inadequacy and tries by various means usually in cooperation with FAO, to raise the standard of technical knowledge, at least among those people who are already working in areas where malnutrition is prevalent. Extensive training courses for high-level medical, biochemical and agricultural workers have been carried out, and conferences arranged where research workers from different countries can discuss their problems and pool their knowledge. The latter, as well as stimulating and encouraging research developments, will, it is hoped, ultimately affect the teaching of nutrition in medical schools and paediatric departments. Thought is also being given to where and how one or more centres, where courses in tropical paediatrics could be given on the spot by paediatricians familiar with the nutritional disorders of infancy and childhood, could be established.

In cooperation with UNESCO, WHO is considering ways and means of improving the preparation of teachers for their role as health educators in schools, and a useful "Study Guide on Teacher Preparation for Health Education" has been prepared jointly by the two Organizations. Both regard nutrition education as an important and inseparable part of general health education, especially in schools serving the rural areas of countries where a scientific education is not yet widespread. This is contrary to recent practice, for in some countries separate nutrition education programmes for school children have been initiated - usually in conjunction with school feeding schemes or the distribution of UNICEF milk to the children.

#### The Need for Evaluation

The temptation to meet the urgent and obvious need for better nutrition in many parts of the world by the relatively easy method of feeding and teaching the easily reached and controlled "captive" groups of school children is understandable. Unfortunately, few attempts to evaluate the

successfulness of this or other nutrition education programmes have so far been carried out and recorded. In one of the few such appraisals, the observer, an anthropologist of long experience, points out the limited educational value of school gardens (introduced to accustom the young to a more varied and nutritious diet) in areas where the homes from which the children come do not have (1) the space required for home gardens, (2) the means of controlling the domestic animals which all too frequently wander at will in and around the houses and streets, or (3) the wherewithall required for cooking, preserving and storing the new foods, and (4) if the parents are not at the same time being taught how to make the best use of the foods grown. It is also suggested that school meals, or the provision of free meals to children will be more valuable educationally if the parents are invited now and then to partake of the food their children are learning to enjoy, or better still, can become at least partly responsible for the preparation and serving of the meals to the children (Kelly and Manganedo 1956). Another comments: "Third and fourth grade students for the past 7-10 years have been exposed to some 'vitamin education' in school ... It is extremely doubtful, however, that the children of the village play more than a negligible role in transmitting such information to their mothers. In the typically hierarchically structured families of the village the babblings of children are not taken seriously by the parents. Although interviewed mothers invariably say that vitamins 'do good' to children, the writer has found no evidence that knowledge of the term or village understandings of the concept have led to changes in child feeding practices". (Wellin, 1953)

The general consensus of opinion gathered from the recorded experience of others who have attempted to review and evaluate health and nutrition improvement programmes in different parts of the world is

described in the fourth report of the joint FAO/WHO Expert Committee on Nutrition, as follows:

- " It has been found that people will change their habits more readily if they can measure the benefits of an innovation for themselves, if the connection between the action to be taken and the desired result is obvious, and if the result does not depend on too many extraneous factors.
- " It has also been found that (1) people will follow a fellow member's success more readily than a demonstration, however impressive, made by someone who does not belong to the community; (2) the younger members of the community are usually more ready than their elders to replace tradition by the prestige of the expert; and (3) decisions taken by a group of people after full discussion of the matter are more likely to be persistently carried out than those reached after individual instruction, or after talks and lectures to groups.
- " Until such time as reliable evaluations of different educational approaches are more widely available, it can be suggested that reliance should not be placed on didactic methods unless the demand for knowledge and the interest are shown to be high, and that it is better to concentrate the educational effort on the receptive few - leaving the rest to follow their example - than to spend much time and energy on persuading the reluctant to learn.
- " The teaching methods selected may well be based on the Chinese aphorism:

' If I hear it I forget;  
If I see it I remember;  
If I do it I know. ' "

### The Need for Integration

One of the unfortunate side-effects of professional training modelled on Western methods has been the unconscious acceptance of specialization as necessary and normal. To cope with the ever-increasing body of knowledge at our disposal and the ever-increasing expectations of an informed public, all aspects of professional, technical, and industrial life have become so divided and specialized that it is now difficult to imagine any other way of life. Nevertheless, in the field of medicine and public health, at least, some of the effects of this degree of specialization are beginning to be recognized as deplorable, and a definite effort is being made towards a re-integration of the component disciplines and services, more in keeping with the unity of the person or the community to be served.

Nowhere is this integration more necessary than in the field of nutrition and nutrition education, and its achievement requires effort and imagination on the part of all health workers, especially those in rural areas. We are all familiar with the village school which, unlike its counterpart in the city, is still usually a single undivided building, with the village schoolmaster acting as a "general practitioner" of education. The public health worker responsible for the nutrition education of the rural communities is also inevitably a "general practitioner", for food, health, agricultural and social practices are inextricably interwoven.

