

which was applied because of the large proportion of the patients who suffered from aphthous ulceration of the mouth. It was not until 1888 that Gee described the "coeliac affection," a disease affecting young children.⁸ Gee also recognized that a similar illness could occur in adults who had never been in the tropics. To this adult variety the term idiopathic steatorrhoea has been applied, though it has been common, especially in America, to use the term non-tropical sprue. Indeed, one of the difficulties for the non-specialist at present is to find a way through the jumble of names which have been foisted on to the primary steatorrheas.

Sprue has often been regarded as synonymous with steatorrhoea, and the three main varieties of the primary malabsorption syndrome have been called tropical sprue, non-tropical sprue, and coeliac sprue. The finding that virtually all cases of coeliac disease and most cases of idiopathic steatorrhoea in adults will respond favourably to a gluten-free diet, and relapse when gluten is reintroduced, has led to the term "gluten-induced enteropathy."

Some workers have sought to divide idiopathic steatorrhoea into two main varieties. The first is adult coeliac disease, characterized by more or less complete villous atrophy, mild anaemia, and a good response to a gluten-free diet. The second is temperate sprue, characterized by megaloblastic anaemia, folic-acid deficiency, and only partial villous atrophy.⁹⁻¹⁰ It is to be hoped that it will not be long before the specialists in the field arrive at an agreed nomenclature with precise definitions so as to help the general physician understand these cases.

Though tropical sprue has long been studied, little has yet been discovered about its cause. It occurs only in certain areas of the tropics, which immediately suggests that an infective agent may be responsible. This suggestion is heightened by the fact that, though the cases are usually sporadic, sometimes veritable epidemics occur.¹¹⁻¹² However, such epidemiological evidence is not decisive, because pellagra presented a similar pattern and was commonly regarded as an infective disease until the brilliant observations of J. Goldberger showed it to be a deficiency disorder.¹³ Tropical sprue differs from coeliac disease and idiopathic steatorrhoea in not being influenced by a gluten-free diet. By contrast, its course is favourably influenced by treatment with broad-spectrum antibiotics,¹⁴ which are ineffective in coeliac disease and idiopathic steatorrhoea. Megaloblastic anaemia is common in tropical sprue and it responds rapidly to treatment with folic acid. Whatever the mode of action of broad-spectrum antibiotics, there seems no doubt that these agents and folic acid have a favourable action in tropical sprue, as is brought out in the articles by W. O'Brien and M. W. J.

England¹⁵ and J. F. Webb and B. Simpson¹⁶ in the *B.M.J.* last week.

Not every case of steatorrhoea seen in the tropics is an example of tropical sprue. With modern diagnostic aids and the opportunity to study the effects of a gluten-free diet it is becoming plain that coeliac disease and its adult counterpart, idiopathic steatorrhoea, may also occur there, as shown by the papers by Dr. R. C. Misra and colleagues (page 1230) and Dr. B. N. S. Walia and colleagues (page 1233) published in the *B.M.J.* this week.

Strontium Metabolism

The problem of what to do about fall-out no longer evokes so much anxiety as it did 10 years ago, though the levels of contamination of food and human bone by strontium-90 rose in 1964 to the highest ever recorded.¹⁻² Present levels are judged to constitute no appreciable hazard to health, but the study of strontium metabolism is continuing in the small number of laboratories where the necessary skills and equipment have been assembled. At p. 1225 of this week's *B.M.J.* Mr. Fletcher and his colleagues review recent advances in one part of the British programme, where work has been in progress since 1959.

Strontium-90, which is the most important constituent of fall-out, enters the diet in cereals, flour, milk, and dairy products. A little of the strontium is retained in the body and is deposited in bone, where its presence constitutes a localized source of radiation. Many important details of strontium metabolism are still obscure, mainly because of experimental difficulties. Three avenues are open to the investigator. First he may seek ways of removing radioactive strontium from the body. Prompt action within minutes of ingestion of an abnormally large dose of radioactive strontium will inhibit absorption from the gut,³ but attempts to remove radioactive strontium deposited in bone or to inhibit its absorption from the diet have proved unsuccessful.

