

# Reviews of Recent Books



**Malnutrition and Food Habits**, edited by A. Burgess and R. F. A. Dean. Tavistock Publications, London, England, 1962, pp. 210.

An international and interprofessional conference organized by the World Federation of Mental Health was held at Cuernavaca, Mexico, in 1960. Sponsors included the Josiah Macy, Jr., Foundation the Pan American Health Organization, Food and Agriculture and World Health Organizations and the United Nations Children's Fund. This small volume is a carefully edited report of the conference.

Participants were drawn not only from the medical specialties but also from the behavioral sciences; the food habits of man were traced through the adaptations made to food supplies, local cultures and food mores to the effects which resulting eating practices had on the nutritional status of various segments of the population. Suggestions for programs for the relief of malnutrition in many areas of the world ranged from the development of suitable dietary supplements from native food supplies to the means of obtaining acceptance of change by the people. Throughout the discussion, the need for multidisciplinary teamwork and the scarcity of trained personnel are brought out but the need for the nutritionist and the social scientist to understand the approach and viewpoint of other disciplines than his own frequently negates the effectiveness of the team approach. The manner of presentation adopted by the editors of briefing the keynote talks and interposing relevant comment and discussion at the logical place in the presentation has resulted in a clear, readable monograph which avoids the wordiness of many conference reports.

M. A. OHLSON

**Ciba Foundation Symposium on Pulmonary Structure and Function**, edited by A. V. S. de Reuck and M. O'Connor. Little, Brown & Co., Boston, 1962, pp. 403, \$11.50.

In July 1961, twenty-nine of the leading scientists in lung disease research met in London under the auspices of the Ciba Foundation and discussed for three days the relationship between pulmonary structure and function. The participants were physiologists, anatomists, pathologists and physicians. Eighteen formal papers were presented and most were followed by spirited discussion.

Dr. A. A. Liebow presented the first paper which summarized recent knowledge in pulmonary anatomy. The other formal presentations considered the proprioceptive control of breathing (E. J. M. Campbell), the glomus pulmonale (V. E. Krahl), bronchial gas flow (P. Hugh-Jones), cellular structure and mucus activity in the bronchial tree and alveoli (H. Hayek), the mechanics of respiratory structures (J. Mead), ventilation-perfusion relationships (H. Rahn), pulmonary gas exchange using radioactive gases (J. B. West), physiologic and biochemical effects of pulmonary artery occlusion (J. H. Comroe, Jr.), the microscopic structure of the human lung (C. G. Loosli), gas exchange processes in the pulmonary capillaries (R. E. Forster), pulmonary capillary blood flow and gas exchange (A. B. DuBois), the effects of lung inflation upon the pulmonary vascular bed (R. H. Riley), technics used in the study of lung disease, with special emphasis on the anatomy of emphysema (J. Gough), fixation of the lung with respect to lung volume and air space size (B. E. Heard), some considerations of the variation of blood perfusion and ventilation within the emphysematous lung (W. A. Briscoe), and the control of respiration in relationship to lung disease (J. E. Coats).

For the most part the physiologists sounded like physiologists, the pathologists like pathologists and the anatomists like anatomists. Some of the problems involved in correlating structure and function are revealed in the following quotation from Dr. Dickinson Richards' excellent summary. "Dr. Loosli showed us in beautiful demonstrations how these structures unfold during embryologic development and Dr. Schulz and Professor Hayek showed the finer structure by electron microscopy. It requires some courage, I think, for a physiologist to look at a structure as defined by an electron microscope. It is always so enormously complex that it seems to us that it will be impossible ever to find out how it works. But I suppose we have to face the music and do the best we can."

Many of the participants had a good sense of humor and I will quote an example taken from Dr. Richards' review: "Professor Krahl presented his discovery of the pulmonary glomus so modestly that it appeared as a sort of Little Orphan Annie, a beautiful little creature, wandering about the world

to find a reason for her own existence. Carrying this a little further, I might note that it was a moving spectacle to see two distinguished physiologists trying, Dr. Riley very hard and Dr. Comroe perhaps not quite so hard, to become a foster father of this lovely creature." Another example was that Dr. Jere Mead told, as a prologue to his chapter, a tale of two suitors. A beautiful princess forced to choose between two equally questionable suitors, both biologists, permitted one to measure anything he wanted to so long as he never actually looked at the lung and permitted the other to take the lung to pieces so long as he never looked at living lungs and never made measurements. Eventually each went down ensnared in his own artifacts and choking on the assumption of the other. At the end of his chapter he indicates that while all suitors (pathologists, physiologists and physicians) are trying to solve the riddle of the lung, the princess quietly slips out with a biochemist.

The final group discussion was revealing because the participants stressed the unknown rather than the known and gave their ideas concerning future work. Dr. Comroe emphasized that progress will be made by studying the factors which influence the growth, repair and death of tissues in the lung rather than by concentrating on diagnostic tests so that they might be 99.9 per cent perfect instead of 99 per cent. Dr. DuBois pointed out that human existence exposes us to infection and inhalation of substances which may destroy our lungs and eventually lead to their downfall. This is one of the areas in which work is needed. Dr. Bates speculates that the ultimate treatment of emphysema may lie in a transplantation technic and he believes we are entering an era in which transplantation technics are possible. Dr. Loosli urges that the biochemist be

included for he will be able to examine in great detail the collagen and the elastic fiber structures in normal and diseased lungs.

For those persons interested in pulmonary disease, this book makes lively and interesting reading. Since the conference was confined to a small group of people, there are many who will enjoy the opportunity to read and evaluate what was said. The correlation of structure with function is not easy, but it is necessary.

G. N. BEDELL

#### BOOKS RECEIVED FOR REVIEW

Books received for review by *The American Journal of Clinical Nutrition* are acknowledged in this column. As far as practicable, those of special interest are selected, as space permits, for extensive review.

**Practical Nutrition, 2nd ed.**, by A. B. Peyton. J. B. Lippincott Co., Philadelphia, 1962, pp. 434, \$3.00.

**Aspects of Geriatric Psychiatry, Haematology, Nutrition and Cancer in Old Age. Proceedings of the Third Meeting of the European Clinical Section of the International Association of Gerontology**, The Hague, September 13-16, 1961, edited by E. Woodford-Williams and A. N. Exton-Smith. S. Karger, Basel and New York, 1962, pp. 244, \$10.60.

**Ciba Foundation Colloquia on Endocrinology, Vol. 14, Immunoassay of Hormones**, edited by G. E. W. Wolstenholme and M. P. Cameron. Little, Brown & Co., Boston, 1962, pp. 419, \$10.75.

