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FOOD HABITS

IT is no light undertaking to make a scientific study of the food habits of a nation, especially when that nation is at war and is sending vast quantities of its basic foods to its allies in a world which is also at war. The United States Committee on Food Habits is one of two committees set up in 1940 by the National Research Council at the request of the National Defense Advisory Commission, as part of the plan for mobilizing science for defence and war effort. Its report is published under the title, "The Problem of Changing Food Habits"*.

The task of the Committee was to study the psychological and cultural pattern of human nutrition, while the other committee appointed at the same time (the Food and Nutrition Board) had the task of dealing with the biochemical and physiological aspects of this problem. The aim was not merely to tell us why we eat what we do eat, but also to guide the food habits of various kinds of people in the direction required by health and national and world needs. This study requires the consideration of economics, culture, tradition, agriculture, national and individual psychology and other factors which govern the consumption of food by communities or individuals. As the preface to this brochure explains, little had been done when the Committee was appointed to study the relation of culture and behaviour and personal traits to food habits, and it had a pioneer job. It had to collect existing knowledge of what foods were liked and disliked by different kinds of people, to stimulate research and to be ready to advise. Dr. Carl E. Guthe, the chairman, contributes a detailed history of the Committee, and Miss Margaret Mead, the executive secretary, reviews the work done.

One of the Committee's first tasks was to organize the mass of existing knowledge, which ranged from studies of soil agronomy to studies of historically changing diets, the relationship between purchasing power and foods eaten, the relation of learning to eat with other types of learning and such medical data as those supplied by the study of gastro-intestinal diseases and other illnesses which profoundly affect food consumption. At the same time new methods of acquiring further knowledge had to be devised. The study had to be world-wide, and the effects of lend-lease and nutritional relief of other countries had to be included. Gifts of white flour for the relief of famine might, for example, inculcate in a population accustomed to eat whole grains a habit which would have disastrous effects on their health in the future. The way in which foods substituted in war-time for normal ones are presented may affect the post-war acceptance of those foods. The enforcement of nutritional standards may have all kinds of repercussions. The giving of emergency food tickets to children may, for example, break down parental authority, with undesirable results in communities in which this authority is traditionally or culturally strong. The whole cultural picture must be considered

* Bull. National Research Council, No. 108: The Problem of Changing Food Habits. Report of the Committee on Food Habits, 1941-1943. Pp. 177. (Washington, D.C.: National Academy of Sciences, 1943.)

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before changes are introduced which may be desirable nutritionally, but may be socially undesirable.

The Committee's method has been to approach the problems largely through the conceptions of cultural anthropology; food habits were seen as "the culturally standardized set of behaviours in regard to food manifested by individuals who have been reared within a given cultural tradition". But these behaviours are related to other standardized behaviours in the same culture. Preference for meat or aversion to milk were not, for example, treated as isolated items, but were referred to the total complex of behaviour which constituted the food habits. Methods of changing food habits are similarly related to psychological factors of learning. The cultured individual reacts both to the food itself and to its production and distribution.

There was no immediate prospect of financing intensive cultural studies of American food habits. Methods for the quick appraisal of some of the more important factors were therefore devised by Prof. Kurt Lewin, of Iowa State University, who contributes an account of the study which he directed by means of a questionnaire addressed to 2,300 Iowa school-children and by interviewing housewives; and Dr. Franklin Dove devised a method of defining the content and pattern of regional food practices. These studies, and others of resistance to change, rationalizations of resistance and so on, have made it possible to identify various social-psychological characteristics of the American food pattern. Examples of these are the tendency, in counties with a Puritan tradition, to use food for purposes of reward and punishment; or the conflict between the emphasis in the southern United States upon personal taste rather than upon health and duty, with consequent catering for the individual tastes of each member of the family; and the emphasis in the north upon "moral overhauling" of the behaviour of each member of the family.

