

# Food propagandists — the new puritans

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Maria: Marry, sir, sometimes he is a kind of Puritan  
Sir Andrew: O, if I thought that, I'd beat him like a dog!  
(Shakespeare, Twelfth Night)

ENJOYMENT of food is one of the great pleasures of life. But today there are many enthusiasts who urge us to change our dietary habits. They claim that many of the foods that we like and which are part of our traditional diet, such as fatty meats, whole milk, butter and cream, eggs, sugar and sweets, highly salted foods and alcoholic beverages are bad for us. These claims are set out in detail in a report by the National Advisory Committee on Nutrition Education (NACNE).<sup>1</sup> The report states that farmers and food manufacturers should alter the quality of many common foods and recommends Government to adopt policies that would change markedly our national diet. The report has been publicized widely on television and radio and in newspapers and magazine articles where it is often taken as gospel. I have no sympathy with these new puritans who would diminish our enjoyment of eating. Of course I know that many people overeat and that excess consumption of one or more of the above foods predisposes to the development of serious diseases but all of these foods are good for us when eaten in moderation and in appropriate circumstances.

Before considering the case against each of the above foods, I set out my prejudices formed in childhood, and my professional qualifications to act as a critic of the NACNE report. My childhood was spent in a village in Leicestershire where my father was in general practice. During the First World War meat, butter and sugar were rationed but as the village butchers' family were looked after by my father we never lacked a good joint of fat beef or mutton on Sunday. This joint, served cold and as shepherd's pie, lasted for most of the week and was occasionally supplemented by a farm hen or a home-cured ham from a fat pig. A country doctor's family never lacked whole milk, or eggs which we ate with salt. A childhood illness was almost a pleasure because father always sent for clotted cream from his native Devon. This came in a one pound tin which did not last long. Because of rationing my sister and I were allowed only butter or jam on our bread, not both, and they had to be spread thinly. We were not allowed sugar in our tea or coffee, but we could put it on the plums which came from a nearby orchard and which mother bottled every autumn. We ate plenty of vegetables from our garden throughout the year. I think my father was well informed about feeding children and, as far as possible, I still eat the same types of food that I enjoyed as a child.

In 1955, Stanley Davidson, a wise physician and Professor of Medicine at Edinburgh University, asked me to help him in preparing a textbook on human nutrition and dietetics for dietitians, medical students and general practitioners. Now, 30 years later, I have just finished correcting the page proofs of the eighth edition. The book was soon established in all English speaking countries as an orthodox account of medical opinion and sales have increased with each edition. So I am a member of the medical establishment and share its virtues, now somewhat

underrated, and also its faults. In successive editions of our book, there have been many changes in the diets and methods of feeding recommended for sick patients. Dietetic therapeutics is much more scientifically based and more effective than 30 years ago. But there has been little or no change in the recommendations for dietary advice to healthy people. Wise general practitioners give the same dietary advice as my father did and this differs little from that given by Hippocrates. We know that meat, milk, butter, eggs, sugar, salt and wine, taken in moderation, are good for everyone.

## Meat and dairy fats

The most publicized claim of the puritans is that reducing dietary fat, especially animal fat, will reduce the risk of coronary heart disease. Two pieces of evidence make this a reasonable hypothesis. First, the risk of coronary heart disease is related to the level of plasma cholesterol. Secondly, lowering plasma cholesterol levels in selected patients has been shown to reduce the risk of coronary heart disease. Four large clinical trials, two in the USA and two in Europe, have recently been carried out.<sup>2-6</sup> The subjects in these trials were all apparently healthy middle-aged men selected from very large samples because their plasma cholesterol levels were abnormally high. Just over 8250 of these men had their cholesterol levels lowered either by diet or drugs for between five and eight years and during this period 393 of these men developed coronary heart disease, as against 496 in the control group of similar size. These results proved a justification for lowering the level of plasma cholesterol when it is very high, as in familial hypercholesterolaemia.

The relationship between the level of plasma cholesterol and the risk of coronary heart disease is curvilinear.<sup>7</sup> The risk rises very little until a threshold level of about 5.4 mM (2.1 g l<sup>-1</sup>) is reached. Thereafter it rises at first slowly and then very sharply at levels over 6.5 mM. There is no evidence that lowering the level of plasma cholesterol in individuals in whom it is below the threshold value is of any benefit. It is in these individuals that the great majority of cases of coronary heart disease occur. Furthermore, in the trials the number of deaths from miscellaneous diseases unrelated to coronary heart disease was slightly greater in the experimental group than in the control group. It is possible that lowering plasma cholesterol levels may have serious adverse effects in some people.

It is prudent for each one of us to moderate our intake of animal fats. Many patients need advice from a doctor or dietitian as to how they can best do this. But we do not need to remove from our diet all fatty meats, whole milk and butter; foods that have been appreciated for their flavour and regarded as part of good living since history was first written. The recommendation in the NACNE report that farmers and food manufacturers should change the quality of our national diet lacks scientific support. Butter and margarine are both good foods which should be readily available at the market price, so that we can choose which we like without worrying about our hearts.

