

which to do battle; the possibility of argument arises on almost every page but behind each printed word one hears the author reminding us with one of the many quotations that his book contains that 'Never have I taught a student archery without, in the end, becoming his target' (Saadi, The Rose Garden, circa 1280 AD).

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Vitamins and Minerals in Pregnancy and Lactation. Edited by Heribert Berger. Pp 478: \$61.50 hardback. Raven Press, 1988. (Nestlé Nutrition Workshop Series. Vol 16.) ISBN 0-88167-414-1.

The Nestlé Nutrition Workshop series has established a justified reputation for its generally consistent scientific quality. It is unfortunate that this volume does not achieve the same standard. This is because it is devoted to the proceedings of a conference rather than to the customary small and well informed workshop. As a consequence it contains many short presentations and abstracts, a number of which lack the perspective and critical insight that are usually associated with this series.

Nevertheless it would be unfair to dissuade people from using this book merely because it is inconsistent with other volumes in the series. As a 'Conference proceedings' it is of interest and, as such, can certainly be judged to be as good if not better than most such publications. The major reviews and commentaries on personal research are interesting. Among these I would include the contributions by Siimes and by Hallberg on iron metabolism in infants and in pregnant women respectively; that of the late Lucille Hurley and Keen discussing trace element metabolism in pregnancy; and Chiswick's valuable overview of his work on vitamin E supplementation and the risk of periventricular haemorrhage in preterm infants. Others include Delange *et al's* contribution on iodine nutrition during pregnancy and lactation, in which there is a salutary warning about functional impairment of the thyroid in the infants of mothers given excessive antenatal supplementation with iodine; Pettifor's paper on rickets in infants provides a good overview on this topic and makes a case for this problem to be predominantly that of the very low birth-

weight infant. Finally there is the particularly thorough review by Kirksey and Rahmanifar on the vitamin and mineral content of preterm human milk. Of these and of the other useful contributions that I have not itemised, most are available in a similar form, often by the same authors, elsewhere. For a general department or reader wanting a relatively painless update on these related aspects of vitamin and mineral nutrition in pregnancy and lactation, however, this would present a useful compilation, as long as they do not resent simultaneously paying for a host of glossy abstracts.

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The Natural History of Cerebral Palsy. By Bronson Crothers and Richmond S Paine. Pp 270: £18 hardback. Mac Keith Press, 1988.

This exemplary study of Crothers and Paine was first published in 1959 and is now republished as a 'Classic in Developmental Medicine'. In the original study 1800 individuals with cerebral palsy were followed up for some 20 years between 1930 and 1950 and the data provided form the key to lucid and illuminating analyses of what cerebral palsy is and is not, to the study of abnormal and normal motor development, to the variety and evolution of motor disorders that occur in cerebral palsy, and to the very wide range of aetiologies, pathologies, and related disabilities that are associated with neuromotor problems.

First and perhaps foremost this book is a 'good read' and is remarkably undated so far as philosophy and factual presentation are concerned. Thus the information and perspectives contained within it are provided in a fashion that is wholly relevant for a contemporary readership. It is of interest that while we may have come some further way in the last 30 years in our understanding of the causation and epidemiology of cerebral palsies, the excellent chapters on treatment and education are a timely reminder that progress in these areas remains slow and limited.

I suspect that this genuine classic is not as widely known to a readership in the United Kingdom as it should be. This edition can make good that deficit and the

book can be confidently recommended for all paediatricians working in neurology and childhood handicap.

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Essential and Toxic Trace Elements in Human Health and Disease. Edited by S Prasad. Pp 328: \$95 hardback. Alan R Liss, 1988. ISBN 0-8451-1617-7.

Our knowledge of the role of trace elements in human health seems to be related inversely to the profile which these elements have assumed in public awareness. Our patchy insight into the metabolism of iron illustrates the ignorance that can persist even when the importance of an element has long been appreciated. The situation is worse with other trace elements whether they are essential or not and it is disturbing to see some, such as zinc, selenium, and copper, joining or replacing iron among the non-specific palliatives of the therapeutic armamentarium. Unquestionably there is a need for a wider appreciation of our limited understanding of the toxicity and essentiality of many trace elements and of the more subtle early biochemical and clinical effects of their deficiency and toxic excess. This book provides such information and insight: Prasad has ably compiled the original and review presentations from the inaugural meeting of the International Society for Trace Element Research. Collectively these provide valuable position papers covering most aspects of the clinical, physiological, biochemical, pharmacological, and toxic actions of trace elements. Many papers illustrate the interactions that occur between the trace elements themselves and with other essential nutrients, and equally importantly the impact that human disease can have on the systemic metabolism of trace elements is considered. There are some omissions; I could not find comment on the pathogenic role of copper in Indian childhood cirrhosis.

Advances in trace element research encompass inorganic and clinical biochemistry, physiology, and human disease. Some fascinating areas that are included in this book include the possible role of trace elements in the precipitation and control of free radical damage, an appraisal of the role of boron in the metabolism of calcium and magnesium, and a critique of the cases for the essentiality of nickel, silicon,