and the requirement for calcium by different groups in the population. Dr. Exton Smith, writing on nutritional deficiencies in the elderly, also raises the question of supplementation for this group.

Other nutrients discussed are vitamin C by Dr. Brook and some aspects of trace element nutrition in man by Dr. Mills. Copper, zinc, and chromium are selected for review. It is clear that little is known about requirements for these and other trace elements, but we have a useful review and many questions are raised which are as yet unanswered. The problems of assessing human diets are discussed by Dr. Mills in relation to trace elements and also by Mrs. Disselduff in connection with energy and other nutrients. There is further discussion on malnutrition due to malabsorption, in a paper by Dr. McLean Baird.

Thus, this publication covers several aspects of nutritional deficiencies, absorption, and levels of intake. The papers also raise many questions which will be debated by nutritionists for many years.

J. W. MARR

TUC Centenary Institute of Occupational Health Fourth Annual Report 1971/72. (Pp. 31.) Published by the London School of Hygiene & Tropical Medicine, Keppel Street (Gower Street), London WC1. 1973.

It is always interesting for those engaged in the management of Occupational Health Services to see annual reports from other similar organizations, both to note progress and to compare achievement with their own services.

While the TUC Centenary Institute of Occupational Health is unique in this country the report is to some extent a barometer of the climate of progress in this field. A growth rate of 74% in the work of the Institute is an encouraging sign that there is an increasing demand for information and a growing interest in the working environment.

The first part of the report is devoted to an important milestone in the life of the Institute—the opening of the new department by HRH the Queen Mother.

There follows a review of the work of the Institute in four fields:

1. The Information Service: By far the greatest individual users are the Trade Unions, but management, occupational health nurses, and universities are also seeking advice in increasing numbers.

2. An Investigational Service giving a service to industry in a wide variety of problems. Despite all the knowledge and published work on the subject, lead still remains one of the most pressing problems. Technology is seeking new and improved ways in which a reliable and manageable test be readily available for estimating the body burden of lead among large numbers of exposed persons and its predictable effect on health. The newest technique of atomic absorption spectrometry may offer this solution but the technical difficulties of obtaining uncontaminated samples still prejudice the accuracy of results.

3. Teaching of occupational health occupies much of the time of the Institute.

This is directed not only at postgraduate students with a medical or scientific background but also at nurses and medical students.

A highly commendable activity is their liaison with the mass media in an effort to provide the general public with informed opinion.

4. Research into a wide variety of hazards, such as back injuries in dock workers, and protective clothing in the notoriously hazardous fishing industry, are described as well as more familiar hazards such as lead, mercury, and asbestos.

The final pages are devoted to the income and expenditure accounts which demonstrate the high cost of running such a service and the difficulties in extracting appropriate fees for services rendered. Were it not for substantial subsidies from The London School of Hygiene and the TUC the service would find it difficult to survive.

It is to be hoped that public demand for safe and healthy workplaces, and indeed the safety of the public itself in its homes, on the roads, etc., will make the Institute less dependant on subsidies in the near future.

It would be helpful if more annual reports were available from similar organizations to highlight progress in the occupational health field.

R. A. TREVETHICK

National Coal Board Medical Service Annual Report 1971-72. (Pp. 32; £1.00.) London: National Coal Board. 1973.

The British industrial medical officer may often feel frustrated by the limitations which custom and etiquette impose on his freedom to investigate or treat the illnesses which he diagnoses. His role is primarily preventive, and if any justification were needed for this approach it is given by the Annual Report of the National Coal Board Medical Service. This report gives details of the virtual elimination of Weil's disease and nystagmus, and of very substantial progress in the battle against beat disease. Tenosynovitis does not present such a satisfactory picture, while dermatitis has so far resisted all efforts at prevention.

Opinions may differ on the disability attributable to pneumoconiosis, but its prevalence is a useful biological monitor of the effectiveness of dust control. The report gives the results of surveys carried out between 1969 and 1971 and compares them with previous surveys. One should not expect rapid change in a condition which is so slow to evolve but the prevalence rate has fallen in all areas, except East and West Wales; even in these areas there has been a fall in prevalence among the younger miners. The report is, in my view, unnecessarily gloomy about pneumoconiosis; the unsatisfactory picture presented by the table of Progression Indices is probably attributable to increasing age of the men over these 10 years, pneumoconiosis being an age-related condition.

It is too early yet to expect any benefit from the new gravimetric standards used in dust control, which came into use in 1970, but details are given of substantial progress in this field. It seems that development work (drivages) in stone now presents the greatest problem in the control of dust.

