general practitioner and the local authority medical officer. An adequate number of beds in acute geriatric assessment units in hospital, as well as in local authority and voluntary residential homes, should be available to enable rapid interchange to take place.

Some thought has to be given to counting the cost of maintaining adequate nutritional standards for the elderly in their own homes by one or other of the means outlined above or by admitting them to a residential home. Individual factors are so variable that even if a cost limit were to be recommended assessment would be very difficult and vary from week to week. So, in the end, the personal wishes of the individual, if reasonable, are met whenever possible.

## REFERENCE

Nappy, D. (1967). British Hospital Journal and Social Service Review, p. 161.

## Education of the general public

By ELIZABETH M. DAVIES, Department of Education and Science, Cardiff, and WINIFRED S. HARGREAVES, Department of Education and Science, London

This paper is based on knowledge, acquired over 25 years, of work in schools, in teacher training establishments and in technical and further education colleges in England and Wales—on intimate knowledge of the work of voluntary organizations and the former Food Advice Service. The opinions expressed are personal and not necessarily those of the Department of Education and Science.

Even before the last World War there was some teaching of food values in schools—it was largely academic, the emphasis was mainly on deficiency diseases and available text books paid much attention to them. Some of these deficiency diseases were unknown in this country and others only slightly so, so little real benefit could be derived from the teaching. The most worthwhile attempt to get sound simple nutritional practices across was in the few Child Welfare Clinics then in existence to help mothers and children in the low-income groups. Dietitians, as now, were thin on the ground, their study had been largely scientific and the majority were employed in hospitals or on research. There were few opportunities for them to work in the social field, where good feeding habits under very limited incomes were difficult to achieve and where help and education were desperately needed.

The war came, the Government took over the control of foodstuffs and introduced rationing to secure an even distribution of food and to safeguard the needs of vulnerable groups. In 1940, the Ministry of Food formed a Food Advice Division in order to provide a nation-wide education service, charged with the task of getting across to the people, in the simplest terms, an understanding of how best to use available foods and how to meet the nutritional needs of their bodies.

The above-mentioned Service called upon the expertise of scientists, home

economists, teachers, actors, journalists, photographers—all these pooled their knowledge and ideas of ways of getting information across to the people—and money was available to meet the task at hand.

The food advisers met people in market places, village greens, factory canteens, welfare clinics, hospital out-patient departments, stores, meetings of women's organizations, schools and the like. The approach was informal, but verbal information was supported by literature, window displays, posters, press notices, and the radio doctor and other eminent broadcasters also took part. Many of the experimental techniques used are now common in public relations and advertising. Food advisers used every wit they possessed and tried and tried again to convince people to eat foods unknown to them and to break down strongholds of tradition in their preparation. Usually they won because 'Hobson' was on their side, and there was little place for the purist attitude.

To begin with people had to be encouraged to take up their allocations and to distribute them fairly within the family, to learn cooking methods which preserved nutrients and to combine foods to form balanced and appetising meals, to group foods according to function and to understand why age, special conditions and occupations had a bearing on nutritional needs. In conjunction with the Ministry of Health there was revolutionary thinking on child feeding and a tremendous drive in the education of young mothers; many responded more easily to the right feeding of their children than sometimes of themselves.

The population came out of this difficult period in fairly good physical fettle; they had learnt certain facts by the 'drip' method, a few had become nutrition minded. What of the people concerned with operating the service—what had they learnt? That the teaching of good food and health practices must be associated with and related to social and economic conditions and that knowledge of nutrition alone is of little value unless it is applied in practical terms.

In the postwar years there have been greatly increased facilities for girls between the ages of 12 and 15 to have cookery lessons—the majority of specialist teacher training courses and home economics teachers have tried to build up on the foundations laid by the Food Advice Service. The approach to nutrition education has been essentially practical, closely related to people's individual and family needs, to cost and to the food on the plate. Experimental work has been carried out to show value for money nutritionally—and to find out how the method of purchasing a commodity can affect cost—and how to break down a recipe to ascertain the relationship between the quantity of main nutrient and the suggested number of portions. Where nutrition education is taught it is through a positive approach to good health through good food habits. However, this teaching reaches less than half the population; boys get very little of it and girls for only a short period in their lives. There are increased opportunities for youth and adults of both sexes through some vocational courses in technical colleges and colleges of further education. The demand from adults for information on this front is minimal.