## Eggs

Propaganda from health enthusiasts has led to far fewer eggs being eaten in the USA and this has resulted in serious financial consequences for poultry producers. Health enthusiasts argue that eggs are the richest dietary source of cholesterol and provide most of the dietary cholesterol in many diets. This is true, but

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the human body requires cholesterol and gets it not only from dietary sources but also by synthesis in the liver. Synthesis of cholesterol is regulated by the amount in the diet. Egg consumption in Britain averages five per week. Most people could regularly eat two eggs a day without a significant rise in their level of plasma cholesterol. Eggs, as a rich source of many nutrients, can be an important component of a diet and are especially valuable for old people as they are a natural convenience food.

### Sugar

There is ample evidence that a high consumption of sweets is an important factor in the development of dental caries. Although there has lately been a marked reduction in the incidence of dental caries, general practitioners should continue to warn their patients of this danger. Sweets are a legitimate pleasure, especially for children, and may be enjoyed on occasions. Excessive consumption of sugar and sweet foods is the main cause of obesity in some patients. Apart from this there is no firm evidence that sugar consumption is directly responsible for any disease. Sugar is a good source of dietary energy and we can enjoy it, but with caution if there is a weight problem.

### Salt

The NACNE report advocates that our national intake of salt be reduced, as this would reduce the prevalence and severity of hypertension. As hypertension is common, causes much ill health and is a major cause of death, this claim must be taken seriously. First, reducing the salt intake can reduce the blood pressure of a healthy person and of a hypertensive patient, but the salt intake has to be reduced to an extent that makes the diet unacceptable for more than a short period. Secondly, there is a correlation between salt intake and prevalence of hypertension in communities. In primitive tribes who have no access to salt, there is no hypertension and blood pressure does not rise with age. The highest prevalence of hypertension is among the Japanese who eat large amounts of salted fish. However, in the United Kingdom and elsewhere, it has been difficult to demonstrate that hypertensive patients have habitually taken more salt than controls. As a recent correspondence in *The Lancet* shows,<sup>8</sup> there is much division of opinion as to whether a high intake of salt predisposes to hypertension and whether restricting salt intake is a practical or effective method of treating it.

There is no doubt that the present national intake of salt, about 12 g a day is more than double that needed to meet physiological requirements. But mankind likes salt and takes steps to get it. The salaries that we draw are descendants of the salt money paid to the Roman legions. When we 'salute' anyone, we are wishing them good health. It is possible, even probable, that a salt intake above physiological requirements in some unexplained way promotes well being.

In my opinion doctors should advise all their patients with hypertension that they might benefit from reducing their salt intake. They can give up the use of table salt and avoid large quantities of highly salted foods, but they can share the normal meals of their families and friends. There is no need to add to their troubles by prescribing a salt restricted diet, though this may be useful for a temporary period for any patient with gross oedema.

Food manufacturers use large amounts of salt. Their customers like it and it is the original food preservative. Some

of those who eat entirely processed foods may have a very high salt intake. It is good to eat some fresh meat and vegetables regularly.

In infancy, while the kidneys are immature, there are additional hazards from a high salt intake. Manufacturers of formula milk and infant foods ensure a low sodium content in all their products.

### Alcoholic beverages

The adverse effects of excessive alcohol consumption are now being publicized widely, and rightly so. There is no evidence that a modest consumption does any harm and there is some not very convincing data that the life expectation of teetotalers is less than that of moderate drinkers.<sup>9</sup> Many of us enjoy beer, wines and spirits and find that a drink relieves temporary depression and makes us see our family, neighbours and the world in general in a more benign light. Alcohol is of great benefit to old people. My boyhood hero, the cricketer Jack Hobbs, lived to a good age and during his retirement enjoyed a glass of champagne with his friends every morning. I commend this habit and for this reason am doubtful of the wisdom of recommending that the price of drink be raised as a deterrent to alcoholics. The government determines both the price of drinks and old-age pensions. A good chancellor of the exchequer will see that pensioners can, if they wish, enjoy one or two drinks every day without financial worry. This might reduce the costs of the geriatric services.

### Trophophobia

It is proper to care about the foods that you eat and to take care in choosing your diet. However, too much care leads to worry and then to anxiety. Anxiety states, such as claustrophobia and agoraphobia, are well known disorders. I suggest that trophophobia (τροφή, nourishment; φόβος, fear) is now commonplace. It is promoted by innumerable magazine and newspaper articles and by radio and television programmes that tell us what is wrong with our diet. This encourages the purchase of the special 'dietetic' foods and vitamin preparations which load the shelves of every local chemist's shop.

