

PROCEEDINGS OF THE NUTRITION SOCIETY

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WORKSHOP ON 'TEACHING NUTRITION TO THE PUBLIC AND THE PROFESSIONS'

Opening address

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Education in nutrition has assumed increasing importance in recent years. There has in general been an awareness that nutrition, together with other environmental factors, is important for the physical and mental well-being of Man, and various groups and dedicated individuals have put forward proposals and given detailed guidance without necessarily any solid intellectual basis. Some of these 'nutritional eccentricities' have recently been discussed by Young (1982); and a detailed account of the bogus vitamin B₁₇ has been given by Jukes (1982). It is important that our knowledge, which is admittedly incomplete, should be presented both to health workers (who include medical as well as non-medical professionals) and also to the general population.

The importance of nutrition in medical education has recently been considered by a Task Force set up by the British Nutrition Foundation. Their report, with which I was associated, made it clear that problems of nutrition enter into every branch of medicine, and I was personally surprised by the magnitude of the impact nutrition has made on modern medicine (British Nutrition Foundation, 1983). This aspect will be discussed in greater detail by Professor J. Lloyd (Lloyd, 1984), but I would like to suggest that in the future nutrition is likely to be even more important in preventive medicine than in curative medicine.

Now that we can deal effectively with most infections, diseases of the circulation (which include cerebro-vascular conditions and ischaemic heart disease) and various types of cancer are the main factors causing mortality in the western world. Nevertheless, the most disabling conditions now are probably psychiatric diseases and various forms of rheumatic disease. In all these conditions, genetic factors must play a varying part of quantitative importance, but the environment is likely to be even more important. Amongst the environmental factors which can in

principle be modified by planned human action, nutrition must play a very important part. This, however, is a field in which scientifically reliable information is still very incomplete. For instance, a good case can be made for the belief that diet is important in the treatment as well as in the prevention of hypertension. There is good evidence that loss of weight and a reduction in the intake of sodium coupled with an increased consumption of potassium may be helpful in a large number of cases of mild hypertension. It is also possible, but this is by no means completely proven, that these measures may also be helpful in the prevention of the disease. The question therefore arises: should advice be given to the population in general on this particular matter, or should one be absolutely rigorous and refuse to give guidance until such time as the scientific evidence is complete? I would say that there is a good case for giving guidance, and telling our fellow-citizens that avoidance of obesity, a decreased intake of salt, and a moderate increase in K consumption is good for their health. Similar considerations apply to the difficult problem of the importance of the diet in the prevention of cardiovascular disease. There is no doubt that obesity should be avoided, but there is somewhat less certainty about what the ideal weight should be for the different sexes and age-groups. Ischaemic heart disease is almost certainly caused by the combination of various harmful factors in our environment, and diet is probably only one of them. Large-scale epidemiological surveys, in which the diet was manipulated, have shown that a reduction in the consumption of saturated fat is likely to have a definite but not very great effect on the incidence of heart disease. A recent survey in America has on the other hand produced a somewhat disappointing result (Anon., 1982). But I am sure all the same that it would be prudent to reduce the consumption of saturated fat to some extent, although we have no basis on which to make quantitative proposals at present.

The question has also been raised as to whether measures involving large-scale changes in our diet should be recommended to the population at large, or whether such advice should be given to groups defined as 'specially at risk'.

I have tried to emphasize some general questions which apply to nutrition education. I am suggesting that we should adopt a positive attitude, that is, be prepared to give advice in the absence of completely conclusive evidence. It seems to me above all important to be both critical and completely honest, not only with ourselves but with the scientific community and the public in general. We should be prepared to say, for instance, in the case of cardiovascular disease that a significant reduction in the consumption of saturated fat is in our opinion likely to lead to a worthwhile and significant reduction in morbidity and mortality from ischaemic heart disease. We can neither be absolutely certain of this fact, nor can we predict the quantitative effects of such a change in diet. We can press such advice more strongly on people who are, in our judgment, particularly at risk, but the identification of such individuals may not be easy. Such advice would in my opinion be scientifically honest, but it is unlikely to appeal to the media, or to such individuals who for mainly laudable reasons desire much more vigorous action to be taken. We are certainly not in a position to sit back and refuse to give advice in

a situation where the public at large expect some guidance from those who are considered experts in this field of human nutrition.

Discussion on nutritional problems now involves the general Press, sound-broadcasting and television. It is unavoidable that this leads to some distortion of the serious discussion. A balanced, dispassionate statement, which emphasizes the difficulties encountered and the large area of ignorance which still exists, will make less of an appeal or be considered less newsworthy than a more extreme expression of opinion which simplifies the problem in a manner which to a scientist may seem somewhat intellectually dishonest. On the other hand, the public will expect definite guidance from us, and such guidance may be ineffective if it is given with too many reservations. This is a serious dilemma which scientists have to resolve to the best of their ability. Another complication in this particular field is the fact that nowadays large financial interests may be involved in nutrition and thus, with regard to the topic of saturated fat, there is on the one hand the dairy industry which is afraid of a significant reduction in the sale of dairy products and, on the other hand, the firms producing margarine, particularly those containing increased amounts of polyunsaturated fatty acids, which have a reasonable commercial interest in increasing the sale of their products. It is in these circumstances easy to accuse scientists of having their judgment affected by financial considerations. I am quite convinced that with very few exceptions all the bona fide scientists who have taken part in such discussions internationally are completely honest, and the opinions expressed by them are undistorted by financial considerations. I feel we should stop accusing each other of this lack of scientific integrity and discuss the problems on their merits. I know that tolerance is easy to achieve if one does not care very much. I also know that scientists often feel emotionally involved, but I suggest that they should not allow their passion to influence their judgment, and to respect the honesty of those with whom they disagree.

NOTE ADDED IN PROOF

Since this address was given, the results of an extensive trial begun in 1973 on men aged 35–59 years, having a plasma cholesterol level of 2.65 g/l or greater, have been reported (Anon., 1984a,b). The treatment group received cholestyramine, whilst the control group had a placebo. Whilst total mortality in the two groups was similar, the treatment group had a significantly lower mortality and morbidity from cardiovascular disease. Thus, there is a strong case for reducing the cholesterol level in that section of the population with a plasma value of 2.65 g/l or greater. Such a group may form about 5% of the adult population.

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