

17th European Meeting of Meat Research Workers

Introductory Speech by

The Rt. Hon. The Earl Waldegrave, K.G., T.D., D.L.

Preliminary remarks. I would like, as a layman, to add my word of welcome to what Professor Ingram has said as a scientist.

I have been an agriculturalist and lived in the West Country all my life. After taking an Agricultural degree in 1927 at Cambridge University, I succeeded to family estates here in Somerset in 1930. I have farmed here ever since, and have also farmed in Scotland and Wiltshire. I found this practical experience of value when I was a junior Minister at the Department of Agriculture, Fisheries & Food from 1958 - 62 in Mr. MacMillan's Government. I am proud to say that it was in that period that agreement was finally reached for setting up a Meat Research Institute, over whose Advisory Committee I now have the honour to preside. Also, I have long been associated with the University of Bristol and am now the Chairman of its Agricultural Committee. May I therefore, besides welcoming you to the meeting, welcome you to the West Country and to Bristol and its University.

To introduce your scientific proceedings, it may be useful if I begin with a few facts and figures about the meat-producing industry of the United Kingdom and conclude by briefly describing the organisation of the research which supports it.

Production and consumption

This country may be unusual because of our extremely high population density, but still 80% of the land area is devoted to food production, from which some 700,000 farmers and farmworkers, less than 3% of the working population, produce two-thirds of the country's food. The current yearly value of their output is over £2,000 m., of which 70% represents livestock products, 20% crops, and 10% fruit, vegetables and flowers. As in other countries, the efficiency of British agriculture has steadily improved, the gross output at constant prices having increased by 44.5% from £1,397 m in 1953 to £2,020 m in 1968 while the labour force employed declined by 46.5%. The production of meat increased by 73%. By 1969, the United Kingdom produced virtually all its own poultry, nearly half its canned meat, and some 38% of its bacon.

The consumption of carcass meat averages 430 g. per person per week, of which over two thirds is produced at home. In addition an equal quantity of other meat products is eaten, including 170g of bacon and ham, and 100g of sausages - I must mention that the British sausage differs from most European sausages in containing raw minced meat with much carbohydrate besides being sold unsmoked and uncooked.

Imports

Despite its rising production of most meat foods, the United Kingdom still depends on other countries in large part.

Bacon is a well known example. In 1969 the Bacon Market Sharing Understanding was renewed for three years; its basic aims are to provide orderly marketing in the U.K. and to keep prices stable at levels reasonable to both producers and consumers. The government estimates each year the total requirements of bacon for the home market, and also the expected production in U.K.; for the year April 1971 to March 1972, these estimates are 650,000 tons and 265,000 tons. The difference, in this year 385,000 tons, is made up by imports divided between Denmark, Poland, the Irish Republic, Sweden, The Netherlands, Hungary, Yugoslavia and Romania, with Denmark allocated three quarters of the whole.

As regards carcass meat, although two thirds of all we eat is home produced, this average does not apply to all types. Lamb is second to beef in popularity, but the trade is dominated by New Zealand which supplies as frozen carcasses more than half our needs. The United Kingdom also remains the world's largest importer of offals; in 1968 with a domestic production of 157,000 tons, we imported an additional 110,000 tons.

Since 1968, while imports of beef from traditional sources (Australia, Argentina) have continued to diminish, there has been an upward trend in imports of beef and veal from Eastern Europe, mainly Poland and Yugoslavia and to a lesser extent Romania. In particular, in view of discussions which are proceeding in this country on the use of uncastrated male animals, interest has been aroused by the Yugoslavian bull beef.

Generally speaking, livestock and meat from Commonwealth countries and the Irish Republic are admitted into the United Kingdom free of customs duty. But, as with the import of bacon, there are special agreements with Commonwealth and foreign governments in respect of particular items; for instance, as long ago as 1952 we undertook to import all New Zealand's exportable surplus of meat until 1967, and this agreement has since been extended to September 1972 with the United Kingdom reserving the right to regulate the inflow whenever the economic situation demands.

The Home Industry

Most of the animals used for meat in this country are slaughtered in abattoirs handling more than 1000 beasts per year, but a large number of much smaller slaughterhouses remain in operation. Although a few slaughterhouses make by-products such as bone meal, the by-products industry is not fully developed and there are almost no installations here which compare with the large packing plants in the U.S.A., Argentina, Australia or New Zealand. Moreover, slaughter is supervised by specially trained meat inspectors who are not as a rule qualified veterinarians.

