between various scientific disciplines will be encouraged, and it is hoped that the club will stimulate research.

At its meeting the club will consider the size of the problem, the importance of back pain in the community, and its incidence in various types of industry. Occupational backache is common, and if the factors leading to it can be accurately defined then it should be avoidable. A session is being devoted to the structure and formation of the spine. Our knowledge of the pathology of spinal disease has been limited by the relative difficulty in obtaining pathological material. Present lines of research include measurements of the pressures within the nucleus pulposus, studies of the anatomical and functional structure of the annulus fibrosus, and calculation of forces acting through the intervertebral discs. Another session will be concerned with biochemistry. Recently it has been appreciated that the strength of collagen depends on the intermolecular and intramolecular cross-linkages and that age changes in collagen are directly dependent on alteration in these. The structure of the annulus fibrosus is obviosly of great interest. Finally the meeting is considering how back pain affects the lives of its sufferers. Though many forms of treatment have their advocates, none are satisfactory. Even among anecdotal reports of cures of back pain when all other treatments have failed some clues may be found to fruitful research.

[1] Lawrence, J. S., *Annals of the Rheumatic Diseases*, 1969, **28**, 121.
[2] *Annals of the Rheumatic Diseases*, 1970, **29**, 324.
[3] Horal, J., *Acta Orthopaedica Scandinavica*, 1969, Supplement 118.

The Gut and Dermatitis Herpetiformis

Enteropathy may be associated with dermatitis herpetiformis. The relationship between the skin disease and the enteropathy is not clear, since each component behaves independently, responding to its appropriate treatment (the giving of dapsone or withdrawal of gluten from the diet), yet the relief of one component does not benefit the other.

Whether or how the enteropathy of dermatitis herpetiformis differs from coeliac disease is obscure. A thorough study of the histology of the small intestine of patients with dermatitis herpetiformis by means of a multiple biopsy technique[1] shows that the enteropathy is almost invariably present (21 out of 22 patients), but may be missed if a single biopsy specimen is taken, since the changes can be patchy. The same workers who carried this out[2] confirm that the structure of the villi of the small intestine improves when gluten is withdrawn from the diet. They failed to show any worsening when gluten was instilled, but this may have been for technical reasons.

The resemblances between dermatitis herpetiformis enteropathy and coeliac disease include the histological appearance of the intestinal mucosa, the diminishing severity of the lesions in the distal small intestine, and evidence of gluten sensitivity. Possible differences are the patchy lesions in the gut and the usual absence of intestinal symptoms in dermatitis herpetiformis, but some gastroenterologists think that the gut may be patchily involved in coeliac disease, and it is well known that overt coeliac disease may have been preceded by many years without symptoms. Nevertheless it is notable that the intestinal symptoms in dermatitis herpetiformis enteropathy, if present at all, are much milder as a rule than might be expected from the degree of histological change, and they may be absent even when the biopsy shows subtotal villous atrophy, a paradox that might be explained by patchy involvement. Conversely the skin lesions of dermatitis herpetiformis are seldom found in patients with coeliac disease. While there is some overlap in that a few patients with the skin lesions suffer from what would be generally acceptable as coeliac disease, most of them have a symptomless enteropathy that is apparent only as a result of intestinal biopsy. Thus, though there is evidence that dermatitis herpetiformis enteropathy depends on gluten sensitivity, it is difficult in the present state of our knowledge to equate the syndrome with coeliac disease. The difficulty may be partly semantic, but it depends principally on ignorance of the precise mechanisms concerned.

There is lack of agreement about the treatment of this syndrome. Some believe that no treatment is necessary in the absence of symptoms of malabsorption; others think that it should always be treated—and that might mean treating virtually every patient with dermatitis herpetiformis. Perhaps the most reasonable line to follow at present would be to recommend that those patients showing biochemical evidence of malabsorption should be put on a gluten-free diet. In any case it is doubtful whether patients would willingly tolerate an irksome diet to control a disease that gives rise to no symptoms and requires biopsies (ideally multiple biopsies) of the intestinal mucosa for its detection and surveillance. But if dermatitis herpetiformis enteropathy is to be regarded as coeliac disease there would seem to be a good case for insisting on a life-long gluten-free diet, since the incidence of neoplasms of the small intestine is above average in coeliac disease,[3] and a gluten-free diet might offer some protection. Dermatologists are not aware that their patients with dermatitis herpetiformis are specially liable to develop such neoplasms, but that is a matter that can be settled only by a long-term follow-up of patients, a measure that is likely to be stimulated by the interest aroused by this syndrome.

[1] Brow, J. R., Parker, F., Weinstein, W. M., and Rubin, C. E., *Gastroenterology*, 1971, **60**, 355.
[2] Weinstein, W. M., Brow, J. R., Parker, F., and Rubin, C. E., *Gastroenterology*, 1971, **60**, 362.
[3] Harris, O. D., Cook, W. T., Thompson, H., and Waterhouse, J. A. H., *American Journal of Medicine*, 1967, **42**, 899.

Alcohol on the Road

A programme on road research is administered by a Steering Committee of the Council of the Organization for Economic Co-operation and Development (O.E.C.D.) and is designed to promote co-operation between member countries in research on road construction, traffic, and safety. The programme is developed through groups of experts, and the group which is concerned with effects of alcohol and other drugs on drivers' behaviour met in B.M.A. House on 24 September. The meeting was preceded by a two-day international symposium on countermeasures, which was attended by experts from most of the O.E.C.D. countries.

