#### ONE HUNDRED AND EIGHTH SCIENTIFIC MEETING—FORTY-NINTH SCOTTISH MEETING MARISCHAL COLLEGE, ABERDEEN

# 20 APRIL 1957

# **CLEAN FOOD**

Chairman: PROFESSOR SIR STANLEY DAVIDSON, B.A., M.D., P.R.C.P.E., F.R.C.P. (Lond.), Department of Medicine, University of Edinburgh

# Chairman's introductory remarks

By L. S. P. DAVIDSON, Department of Medicine, University of Edinburgh

Excluding duodenal ulcer the most common disease affecting the small intestine of man is acute gastroenteritis due to food poisoning, and the most important method of preventing food poisoning is the provision of clean food. Food poisoning is a difficult term to define, but through common usage it is accepted as meaning an acute gastroenteritis developing some hours (up to 48) after the consumption of unwholesome food or drink. It is customary not to include under this term (a) such specific infectious diseases as enteric fever, dysentery or cholera which are also spread by infected drinking water and food, because their incubation period is longer and gastritis is not an essential feature; (b) food idiosyncrasy or food allergy, since the food ingested is wholesome (e.g. shellfish) but the patient's reaction to it is abnormal; (c) digestive upsets resulting from the eating of clean food which is, however, too rich or mechanically irritating (e.g. excessive amounts of unripe fruit). Children are particularly prone to such upsets.

In contrast to enteric fever which is rarely encountered in Great Britain at the present time, a remarkable increase in the reported incidence of food poisoning has occurred during the last few years. This warrants a detailed consideration of the aetiological factors concerned.

Food poisoning may be due to (1) the ingestion of inherently poisonous foods (e.g. the 'death-cap' fungus) or (2) the consumption of food contaminated with chemicals (e.g. arsenic or zinc) or (3) pathogenic bacteria and their products. The great majority of cases of food poisoning are bacterial in origin.

The problem of supplying the public with clean food is a matter of deep concern not only to those who consume the food but to the doctors to whom they turn in grave distress when they suffer from food poisoning.

The Medical Officer of Health and his colleague the Sanitary Inspector have an important part to play both in the prevention of food poisoning and in establishing the causal factors which determine an outbreak.

Since bacteriological contamination of food is by far the most important cause of food poisoning, the bacteriologist is the most important member of the investigating team.

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Lastly, since food poisoning is reported to occur far more frequently in canteens, restaurants, hospitals and other residential institutions than in private houses the provision of clean food is a matter of great importance to the owners and managers of all premises in which food is supplied to the public, to the Boards of Management and Superintendents of hospitals and institutions and to commercial firms which manufacture or process food for sale.

In view of the vital importance of clean food, the Committee of the Scottish Branch of The Nutrition Society is to be congratulated on choosing this subject for a symposium and on obtaining the services of such a distinguished group of experts to deal with the many and varied aspects of this problem.

### Public-health aspects of food poisoning

By Kenneth Cowan, Chief Medical Officer, Department of Health for Scotland, St. Andrew's House, Edinburgh 1

The subject of food poisoning has attracted much attention in recent years partly because of increased incidence in spite of measures directed towards prevention, and partly because of the interesting nature of many outbreaks and the amount of work devoted to their investigation. The gastro-intestinal illnesses which are included in the group of conditions known as food poisoning exclude alimentary infections due to the shigella group and to Salmonella typhi and Salmonella paratyphi which are statutorily notifiable under the Public Health Acts but even with this limitation food poisoning constitutes a considerable problem.

The extent of the problem can be measured from the report of the Public Health Laboratory Service in England and Wales (Public Health Laboratory Service, 1956). A total of 8961 incidents was recorded in 1955, an increase of 2945 (49%) over 1954. Outbreaks of food poisoning involving more than one family numbered 612; in 723 incidents the outbreak was confined to one family and there were 7626 sporadic cases. Thirty-nine deaths were reported to the laboratory services. In 38% of all incidents the causal organism was not discovered and in outbreaks involving more than one family this percentage was actually 56.

It was not possible in former years to estimate the amount of food poisoning occurring in Scotland on a comparable basis to that in England and Wales because it was not necessary to notify cases. This was remedied by the Food and Drugs (Scotland) Act, 1956, and notification came into operation on 1st August 1956. The total number of incidents reported in Scotland up to the end of 1956 was 626.

The public-health issues involved in food poisoning are related to the immediate action required to investigate and control outbreaks of food poisoning and to the longer-term aspect of the education in hygiene of those engaged in the handling, storage, preparation and cooking of food.