Secondly, the use of radioactive tracers may be considered. For reasons of safety, however, the appropriate techniques, though readily available, are not permissible in young children, where the most important information remains to be gathered. Hence most work has been carried out on the third type of investigation—namely, the metabolism of strontium-90, which in this case is studied as a radioactive tracer. Radioactive strontium emits beta-rays, but these cannot be detected outside the body. Hence studies have to be carried out on necropsy specimens of bone from which strontium may, with difficulty, be chemically separated for radioactive assay.

The British programme, supervised jointly by the Medical Research Council and the Agricultural Research Council, relies on the work of two teams. The M.R.C., the A.R.C., and the Atomic Energy Authority provide the staff and resources for a group which analyses about 300 samples of bone per year from all parts of England and Wales. About one-third of the necropsy samples come from babies under 1 month old; another third from those up to 1 year; and

¹ Doniach, I., and Shiner, M., *Gastroenterology*, 1957, 33, 71.

² Sakula, J., and Shiner, M., *Lancet*, 1957, 2, 876.

³ Booth, C. C., and Mollin, D. L., *Amer. J. dig. Dis.*, 1964, 9, 770.

⁴ Jeejeebhoy, K. N., Desai, H. G., Noronha, J. M., Antia, F. P., and Parekh, D. V., *Gastroenterology*, 1966, 51, 333.

⁵ Dicke, W. K., *Proc. 6th Congr. Assoc. int. Paediat.*, 1950.

⁶ — Weijers, H. A., and van de Kamer, J. H., *Acta paediat. (Uppsala)*, 1953, 42, 34.

⁷ French, J. M., Hawkins, C. F., and Smith, N., *Quart. J. Med.*, 1957, 26, 481.

⁸ Gee, S., *St Bart. Hosp. Rep.*, 1888, 24, 17.

⁹ Cooke, W. T., Fone, D. J., Cox, E. V., Meynell, M. J., and Gaddie, R., *Gut*, 1963, 4, 279.

¹⁰ — — — — — *ibid.*, 1963, 4, 292.

¹¹ Ayrey, F., *Trans. roy. Soc. trop. Med.*, 1948, 41, 377.

¹² Mathan, V. I., Ignatius, M., and Baker, S. J., *Gut*, 1966, 7, 490.

¹³ Goldberger, J., *Pellagra—Its Nature and Prevention*, U.S. Publ. Hlth Rep. No. 1174, 1927.

¹⁴ French, J. M., Gaddie, R., and Smith, N. M., *Quart. J. Med.*, 1956, 25, 333.

¹⁵ O'Brien, W., and England, M. W. J., *Brit. med. J.*, 1966, 2, 1157.

¹⁶ Webb, J. F., and Simpson, B., *ibid.*, 1966, 2, 1162.

¹ Agricultural Research Council, *Radiobiological Laboratory Annual Report*, 1965-66. Her Majesty's Stationery Office, London.

² Medical Research Council, Monitoring Report No. 13, *Assay of Strontium-90 in Human Bone in the United Kingdom: Results for 1965, Part II*. Her Majesty's Stationery Office, London.

³ *Brit. med. J.*, 1966, 2, 1024.

the remainder from older children or adults. A team in Glasgow, comprising workers from both the University Department of Child Health and the hospital service, analyses about 200 samples each year, almost all from children aged under 5 years. The Glasgow survey is confined to a limited geographical region, and has access to clinical records and other material which permit detailed interpretation of the results. The English survey gives a better sample of the country as a whole. Other work now in progress includes the study of strontium metabolism by the use of radioactive tracers in adult volunteers and by the analysis of diet and urine in infants. The problem of strontium metabolism, linked as it is with the growth and maintenance of the skeleton, is necessarily a long-term project. The British work now under way has produced useful results from a modest expenditure of effort, and its value may be expected to grow continually over the next decade.

Medical and Social Welfare

The Seebohm Committee was appointed in December 1965 by a number of Ministers of State "to review the organization and responsibilities of local authority personal social services in England and Wales, and to consider what changes are desirable to secure an effective family service."

