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## FEEDING THE PEOPLE IN WAR-TIME

TAPOLEON had a gift for witty and penetrating comment which the contemporary aspirant to the position of world conqueror, Adolf Hitler, lacks. Napoleon said "An army marches on its stomach". In modern war not only the army but the whole nation is concerned, and Napoleon's saying may be given a wider significance. An ill-fed and starving people has no stomach for the fight and will inevitably be defeated. The mistaken food policy followed in Germany during the War of 1914-18 was a major factor in bringing about the victory of the Allies. In the Spanish civil war the people of Barcelona, who had survived brutal air raids without serious impairment of morale, lost their fighting spirit after long months of semi-starvation.

The proper feeding of civilians, Orr and Lubbock\* remark, is a more difficult problem

than the feeding of the Army and Navy. In their recent book they define a national food policy for the import, production and distribution of food which is based on the principles of nutritional science and knowledge of the existing dietary habits of the people. The tedious diet survey work which has been carried out within recent years here proves of the utmost value. same time, the potentialities and limitations of British agriculture are fully understood and allowance is made for the restriction of imports which has already occurred and which must become more serious as the war proceeds. Very briefly outlined, the proposed policy is as follows: The fundamental object is to provide the entire population with a diet which will maintain its health and physical efficiency. Even in peace time a very considerable proportion of the population consumes a deficient diet and in wartime this diet is likely to deteriorate further with the rise in food prices. The fulfilling

<sup>\* &</sup>quot;Feeding the People in War-time" by Sir John Orr and David Lubbock. (MacMillan & Co., Ltd., London), 1940, Pp. 88, Price 1s. 6d,

of the needs of this group, "the weakest part of the home front", should be made the cardinal aim of the nation's food policy. "If they are well fed we need not worry about the rest of the population."

The subsidising of certain basic foods is recommended. The Government has already made an annual allotment of 50 million pounds for subsidising foods. Orr and Lubbock suggest that bread, milk and potatoes should be subsidised. The potato is the best insurance crop against food shortage. The wholesale price of these foods should be fixed by subsidy at a level which would enable the poorest families to obtain sufficient for their needs. Wholesale and not retail prices should be fixed. The small retailer has little opportunity for extensive profiteering.

The organisation of agricultural production on the right lines is of essential importance. There are 4 million acres of good land available in Great Britain which can be brought under cultivation, whereas in Germany production has probably already reached its maximum. But at present the farmer, urged to develop his land to the fullest possible extent, does not know what to produce; "the agricultural policy, as far as it is known, is too vague to call forth the additional foods we need". But production can be regulated by price in the same way as consumption. If there is a guaranteed minimum price and a guaranteed market for certain foods the farmer will automatically produce them. There is little difficulty about a guaranteed market since the Government is already the wholesale purchaser of many foods and no doubt by the end of the war will be in complete control of all the wholesale food trade. This system, the authors think, would utilise the land to better advantage than a system of compulsory ploughing up without any guidance as to what additional foods should be grown.

A very large increase in the production of vegetables other than potatoes is both possible and desirable. Not only farm land, but also gardens and allotments, should be utilised to the fullest extent. "If the campaign for increased vegetable growing in gardens and allotments were pushed hard enough it might be possible to have nearly half of the families in the country self-supporting in vegetables."

Import and agricultural policy must be closely co-ordinated. Normally Great Britain imports some 70 per cent. of its total food supply, so that a satisfactory plan for regulating imports is in a sense more important than the planning of agriculture. One of the guiding principles should be that imports which provide a maximum of food value for a minimum of shipping space should receive priority. This means bread and fats, which should be given priority "until we have a store which puts us beyond the danger of shortage". Sugar is a concentrated food, but since it is a pure carbohydrate and contains no protein, vitamins and minerals, has a smaller claim to priority. It is not sensible to import bacon, beef or eggs in large quantities; these foods take up relatively more shipping space per 1000 calories, and can to a reasonable extent be produced at home. Nor is it economical to import fodder crops because it takes 5-20 tons of feeding stuff to produce one ton of human food. Food for livestock, consisting mainly of grass, grass silage, and, to a lesser

extent, of fodder crops, must as far as possible be produced within the country itself. The dairy cow and pig are more efficient and economical converters of feeding material into human food than poultry or beef cattle. There are large areas of rough grazing suitable for sheep.

The authors deal with the question of The purpose of rations is to ensure that each person gets the same amount and to prevent food hoarding. But actually about one-third of the population cannot afford to purchase the amounts of bacon and butter allowed by the rationing scheme already in force, and those who have the money cannot obtain their usual supply without underground trade in coupons. It follows that if the supplies necessary to provide the whole population with the given ration are made available, there will be considerable wastage. Rationing systems have many disadvantages. They do not necessarily ensure the equable distribution of food for the above reason, and they limit choice of food, which is physiologically undesirable. It is hoped that bread, milk and potatoes will be available in such abundant quantities that their rationing will be unnecessary. Food-hoarding is not likely to be a serious problem.

The authors claim that, if their food policy could be put into successful operation, the nation would be provided with a diet which, while considerably less rich and varied than its customary diet, would nevertheless be an adequate and well-balanced one. To deal

with the problem in all its aspects, a small "Food Council" should be appointed. It appears that at present no clear-cut policy is being followed. "The lack of co-ordination between the Ministries of Food, Agriculture and Health is causing a certain amount of disquiet."

It is impossible in a brief article to deal with the questions raised in this book, which illuminates one vitally important department of war activity. Reports of recent parliamentary debates show that its lessons have not been lost on politicians. Mr. Lloyd George, in particular, appears to have been impressed by its conclusions. No doubt the scheme is open to criticism at certain points and would need to be modified in various respects as the result of war necessity and experience. However this may be, a comprehensive long-term policy is obviously needed to replace piece-meal temporary measures for dealing with the situation.

## W. R. AYKROYD.

[Note added in proof.—This review was written early in May before the German attack in the West. The events which have taken place since that time make the problem of maintaining the food supplies of Great Britain more urgent and difficult. But as long as American and Canadian wheat can be imported in sufficient quantities to supplement homegrown food there should be no serious danger of food shortage. The potato crop is of essential importance. The lack of cod-liver oil, which is of such high value in preventing malnutrition and rickets in children, can be made good by a synthetic substitute in the shape of a vegetable oil containing concentrates of vitamins A and D.—Coonoor, June 18, 1940.]