There are large gaps in our present knowledge about such practices, and WHO recognizes that much more must be known if educational programmes are to be soundly based, and acceptable to the people. Various types of study - dietary, economic and sociological are being carried out in different parts of the world but this is necessarily a slow process. Meanwhile, much can be learned by health workers about their own particular area if they are prepared to spend some time looking, listening and asking questions. In the WHO Monograph No. 29, "Infant Nutrition in the Subtropics and Tropics", the author suggests some of the facts which an MCH worker should know before undertaking education about infant feeding in the MCH centre. (Annex 2, page 194).

Seminars on a local, country or international basis are being encouraged as an effective means of helping the people responsible for carrying out nutrition education to acquire, by the exchange of their experience and knowledge, new insights in this aspect of their work. Wherever possible these seminars try to cover both the nutritional and the educational aspects of the problem, for it is realized that many doctors and nurses in hospital, MCH or general public health work, have little knowledge of how best to make their health teaching acceptable to the people they serve. The question of the development and provision of suitable educational aids for use in nutrition education is also at present being considered jointly by WHO, FAO and UNESCO and UNICEF.

### Rivals in the Field

The usefulness of such educational aids will, however, depend on the attitude, knowledge and skill of the user, for the nutrition educator has to compete against a great many long-established and respected educators who, in every rural community, have been teaching food habits, agricultural practices and curative or preventive medicine for generations. Parents, religious leaders, teachers, midwives, indigenous medical practitioners, shop-keepers and the vendors of patent medicines or foods are all powerful educators. Dissatisfaction with the end results of such teaching is rarely ascribed to lack of knowledge, or to the wrong kind of knowledge on the part of these traditional teachers. In fact, a whole parallel system of explanations for crop failures, illness, death, the value of certain foods and the unsuitability of others exists as the 'mirror image' of the theories underlying the rules and regulations for everyday behaviour in most communities. The nutrition educator therefore starts at a disadvantage in so far as there is frequently no recognition of nutritional 'ignorance', little or no desire for new scientific knowledge and often considerable scepticism about the educator's justification for his confidence in his own ideas. Luckily, however, most people are born empiricists, and if they can see for themselves that certain of the educator's ideas really work - produce better crops, or healthier babies or freedom from some long familiar plague such as flies, "worms", or skin disease, they are prepared to give the new ways a trial.

### Education by Action

From the above it is evident that the educator has to rely more on "educating by doing" rather than by talking, which is much more demanding on his skill, ingenuity and time. Nor can he rely on producing an effective and convincing demonstration entirely on his own.

Past experience has shown that successful demonstrations by e.g. agricultural extension workers are usually dismissed by the villager as being due to some special skill or secret known only to the demonstrator.

Similarly, various reasons can be found for unfamiliar food or health practices not being "really" the cause of the demonstrated improvement in health or freedom from disease. So from the beginning it is usually necessary to get some of the people to cooperate in any "demonstration by doing". Women who have accompanied their sick child into hospital and actually helped to feed and nurse it back to health really believe that the protein-deficient child can with benefit be given milk instead of the traditional purges and watery gruels. Dr R.F.A. Dean, Director of the Infant Malnutrition Unit of the British Medical Research Council, Uganda, gives evidence of the value of this form of education - "Less serious cases (of kwashiorkor) are either treated at the clinic, or are taken to hospital where the child can be given a correct diet for a week or two and the mother can be instructed in the use of the supplements. The children so treated are, of course, of great propaganda value when they return home. In the three years, nearly 1000 different children have attended the clinic, and the totals of fortnightly attendances have risen from 25 to nearly 250." Describing the work at the clinic he continues, "Although the child may have been brought for the treatment of an illness, the mother is never allowed to leave without some mention of the child's feeding. She is shown a chart on which the child's weight is compared with that of a well grown child of the same age, and the possibility of supplementation is discussed. She is usually agreeable to any suggestion, chiefly because she knows already a number of her neighbours who are using the supplements, and because the supplements are made up of ingredients that she knows already. She is given a metal cup that measures a day's ration, and a supply for 14 days. There is no other teaching: the success of the scheme is made to depend entirely on the mother's satisfaction and the example provided by the child."

Satisfaction of the mother's "felt need" for treatment of some minor ailment ensures her continued interest and attendance, and enables the more important supplementary feeding to be continued. Ultimately the simple visual aid, the weight chart, provides proof of the value of the nutritional action and education.

### Need for Coordination

The actual approaches used and activities undertaken will depend on the particular field of work of the nutrition educator. It is economically impossible and, in fact, unnecessary, to have a highly trained nutrition worker in every small community. But whether the nutrition education is carried out by the staff of the MCH centre or by the teacher in school, or by the agricultural social or voluntary worker, or by each and all in their different settings, it is essential that the same basic facts are taught, that these facts are sound, and that the methods whereby they are adapted to existing conditions are well within the resources of the community. Some means must therefore be established whereby the person responsible for the nutrition education carried out in any region can make regular contact with the educators in the field, and, on a local level, whereby the field workers can get together to coordinate their efforts and teaching.

The Seminar might profitably discuss how best this can be achieved.

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