Studies of emergency feeding showed that the most practical way of avoiding giving offence to anyone in a mixed group was to cook single foods with a minimum of seasoning and to serve all condiments separately. The contemporary American cafeteria and methods of self-selection of meals are examples of social institutions well adapted to a variety of incompatible food habits. "The attitude of many European peasants who treat bread as sacred and guard against a single crumb falling on the floor has vanished in a country in which food was the certainty and money the uncertainty"; for, until 1942, very few Americans under forty had had the experience of having money for food while the food was not obtainable. The study of food habits is also necessary for the understanding of subcultural groups in the United States. To this subject Natalie F. Joffe contributes an interesting paper. This aspect must also be studied because the United States will send food to other countries, to the food habits of which these rations must be related.

The study of the number, form and composition of meals reveals some interesting features. A nutritional substitute for meat may, for example, be milk,

but culturally the container may have been substituted for the thing contained, so that food which is not nutritionally a substitute for, say, protein, may be accepted if it is put on the table in a casserole or other suitably shaped container. If the shape and size of the container of food is so important to some human beings, they would seem to resemble some animals in this respect, for the farmer knows that he is asking for trouble if he gives his pigs or hens, for example, their food in containers to which they are not accustomed, or if he puts these containers in a new place.

Industrialists will be interested in the section which deals with the effects of altering the time of a meal or of changing the name given to it. Prof. Lewin, discussing this question, claims that people eat according to the clock and that, if they start work at noon, breakfast foods, such as fruit juice, eggs, cereals and milk, may be omitted from the diet. Two other papers also discuss this and other effects conditioned by hours of work.

Prof. Lewin's study further considers the effects of shopping habits, to which must be added the effects of the ration card, the queue and similar factors. If Prof. Lewin's contention is correct that the person who buys the food controls the diet, increased shopping during the War by men or children may affect the content of the meals considerably. In Great Britain this conclusion will, no doubt, be disputed.

Prof. Lewin also provides a discussion of motives for buying different kinds of food, among which, of course, are the amount of money available, the price of foods and the conflicts between these and other economic factors and the ideals of health and cultural tradition. A Czech or an American of Czech origin and a Negro will omit different foods as a result of the conflict between these factors, and there will be similar differences between the decisions of the Jew and the American of German or Anglo-Saxon descent. Meat, concludes Prof. Lewin, is the "most typical husband's food", and this introduces another complication. For whom in the family is the food to be bought? If the husband is a keen gardener, as, for example, the Czech in the United States apparently is, will the family eat more fresh garden produce? If it is true that a man acquires his personal food tastes within the family, he will carry these to public eating places and so affect their catering. But it would be interesting to find out whether this often, or indeed ever, happens in Great Britain; and how much the home catering can be affected by family experience in a public eating house.

Another series of questions arises out of the consideration of the housewife's knowledge of cooking and food values and the degree of her influence on the home. Prof. Lewin suggests as a partial explanation of why we eat what we do eat the "channel theory", which amounts to the self-evident proposition that we do not eat at home what does not come into the home. This forms, nevertheless, the basis of his study of how food comes to the table and why. Prof. Lewin gives paramount importance to the view that once food is on the table, most of it

will be eaten by some of the family. This view also will be challenged by some British authorities. Nor should we forget the importance of the way in which food is served. The effects, for example, of the method of serving it on individual plates are discussed by the Committee on Food Habits, and all of us have probably suffered—or benefited—from the system of training children to eat up what is on the plate, without adequate consideration of what the physiological or mental results may be.

In a leading article in the same issue (p. 47), *The Lancet* gives the salutary reminder that it was not science that made our forbears healthy on the food which they liked; science only enables us to understand why they were healthy. The primary error that we have made, says Mr. F. Le Gros Clark (also in the same issue of *The Lancet*, p. 55), is that of looking upon food habits as a health problem. To the public, milk, for example, is a beverage, and we have almost succeeded in converting it into a medicine. Neither Lord Horder nor Mr. Le Gros Clark is, of course, seeking to belittle the value of scientific knowledge about food; they are both, like the United States Committee on Food Habits and the British Food Education Society, concerned to create a gradual and irreversible change in food preferences; but the views of Lord Horder and Mr. Le Gros Clark will be welcomed for their practical common sense.