There is a large trade in the wholesale distribution of meat, which centres on Smithfield Market in London, whether the meat is home produced or imported. Prices are fixed after visual examination, and there is no centrally regulated system of classification. The meat is distributed mainly by transport companies in sides or quarters at temperatures about 5°C, relatively rapidly because distances in Britain are small.

The retail trade has changed greatly in the last twenty years. The local personal service butcher is giving way to large supermarkets which sell standardised prepacked cuts. For the latter trade, a number of companies now operate abattoirs producing meat specifically for prepacking, with emphasis on improved hygiene and rapid handling under strictly controlled refrigeration.

To help to co-ordinate and improve our meat industry, e.g. by introducing systems for classifying meat, the British government by the Agriculture Act in 1967 created the Meat and Livestock Commission. This body is financed by a small tax (levy) on the slaughter of animals. The Commission is responsible for promoting efficient production, marketing and distribution of livestock products (except poultry, dairy cattle and products), either by undertaking suitable projects itself or by promoting projects undertaken by others. Money from the levy is used to carry out a large experimental programme, mainly of animal testing and carcass improvement, but with increasing attention to meat quality. In addition, by allocating research grants, it has very recently stimulated a substantial volume of applied research on animal production and meat in Universities, which did not exist before.

The organization of research in the United Kingdom

We are not here concerned with research on the animals, which is carried out in numerous agricultural institutes and university departments of agriculture. Our concern is with the meat which is the end-product of all that activity, and the ways in which this meat can be used by the meat industry.

In the United Kingdom, research for the meat industry has followed a common pattern. The largest firms have set up their own laboratory services for routine control and problem solving. Research Associations serve the same purpose for smaller firms on a basis of partial government support; research on processing of meat having been so carried out by the British Food Manufacturing Industries Research Association since about 1925. Finally the Government has financed a research effort specifically for carcass meat.

Government research on the preservation of meat besides other foods first arose out of the transport problems which occurred in the first world war: and it was mainly carried out in the Low Temperature Research Station at Cambridge beginning about 1920. The results of that epoch increasingly revealed relations between meat quality and treatment of the live animal;

accordingly, responsibility for such work was transferred to the Agricultural Research Council in 1959. The Low Temperature Research Station was closed in 1967 and a new Research Institute, which you will be visiting during your stay with us, was set up entirely for work on fresh and cured meats. Half the cost of this Meat Research Institute is met by the Agricultural Research Council, and the other half by about 10% of the financial levy previously mentioned raised by the Meat and Livestock Commission.

The bodies which I have mentioned work together on problems important to the meat industry. The Meat and Livestock Commission is strongly represented on the Advisory Committee for the Meat Research Institute, and similar arrangements exist between that Institute and the British Food Manufacturing Industries Research Association in relation to problems of meat processing. Collaborative investigations result from time to time, as many of you may be aware from published accounts of such work.

The Government is, at the present time, examining the organisation of the research and advisory functions which support the agriculture and food industry. The Ministry of Agriculture, Fisheries and Food recently combined its relevant professional, technical and advisory functions in a unified Agricultural Development and Advisory Service, to provide more effective and economical organisation. The Ministry has also assumed responsibility this year for the financial grants to food research associations, such as the British Food Manufacturing Industries Research Association which I have already mentioned.

I have tried to give you, in this short space, a view of research for the British meat industry as it is to-day. But we are going through a period of re-assessment of our priorities, and of reappraisal of the organization and research needed to meet them, so this picture may soon change.

The Common Market

Over everything is the continuing discussion about possible entry into the European Economic Community. Everybody knows that this raises political and economic questions, because these receive much public discussion. It is far less well understood that, underlying these questions, there are technical and scientific problems, which will have to be solved also. To take a typical example, the British sausage could not exist according to the definitions current in the E.E.C. Talk of entry over a transitional period implies that, within that period, definitions or practices will have to be amended, and any associated scientific problems - for example about manufacturing or analytical control methods - will have to be settled on an international basis. Your meetings, where scientists from the European

countries have been in friendly and regular contact for many years, should provide particularly favourable opportunities to discuss such problems as may arise in connection with meat and meat products.

Final Remarks

It now only remains for me to thank you all for listening so patiently when you must be eager to get on with the main business of the day. In all your deliberations I wish you success, and I hope that during your stay here in Bristol you will be able to find the time to see something of this fine and historic city, enjoy its many facilities, and explore some of the beautiful English countryside which surrounds it.