

Report of the ARC/MRC Committee

Her Majesty's Stationery Office; London, and Elsevier Scientific Publishing Co.; Amsterdam, New York, 1974

xvi + 210 pages. £ 3.80

What types of investigators do research relevant to man's nutritional needs and where do they work? Is there a need for more investigators in various aspects of nutrition and what should their training be? What fundamental problems still require to be resolved in nutrition research? How can we apply such knowledge to various practical aspects of human nutrition?

This volume was prepared by a Committee on Food and Nutrition Research set up by the British Agricultural and Medical Research Councils in order to answer these and other questions regarding the status of nutritional studies in Britain today. The book is based on the working papers and opinions of the large number of British scientists who participated in the working parties of the committee and contributed their expert advice. Nevertheless, the final report reads very smoothly, a tribute to the work of the editors. Following an introductory section giving an account of the scope and organization of nutrition research in the United Kingdom, there is a lengthy section on scientific questions basic to our understanding of nutritional processes in the body. The final part of the report, on practical problems in human nutrition, considers social aspects of nutrition, nutrient requirements, nutritional problems in relation to public health, nutritional factors in the causation and treatment of disease (diet and cancer; diet and atherosclerosis, etc.), and finally some aspects of food quality. I am not aware of any recent survey which is as comprehensive as this one in describing in a mature fashion the multi-faceted nature of modern nutritional studies. The areas of research that are discussed transcend national boundaries, so that scientific advisers to governments in many countries will be able to use this volume as a comprehensive survey and check-list.

The biochemist will be particularly interested in the section on fundamental research. This covers, first, the

metabolism of energy-yielding nutrients and of protein in a way which emphasizes the integrative features of metabolic processes, and leads naturally to consideration of human requirements for these nutrients, and the consequences of deficiency or excess. The section on basic research into vitamins deals sequentially with these by providing for each vitamin the present state of knowledge followed by a description of significant problems requiring more research, and the section on basic research into inorganic nutrients pursues the same pattern, though in a less structured way. In consequence, it is possible for the reader to gain some appreciation of the links between current mammalian metabolic research and its nutritional applications. It is to be hoped that this may go some way towards making nutritional science more appealing for basic biomedical scientists.

It is of course true that this report has blemishes. There are certainly some erroneous conclusions and out-dated statements. The decision to exclude all literature references, though understandable, nevertheless prevents the reader from following up provocative statements. Finally, food science receives proportionally less attention than nutrition. Despite these comments, the report represents a land-mark achievement in synthesizing the many facets of nutritional science into a readable and comprehensive account, full of interesting value judgments and challenging statements. It is to be hoped that this report, which is an advisory document for the British Agricultural and Medical Research Councils, will have a positive effect in stimulating food and nutrition research in Britain, and will also attract biochemists to return to an area that used to be part of the mainstream of biochemical research in the earlier years of this century.

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