Trophophobia prevents people enjoying good foods, and may also have serious consequences. Anorexia nervosa, once a rare disease, is now commonly seen. In many cases it arises from a fear of obesity. Only about 4% of the population are seriously obese, with a high risk of becoming hypertensive or diabetic.<sup>10</sup> Most of the huge army of would-be slimmers, one-quarter to one-third of the population, are better described as plump than as obese. The plump are not less healthy than the thin, though they have an increased risk of developing obesity. Most of them do not need to reduce. Go to the National Gallery in Edinburgh and look at Titian's Venus. His model was a plump lass. Who would want her any different?

Multitudes of people fearing that their food is in some way inadequate take a daily tablet of a vitamin preparation. This benefits only the manufacturers. The diets in this country provide ample sources of all the vitamins except vitamin D. Probably most of us get less than a quarter of the vitamin D that we need from our diet and make the remainder in our skin when it is exposed to sunlight. Stores of vitamin D are laid down in the liver during the summer and utilized during the winter. In many old people and in others prevented by disability from getting outdoors, stores become dangerously low. There is histological evidence that in many cases of fractured femur in the elderly the bones have been weakened by osteomalacia. Growing children need more vitamin D than adults. Although rickets is now rare, cases continue to occur, especially in Asian

children. There is a strong case for giving all growing children and also all old people a supplement of vitamin D during the long dark winter months.

It has long been known that large doses of vitamins A and D are stored in the liver and that this may lead to toxic effects. Because water-soluble vitamins are readily excreted in the urine, they are generally considered to be harmless, but recently there have been reports of several cases of severe neurological disability arising from large doses of pyridoxine.<sup>11</sup> These have usually been self-administered for menstrual disorders.

People may become frightened about their food because of propaganda in the media by people claiming to be allergists. These, some of whom are medically qualified, flourish in the USA where they make a lot of money. Unfortunately, they have crossed the Atlantic and are now active in claiming that they can treat conditions such as hyperactivity in young children and unruly behaviour in adolescents and serious diseases such as multiple sclerosis, rheumatoid arthritis and the irritable bowel syndrome. A total allergy syndrome has been invented. Treatment consists of restricting the diet, often seriously, after diagnosing the offending articles by methods that are unsound and sometimes bizarre, for example, analysis of a sample of hair.

Of course food allergies and food intolerance are real. The common foods responsible, such as eggs, shellfish, and chocolate, are readily identified by sufferers who do not need medical advice to avoid them. Patients should not go on a restrictive diet without first consulting their general practitioner who will usually want to get a second opinion from a specialist. That hyperactivity and other behavioural disorders may be attributable to dietary factors is undeniable but this is very rare. Many children have become seriously undernourished through unnecessary dietary restrictions. Patients with multiple sclerosis and rheumatoid arthritis may well feel better for a change of diet; they can be encouraged to make dietary experiments, but should not be given false hopes that these will alter the course of their disease. They should choose foods that they like and that suit them.

Peoples' worries and fears about food may be increased if the enthusiasts, who include the authors of the NACNE report, get their way and the government is persuaded to introduce compulsory nutritional labelling of foods. There has long been legislation enforcing food manufacturers to list the ingredients of a product on all labels. This is sensible; people should know what food they are eating and new legislation may make the labels more intelligible. The more children and adults learn about the nature of foods and how they are combined to make a good diet, the better. But a knowledge of nutrients is not necessary in order to feed well. I know people, including some doctors, who would be happier and more relaxed if they had never heard of polyunsaturated fats, cholesterol or vitamins.

### Comment

There is ample food in this country and most of us have sufficient money to eat well and choose what we like from a great variety of foods. The people of the United Kingdom have never before been so well fed or so healthy. The puritans who wish to alter the quality of foods that we have enjoyed for years and who advocate widespread dietary changes require much more hard scientific evidence to support their claims. If you enjoy your food, then in all probability you are in good health.

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## WILLIAM PICKLES

William Pickles was one of the outstanding general practitioners of our time. His *Epidemiology in Country Practice*, first published in 1939, was reprinted by the College as a limited facsimile edition in 1972 but has not been available now for some years. Similarly his biography *Will Pickles of Wensleydale* by Professor John Pemberton, who was both a friend and colleague, is also out of print.

The College has republished both books simultaneously. *Epidemiology in Country Practice* is a classic example of original research carried out in general practice and *Will Pickles of Wensleydale* is the definitive biography of Pickles written in a pleasing and easy-to-read style. These two books, which both separately and together contribute to the history of general practice, can be warmly recommended.

The books are available from the Publications Sales Office, Royal College of General Practitioners, 8 Queen Street, Edinburgh EH2 1JE. *Epidemiology in Country Practice* is £5.50, *Will Pickles of Wensleydale* is £10.50; if ordered together the two books can be bought at the reduced price of £13.00. All prices include postage, and payment should be made with order.