Though road traffic accidents continue to increase, the public health aspects of the problem tend to be concealed by the transport statisticians, who present the figures in relation to the even greater increase in the number of motor vehicles on the road. The failure of our own Department of Health and Social Security to draw attention to the public health aspects of the problem in its annual reports was

made all the more apparent by the obvious concern expressed by medical colleagues attending the symposium from other countries. In most technically developed countries deaths of males from road accidents amount to nearly half, or in some cases more than half, of all the deaths of those aged 15-24,[1] and the proportion is increasing annually. It is significant, therefore, that reports from a number of countries at the symposium showed that the largest incidence of high blood-alcohol concentrations among drivers is now to be found in young males. In the Netherlands a comparison in occupational groups showed the highest incidence among students.

Another important public health aspect of the problem is the changing pattern of morbidity, which is clearly associated with the increasing velocity of vehicles in road accidents. Not only is the incidence of multiple injuries and "explosive" fractures increasing, but the proportion of serious head injuries which are remediable in terms of returning the victim to the community is getting smaller. In one Australian series[2] it has been noted that the number of remediable local head injuries had fallen off steadily, whereas the incidence of operations for more severe lesions had steadily increased. There had also been a steady increase in brain stem injuries, which had created problems of bed occupancy, nursing manpower, and morale. The action of public health authorities in drawing attention to these changes was largely responsible for the recent introduction of compulsory seat-belt legislation in some of the Australian states, and a reduction in mortality and morbidity is already apparent.

The increasing proportion of high blood-alcohol concentrations among young male drivers is relevant in this context because reference was made in the O.E.C.D. symposium to the little understood effect of alcohol in increasing the tendency to cerebral haemorrhage. Various theories, including "sludging," have been put forward, but it is clear that alcoholic intoxication influences adversely the outcome of head injuries, which comprise more than half the serious injuries received by drivers in road accidents. Meanwhile, it is to be hoped that the courts of law in Britain will cease to commend the taking of alcohol after an accident as normal and reasonable in justifying their acquittals of those drivers who have adopted the "hip flask dodge" to avoid conviction under the Road Safety Act.

The dramatic reduction in casualties following our 1967 Road Safety Act was the occasion for favourable comment by experts from other countries. The success of the legislation was attributed largely to the roadside breath-testing procedure. Evidence has been accumulating for many years that a high proportion of persons who drink regularly beyond the 80 mg/100 ml level have an alcohol "problem" to such an extent that they would be regarded as "alcoholics" in many countries. Our own representatives at the symposium were clearly embarrassed by questions aimed at finding out what remedial action was being taken to deal with drivers convicted under the Road Safety Act, and it was perhaps fortunate that the Act has not been in force long enough to identify any tendency to recidivism. One well-designed study from the Netherlands was presented at the symposium which showed that the severity of the court sentence had no statistically significant effect on the probability of the offence being repeated.

Recent technical advances exhibited at the symposium included self-testing breath-alcohol devices, developed from the fuel cells used in the U.S. space programme, and an "alcohol interlock ignition system." The latter requires the driver to memorize a series of numbers and punch them out correctly on a keyboard before full connexion occurs in the ignition system.

The main task of the expert group on the day after the symposium was to decide new areas of research which would be suitable for international co-operation. Roadside testing programmes and studies into the breath/blood alcohol quotient (B.A.Q.) were selected as priorities. The latter arose out of recent correlation studies, in particular those made at the Institute of Science and Technology in Cardiff. Detailed proposals on research into the effects of drugs other than alcohol on driving behaviour will also be put forward after a meeting of the group to be held in Basle early next year.

Finally, for countries which had not yet adopted a fixed blood alcohol concentration the group decided to recommend that the attention of their governments should again be drawn to the conclusions contained in a report[3] adopted by the group in 1967 on the direct relationship of blood-alcohol concentration to increased risk of an accident. It is interesting to note that the recommendations contained in the report, which have been adopted by the European Conference of Ministers of Transport, have not been introduced in the major wine-producing countries, including France, Germany, Italy, and Spain. These are also countries with very high and increasing road accident casualty rates.

In his message to the symposium the Minister for Transport Industries, Mr. John Peyton, congratulated the B.M.A. on organizing the symposium and explained that "anybody whose concentration or judgement is impaired by alcohol or any other drug is a hazard." The action taken by one of his predecessors, Mr. Hore Belisha (as he then was) in inviting the B.M.A. in 1935 to report to him on the relation of alcohol to road accidents was referred to by Mr. Walpole Lewin, Chairman of the B.M.A. Council, when he formally opened the symposium, as having been a major factor in the events which culminated in the Road Safety Act of 1967.

1 World Health Organization, *World Health Statistics Annual 1967*, Vol. 1. Geneva, 1970.
2 Jamieson, K. G., "Magnitude of the Problem of Motor Vehicle Accident Injuries and Death," paper read at 3rd International Congress on Accident and Traffic Medicine, New York, 29 May-1 June 1969.
3 Goldberg, L., and Havard, J. D. J., "Research on the Effect of Alcohol and Drugs on Driving Behaviour." O.E.C.D., Paris, 1968.

Problems of the Newborn

The sharp decline in the neonatal mortality rate in the last 25 years has been due to a number of causes, social as well as medical. The main medical advances have been, firstly, new and improved drugs and techniques of management, and, secondly, an increased awareness of what can be done by prompt and skilled care of newborn babies. But so rapid has progress been in this field that doctors outside the specialty are of necessity sometimes unaware of all the advances that have been made. This week the *B.M.J.* starts a new series of "Medical Practice" articles on problems of the newborn. These aim to give advice on the diagnosis and management of common conditions, and besides articles on more recent trends they will include contributions on everyday topics such as the routine care of the normal baby, infant feeding, and psychological aspects of early mother-infant relationships.