range of clinical situations. The publishers have done well to produce this volume in a relatively short space of time, and, although it may be overtaken within the next year or two, it still serves as a useful summary of carefully evaluated findings in most important gastroenterological fields. It is a good volume, good value, good reading, and can be thoroughly recommended to devotee of gastric physiology and interested bystander alike.

I. E. GILLESPIE

Comparative Animal Nutrition: Nitrogen, Electrolytes, Water and Energy Metabolism

The average gastroenterologist will find little in this book of application to clinical practice. It deals, in a very general way, with four aspects of animal nutrition: energy, nitrogen, electrolyte and water metabolism. As such it is a useful introduction to these topics but draws virtually nothing from the vast amount of information that there is on similar aspects of human metabolism, and consequently much of its possible value as a book of comparative nutrition is lost.

The chapter on energy metabolism defines clearly the currently used terms in this field, such as digestible energy, metabolisable energy, calorigenic effects, etc., and how they are calculated. It fails, however, to justify the physiological basis for these and one has the feeling that in a field where there are now new and exciting concepts we are being asked to restrict our thinking for the sake of long-established jargon.

In the discussion of nitrogen metabolism, the central role of bacteria is emphasised. Protozoa get their amino acids by eating bacteria, while higher animals rely on bacteria to synthesise amino acids for them. The part played by microflora in human metabolism is not mentioned, but it is something to which we have perhaps not given sufficient attention.

Half the book is taken up by a review of water metabolism in the major phyla. It makes fascinating reading to discover the ingenious ways in which water intake and loss is controlled. Water may be acquired through surface membranes and skin, gills, the gut, and as metabolic water. The important role of the large intestine, particularly the rectum, in both acquiring and conserving water in higher orders is stressed.

Overall, however, this book is an introductory text only. Unless you are particularly interested in the blood magnesium concentration in equilibrated estuarine polychaetes or fascinated by the thought of intrepid biologists chasing wild ungulates to measure their oxygen consumption, then it is not for you.

J. H. CUMMINGS

Drug Treatment of Gastrointestinal Disorders: Basic and Practical Principles
By N. J. Greenberger, C. Arvanitakis, and A. Hurwitiz. (Pp. 290. Illustrated, £13.) Churchill-Livingstone: Edinburgh. 1978. The book is third in the monographs in the Clinical Pharmacology series. The book is primarily pharmacological in outlook, aiming to assist students, house officers, and practising physicians. Each section has a brief clinical introduction before a more detailed assessment of the various treatments available. A limited critical review is given, often with very helpful tables summarising the clinical trials. The need for controlled trials in drug therapy runs through this monograph—indeed, it starts with the observation that in the decade 1964–74 only 0.9% of 35 228 citations on gastroenterological therapy were randomised controlled trials.

The text is clearly written and well referenced (up to December 1977), with a comprehensive range of drugs being discussed. Considerable weight is put on the critical reviews from the literature but is somewhat biased by its American origin (for example, metronidazole has not been approved by the FDA for use in giardiasis so quinacrine is suggested as the first line treatment). As this is primarily a pharmacological book, the clinical aspects of gastrointestinal disease are only briefly discussed, except perhaps in the sections on the liver and pancreas—the latter being very much the weakest chapter, being clinically confusing and repetitive.

This book is not for the specialist gastroenterologist, but is ideal for students and aspiring specialists who wish to assess the validity of the treatments they recommend.

D. COLIN-JONES

Dietary Fibre: Current Developments of Importance to Health
Edited by K. W. Heaton. (Pp. 158. Paperback: £4.50. Hardback: £7.50.) Newman: London 1978. This symposium report contains 17 papers presented at the Third Nutrition Symposium held by the Kellogg Company in London in December 1977. Contributors from the United Kingdom presented all but one of the papers, over half of which were concerned with gastrointestinal disease or physiology. Several of these papers contain work already familiar to readers of this journal: the work on measurement and effects of diet on whole-gut transit time by Cummings, the study of the prevalence of asymptomatic diverticular disease and dietary fibre consumption in vegetarians and non-vegetarians by Gear, and Brodribb's work on the treatment of diverticular disease. These papers followed Eastwood's paper in which he reviewed approaches to the study of the epidemiology of diverticular disease.

Although the report is heavily weighted towards the large bowel, a true reflection of interests at the time, there were two papers concerned with heart disease (Morris's epidemiological studies and Truswell's review of experimental blood lipid studies) and introductory papers on the chemistry and analysis of dietary fibre. Heaton discussed dietary fibre and its effects on satiety and related these to overnutrition and obesity. The discussion which follows some of the papers contains some valuable observations.

Although mineral availability was discussed by one contributor, the overall balance of the report might have been improved by a more extensive review of possible deleterious effects of high-fibre diets. References to published work are mostly dated not later than 1977, though one or two for 1978 have been inserted. Comprehensive reference lists are given with some papers such as Losowsky's review of the effects of dietary fibre on intestinal absorption, while some lists are very short. The index is good, and the report will be of value to anyone wishing to be reasonably up to date with work on dietary fibre in the United Kingdom, but for gastroenterologists much of the content will already be familiar.

ANTHONY R. LEEDS

References

References in the text and in the list of references should now follow the Vancouver style. (See Instructions to authors.)