This, very briefly, is an account of the nutrition education which has taken place over the years within the organized education field. In the postrationing period it seems to have made little impact on the mass of people, and the return has not been commensurate with the effort. One must ask why this is so and how can it be improved?

In the postwar period big social changes have taken place, e.g. the introduction of a National Health and Welfare Service, more food and a greater variety available all the year round and more money to spend on food. The pattern of living has changed—an increased number of mothers at work, a greater tendency for meals to be taken outside the home and different eating habits within the family. All of these are relevant to nutrition education and from them arise some of the current problems connected with the education of the public.

From what has just been said it is clear that the most successful period in nutrition education coincided with rationing—so a further look at the period to see why it was so successful might be profitable. There was then a nutrition policy, and experts of a variety of kinds worked together to implement the policy; money was available to operate the policy and the people were in a receptive mood. None of these apply today. People are no longer in a receptive mood, they are more interested in their whims and fancies on the food front and their real nutritional needs no longer act as the guiding force in purchasing food and planning meals. These factors make the task of the educator infinitely more difficult. Teachers are often overanxious to teach what they think people ought to know rather than to convey their message through people's interests, i.e. what they want to know. There were, no doubt, very good reasons at the time why a national policy for education in nutrition and food and a Food Advice Service were discontinued in the postrationing period, but the need for a comparable service in our times is evident. The absence of such a policy, supported by a service, may account for the lack of direction and continuity if not drive in this work nowadays.

The Government Departments of Health, Education, Agriculture, Fisheries and Food have all an interest in the work and all have a contribution to make. To be successful each must know what the others are doing. How much do they know, how much co-ordination is there, do they go their separate ways? The formation of an inter-departmental committee on nutrition education would seem a step in the right direction. One of its functions could be to encourage co-ordination at local level between doctors, dietitians, teachers, home economists, health visitors and social workers. How often, if at all, do we have at local public health level these groups of people working together for the people's good in the nutritional field? Is it not time that we had more of this? By so doing many gaps would be filled and programmes strengthened.

Since the war there has been little high-quality publicity or information material of an authoritative objective nature put out at the level of the ordinary man and woman (except for feeding those under 2 years and old people) and little is available for teachers to use, other than that which they themselves make. Effective publicity requires highly expert preparation and presentation.

Should we not in this decade be making far greater use of mass media of all kinds—television, radio, magazines and the like—in order to put across sound nutrition?

This line of inquiry has aroused the concern of politicians. Mr Gwynfor Evans, MP put this question to the Minister of Health: 'If, in view of the influence of advertising or eating habits, he will give publicity to good nutritional standards.' The Minister of Health's answer was accurate but incomplete: 'Advice on diet is already widely available through general practitioners, local authorities and other organizations and the Press, especially the women's pages and the women's magazines; the broadcasting service also issue a great deal of advice.' (Hansard, 21 April, 1967).

Plenty of advice on food, meals and diet is available from the latter-mentioned sources, but this must not be confused with advice on sound nutrition—there is very little of this. One must ask are their nutritional facts always accurate, are they up-to-date and are they at the appropriate level? How much is available for people with limited reading ability, the group of people most needing help? Good advertising through various mass media may induce people to take better care of their health and thus reduce the general national health bill. In that case is the cost of such advertising too high a price to pay? It may be offset by an appreciable reduction in the National Health Service. Are we trying to educate the nation nutrition-wise on a 'shoe-string'?

One welcomes the modest legislative measures that have been taken to indicate the quantities of nutrients available in foods and meals and of the very recent moves to relate the quantity available to daily requirements. Very much more of this must be done, and in a very clear simple form, if it is to reach the majority of the people. Early experiences in the teaching of nutrition indicate that it would be unwise and confusing to label more than the main nutrients in any food.

The UK Federation for Education in Home Economics (Preliminary Report for the Tenth International Congress on Home Economics, 1963) answering a question-naire on conditions in this country said: 'The government is alive to nutritional needs, but the general public probably has little knowledge of the subject. . . . The most urgent need is for more basic research.' All our research into nutritional needs will be of little avail if we have insufficient knowledge of how and when to apply our findings in practical terms. Much of the work being done at present is with the young age group. Should more be done at the adult stage and has the subject greater relevance than when one is more intimately concerned with the responsibility of feeding one's family? Should the information be imparted in small but frequent doses over the years? Would we have far better results through co-ordinated efforts between education, health and food? Can the discreet and persistent use of mass media make an effective contribution?

We must surely research into these things also before nutrition education can play an effective part in our time.