The field of inquiry is wide. Almost everyone in the community is at some time affected by the activities of the local authority departments—children, education, health, housing, and welfare. The committee must also consider how these services dovetail, if they do, with the work of general practitioners, hospitals, national assistance, national insurance, the probation service, and voluntary associations. The committee has been asked to complete its work quickly—it has already received written evidence from many organizations and is now interviewing representatives from some of them. Before receiving written evidence the committee made it clear that it sought the views of interested bodies on four subjects: firstly, the strength of the case for change in dealing with weaknesses; secondly, the kind of changes that may be required in the organization, administration, and staffing of local government departments and also the role of voluntary bodies; thirdly, the repercussions to be expected from the changes proposed—a searching questionnaire dealt with the needs of people, local and central government, voluntary workers and bodies, public feeling, training and recruitment of staff, costs, and "any other new problems created by reorganization"; and, fourthly, the timing and phasing of change and the possibility of different patterns of local authority administration.

Written and oral evidence has been forwarded to the committee by the B.M.A., which expressed the view that people should not be regarded as "cases" but rather as individuals or families needing the help and support of society. This should be achieved by a well co-ordinated social welfare service rather than by separate specialized departments with, as often as not, inadequate lines of communication. The Association stressed the importance of integrating both the public health services and general practitioners' group-practice and health-centre services in future arrangements.

Certainly there are weaknesses and gaps in the existing services. Fragmentation of services means, in many cases,

lack of co-ordination, inefficiency, and duplication of effort. A good improved social welfare service would provide the means of directing the appropriate special skills to particular needs and would make careers in the service more attractive.

The answer seems to be a comprehensive integrated health and social service department with appropriate sections dealing with specialized functions. This principle is already successfully in operation in many areas, where the chief dental officer, the public health inspector, the chief welfare officer, and the chief nursing officer work as special officers under the administrative umbrella of the medical officer of health. The Association's policy is expressed in the following words: "The medical officer of health is the officer responsible for many of the services at present provided by local authorities in the field of community service, and it is considered that his department is the one most fitted to administer a unified health and social welfare department."

Questions about professional secrecy in relation to the terms of reference of the Seebohm Committee were dealt with and were based on the long-standing policy of the Association in relation to the public health service, which includes the following:

"To maintain the confidential relationship of doctor and patient (or examinee), it is desirable that only information of a general nature be given to lay persons without revealing intimate or personal details. Not infrequently detailed personal information is sought by such bodies as the children's committee or the welfare committee of the local authority. In those circumstances information should be submitted only through a medical officer nominated for the purpose, who would be responsible for appraising the medical report and deciding the extent to which personal information could be disclosed. The medical officer of health as adviser on medical matters to the council of the local authority and its committees should be consulted whenever it was proposed to review medical reports."

Though a general practitioner should not discuss detailed information about one of his patients to a public health doctor or industrial medical officer without the consent of the patient, in practice when consent is obtained doctors are naturally more willing to give full information about their patients to medical colleagues than they are to lay persons. Claims have been made that the head of a unified social welfare department need not have medical qualifications. These ethical considerations constitute a major objection to such a view. An administrator must take or be responsible for decisions about people needing help. To do so properly he must either have all the facts or have full access to the facts. A non-medical administrator can do this except in relation to medical information, some of which would necessarily be withheld from him on ethical grounds. The only local authority officer who can be given all the available facts is the medical officer of health, and he is therefore the only officer who can effectively administer the proposed health and social welfare department.

However, other organizations which have given evidence have taken opposing positions on this issue. In the published evidence of the Association of Child Care Officers to the Seebohm Committee it is stated that "the director of the family service must be a professionally qualified social worker" and that neither a medical officer of health nor an education officer will do because the first is "basically concerned with health, physical and mental," and the other "with education." Apparently, social work must be the basic activity—health and education are referred to as "subsidiary activity." The Association of Child Care Officers would wish to take away from the health departments control over child