antibiotic residues in foods of animal origin. This is the first of two reports submitted by the Expert Committee and presents a toxicological evaluation of some 20 compounds belonging to eight classes of antibiotics. The second report, awaiting publication, is concerned mainly with the specifications of antibiotics and the methodology for the determination of antibiotic residues in foods.

The introductory section includes a brief review of the potential toxic hazards due to the chemical and microbiological effects of antibiotic residues in food. The committee viewed with grave concern the antibiotic resistance induced in micro-organisms, in particular in Gram-negative members of the Enterobacteriaceae, for example, the danger inherent in the development of resistance to chloramphenicol by species of Salmonella which cause typhoid and paratyphoid fevers.

In assessing the use of antibiotics as food additives and growth promoters, the Committee took into account these and other factors such as the presence of the breakdown products of antibiotics in food.

The report considers the use of a number of antibiotics as growth promotants to be acceptable and specifies the limits of residues present in animal food for human consumption. These are aminoglycosides (streptomycin, dityhydrostreptomycin, kanamycin and neomycin), macrolides (erythromycin, leucomycin, oleandomycin, spiramycin and tyllosin), penicillins (benzylpenicillin), polypeptides (bacitracin and polymyxin B) and tetracyclines (tetracycline, chlorotetracycline and oxytetracycline). The Committee advises against the proposed use as direct food additives of tylosin, pimaricin and tetracyclines.

The report favours the use of the antifungal antibiotics, nystatin and pimaricin, as food additives, and, in contrast, considers that chloramphenicol and novobiocin should be restricted to human and veterinary medicine.

The original list of substances submitted to the Committee for consideration included 32 antiprotozoan and antibacterial compounds, but these could not be evaluated due to paucity of toxicological data. The Committee called for more research to be undertaken on these and other antibiotics and hoped for a freer exchange of information between national and international regulatory authorities.

The recent report of the Joint Committee on the use of Antibiotics in Animal Husbandry and Veterinary Medicine, under the Chairmanship of Professor Swann, not only endorses the findings of the F.A.O./W.H.O. Expert Committee but goes further in recommending the ban on the use of penicillin and the tetracyclines as feed additives.

S. D. GANGOLLI


This well-produced volume presents the papers and summaries of discussions in an international symposium organized jointly by the North Staffordshire Medical Institute and the British Occupational Hygiene Society and held from 27 to 29 March, 1968. There were 30 contributors, of whom 10 were from Europe and one from India.

The book opens with the first Wade Lecture in honour of Sir George Wade, President of the Institute, given by J. C. Gilson on 'The changing pattern of pneumoconiosis'. His theme was the need for greater precision in establishing and specifying dust standards, and how this can be achieved not only through environmental measurements but also by searching for early evidence of abnormality in the worker before disease becomes manifest.

The remainder of the volume comprises 29 papers centred on silicosis, particularly that in the ceramic industry. They are divided into six groups. The first discusses pneumoconiosis in the ceramic industries of North Staffordshire, India, Bavaria, Sweden and Italy and follows an excellent short historical introduction by A. Melkjejohn. The next two groups consist of a paper on the therapy of silicotuberculosis, one on the treatment of the general complications of silicosis, one giving a pathological description of the disease, and one on results of a large series of latex tests in 6 000 porcelain workers which suggests a higher percentage of positive titres in those with silicosis.

There follows a group of 10 papers on environmental conditions. These together form a useful and coherent account not only of the assessment of dust levels and hygiene standards but also of practical aspects of protective clothing, ventilation and dust control in the industry.

Three papers on respiratory disability discuss lung function in Staffordshire workers, the lung compliance in silicosis and finally evidence from Yugoslavia that an abnormally high bronchitis rate exists among ceramic workers in the presence of little or no radiological abnormality. The last group of papers discusses skin disease, lead poisoning, accidents and factory legislation.

This volume covers a wide field, and anyone concerned with industrial pulmonary disease is likely to find interest in it.

C. B. MCKERROW


This is the most recent publication coming from the regular meetings of a joint F.A.O./W.H.O. group of experts on pesticide residues. In its 293 pages of compact information, monographs are given on 32 individual pesticides. Some are merely supplementary monographs giving new data or evaluations on compounds previously reviewed. Most are complete summaries of available information on chemicals at the time of compilation.

The F.A.O./W.H.O. experts then make their own evaluation and recommendations on residue tolerances for the individual chemical on 'raw agricultural products moving in commerce', and list the further information required or otherwise desirable for the next improved review of each compound. Each monograph ends with a useful list of references to the main published literature.

This latest expert survey on the 'pesticide residue problem' is as welcome as previous versions. As an