The study of the influence of methods of preparation of foods leads the inquirer into many complex problems. *The Lancet* (542, April 22, 1944) has pointed out, in a discussion of a memorandum on hospital diet issued by King Edward's Hospital Fund for London (1943), that the hospital ward offers an unparalleled opportunity of giving people experience of the value of rightly chosen and properly prepared food. The King's Fund memorandum lays down the principle that the food service of a hospital should be one of its essential remedial services; and most of us will agree. The remarkably good recipes for war cookery issued in Great Britain by the Ministry of Food and other agencies during the War have taught the people a great deal about the choice and preparation of meals which are both adequate and appetizing. Lord Horder, in his address to the Food Education Society last June (see *The Lancet*, 53, July 8, 1944), has reminded us that the science of nutrition is a young one and that we should not strain too far the few facts of which we seem certain. Balance the day's diet, by all means, he says, but it is not necessary to balance the individual meal. He also said wise things about white and other kinds of bread.

The many other questions raised by the American report cannot be discussed here. It is already possible, says Miss Mead, to predict the general lines which resistance to, or acceptance of, proposed changes in food habits will follow; but recommendations of methods have to be related to the whole complex of the War and to the cultural, social and individual ideas about food of a variety of peoples. She suggests that, during the War and the immediate post-war period, two tasks must be tackled. One is to maintain the health of the people by the skilful use of

existing food supplies; the other is to present the increased knowledge about the use of foods in such a way that it does not become associated with wartime deprivation and therefore is not rejected later on. The additional long-term task, in the United States, is to alter American food habits so that they are based upon a tradition which embodies science and yet are sufficiently flexible to incorporate new scientific results. Altered production and distribution of foods will not by themselves effect this. Nor will authoritative pronouncements effect it, for they tend to breed regional conformity rather than intelligent flexibility. The responsibility rests on those individuals who plan what others will eat. New knowledge must therefore be conveyed to the woman on the farm, in the village and in the city. Mr. Le Gros Clark (*loc. cit.*) would seek the point at which social preferences are most readily influenced, and suggests that the school canteen, aided by committees of parents, could be developed gradually into an institution for the education of public tastes. The pressing need, writes Miss Margaret Mead, is for the integration of the techniques which have been devised for dealing with various aspects of these problems.

ENGLISH AGRICULTURE, NOW AND AFTERWARDS

(1) The Farm in the Fen

By Alan Bloom. Pp. 192+20 plates. (London: Faber and Faber, Ltd., 1944.) 10s. 6d. net.

(2) This Farming Business

By Frank Sykes. Pp. 160+8 plates. (London: Faber and Faber, Ltd., 1944.) 8s. 6d. net.

FORTUNATELY for the countryside of England, there have always been men who have felt the urge to reclaim heaths, moors and wastelands and bring them into agricultural use. Reclamation went on vigorously during the Napoleonic Wars, during the War of 1914–18, and during the present War; it has hitherto been essentially an emergency activity. Unfortunately, a great deal of the land thus brought into cultivation has been allowed to go derelict again, so that the whole of the capital embarked has been lost. Reclamation on the grand scale has been undertaken during the present War and a fascinating account of one of these enterprises has now been published.

Mr. Alan Bloom is a born reclainer. He began as a nurseryman producing flowering plants for gardens, and having had difficulties owing to dryness of his soil, he looked out for a fen-land farm to which he might transfer the moisture-loving varieties. In 1939 he found a farm in the Burwell Fen which was certainly not short of water; it had, however, been badly run down. Next to it lay Adventurers Fen, which, though at one time cultivated, had long since been abandoned, and had reverted to a water-logged waste. It was a familiar story. Until recently, drainage had been the responsibility of a number of small local bodies, none of them possessing resources or power to do the work properly; as the farms fell in value, so their resources dwindled and less and less drainage could be attempted. Seeing the hopeless-