The Report is well written and attractively produced but it is a disappointment to find that it no longer includes

summaries of medical research in progress which are published elsewhere. Nevertheless, it deserves a place on the shelves of all of us who have the welfare of miners at heart. It was a shock to find that neither the university library nor the local reference library stocked previous Annual Reports, and it is to be hoped that this omission will be rectified.

G. L. LEATHART

Trauma Surgery Excepting Bones and Joints. By P. Powley. (Pp. 136; 18 figs; £1.50.) Bristol: Wright. 1973.

This concise and essentially practical book is based on the author's personal experience of the diagnosis, early management, assessment, and initial surgical treatment of major soft tissue injuries to the head and trunk.

The help of specialist colleagues, J. Garfield and R. Thexton, has been enlisted to write the chapters on head injury and maxillofacial injury, respectively.

While most of the books on trauma have an orthopaedic bias, the author points out that almost all the causes of immediate and early death following injury result from damage to the soft tissues of the head, chest or abdomen. The book intended primarily for the use of junior orthopaedic, casualty, and general surgical staffs is designed to redress this orthopaedic imbalance.

Doctors working in industry will find the urgent and sometimes heroic surgical measures described beyond the scope of their departments. Anyone, however, who may be responsible for the care of serious injury before admission to hospital can with advantage study the practical points on early diagnosis and management described.

The book is an encouragement to all who may have to deal with the early stages of serious injury and demonstrates the real hope which modern medicine and surgery afford if the casualty can reach hospital alive.

J. D. CAMERON

Environmental and Industrial Health Hazards. By R. A. Trevethick. (Pp. 211; £4.50.) London: Heinemann Medical Books. 1973.

This unusual book was originally designed, we are told in the preface, to provide easy reference for the hazards to be found in the steel industry (*sic*). It is now presented for wider circulation because of an increasing demand from both lay and medical staff in industry and from postgraduate medical centres. How does it match up to these objectives?

When the book is opened at random, facing pages deal with a particular hazard. The right-hand page printed in black is a hazard data sheet, describing the hazard in simple straightforward language for managers, charge hands, engineers, and trades union officials. The left-hand page is printed in red and designed for doctors, nurses, and first-aiders so that they may 'have recommendations on further treatment, and the type of biological and physical monitoring which is required to test the efficiency of workshop precautions'. This is a simple practical system of presentation which has much to commend it.

A danger of this sort of presentation is that the author is trapped into making dogmatic statements. These may be permissible when giving clear directions to lay staff but they are not permissible in a book intended for doctors and postgraduate centres. For example, aluminium in some of its uses has proved a very dangerous material but this is not mentioned; the early symptoms of acute isocyanate poisoning are not, in my clinical experience, those described in this book; it is confusing to try to describe together the effects of nitrogen and of its oxides and with the latter there is no mention of the important secondary relapse which might occur two to four weeks after exposure; the advice on periodic medical screening of asbestos workers is limited to periodical chest radiographs and there is no mention of clinical examination or pulmonary function testing.

If this book is to serve doctors and is to retain its straightforward practical presentation the author should consider adding references to further detailed reading on the medical data sheets. In its present form the book is of very limited use to doctors whether or not in industrial medicine.

W. R. LEE

Proceedings of the Symposium on the Assessment of Exposure and Risk. Edited by Bertram W. Duck. (£1.50 incl. postage.) Copies available from the Society of Occupational Medicine, 11 St. Andrew's Place, London, NW1 4LE. 1973.

A reviewer once handed his script to an editor saying, 'You will see I have suggested that every industrial doctor should have a copy of the book on his bookshelf. I hope that it stays there and he does not try to read it'. This book on the Assessment of Exposure and Risk should be on the industrial doctor's desk and be read. Better, it should be beside his armchair so that he reads it (or parts of it) at leisure, puts it down, and reflects about some of the ideas offered.

It is the report of a symposium held over two days and separated into four sessions each with a stated theme:

At what stage is the measurable or identifiable effect of a chemical or physical agent to be regarded as pathological?

Quantitative assessment of hazards of exposure acceptable and unacceptable risks

Problems in establishing aetiology of disease—in relation to 'normal' incidence and 'natural' background

Medico-legal consequences and assessment of compensation

The first three sessions were opened by two or three speakers and the fourth by a distinguished medically qualified judge. Each session was followed by a discussion, and the final, fifth, session comprised a general discussion on all the material presented at the previous sessions.

The quality of the papers was high. I particularly enjoyed reading four contributions: one by Dr. Mole which exposed some of the clear and deep thinking leading to recommendations on Radiation Dose Limits;