

Reviews of Recent Books

The Vitamins: Chemistry, Physiology, Pathology, edited by W. H. Sebrell, Jr., and Robert S. Harris, Academic Press Inc., New York, 1954, Vol. II, pp. 766, \$16.50, Vol. III, pp. 665, \$15.00.

These two volumes complete the three-volume treatise on the chemistry, physiology, and pathology of the known vitamin factors which for many years to come will be the best source-book of factual information for all workers in the field. Written by numerous authorities and fully documented, these encyclopedia-like reference books seem to cover every significant observation dealing with the vitamins which have been made in the "basic sciences." Clinical matters receive rather scant treatment, but these books make no attempt to cover this aspect completely.

There is an ample subject and author index, and innumerable references which fully document the treasury of experimental work in this field. Anyone engaged in research with a particular vitamin substance will need to refer to this work for complete coverage. He will find these reviews entirely satisfactory.

Volume II deals with choline, inositol, vitamins D, K, niacin, pantothenic acid, and essential fatty acids. Volume III deals with pyridoxine, riboflavin, thiamine, tocopherols, p-aminobenzoic acid, pteroylglutamic acid, and new and unidentified growth factors. The authors and editors are to be congratulated on performing a difficult task in an admirable manner.
S.O.W.

Casimir Funk. Pioneer in Vitamins and Hormones, by Benjamin Harrow, Dodd, Mead & Co., New York, 1955, pp. 209, \$4.00.

The story of the Polish chemist, Casimir Funk, who has been living in this country since 1915, has certain interesting elements. One of the early workers in nutrition and modern biochemistry, he is remembered for a number of contributions, including the coining of the word "Vitamine" in 1911.

Nevertheless, a very one-sided portrait is painted by his old friend and co-worker, Dr. Harrow. The book is a typical panegyric—from the preface in which "Funk represents one of the original minds of our time" . . . "a pioneer in the field of sex hormones" to affidavit-like laudatory quotations from the pen of other prominent nutritionists. It would be expected that the biography of a friend would be most

favorable from every point of view. Still, too much is made of the "implications" of some of Casimir Funk's work; it must not be forgotten that all scientific progress is based on building upon the work of others. A reader unfamiliar with the international picture of nutritional (and cancer) research in the past forty years might get the impression that Funk alone was the major force in these developments. It is obviously difficult if not impossible to assess the contributions of one scientist to current progress, especially if the scientist in question was a co-author in about a dozen papers.

The trials and tribulations of Casimir Funk nonetheless make interesting reading, for they show the difficulties that original ideas encounter when first presented, particularly if advocated by a person who is admittedly "opinionated" and who apparently worked better as a lone wolf. This friendly and sympathetic account of an individualistic scientist has within it some morals applicable to research today.
S.O.W.

Bread. The Chemistry and Nutrition of Flour and Bread with an Introduction to Their History and Technology, by Lord Horder, Sir Charles Dodds, and T. Moran. Constable, London, and the Macmillan Co., New York, 1954, pp. 186, \$3.75.

During recent years the subject of bread has received much attention and much has been written about it. However, this is the first book which treats of this subject from the historical, theoretical, and practical standpoints. The book has additional merit, since the authors have themselves taken part in the many problems concerning bread which have arisen both during and since the last world war. The book deals with such diversified subjects as History of Bread, Wheats of the World, Chemistry of Wheat Flour and Bread, Main Features of the Milling and Baking Processes, Improving Agents, The Digestion and Assimilation of Bread, Bread and Nutrition, Enrichment of Flour and Bread, and Bread and Health.

The authors claim that the vitamin B₁ content of wheat, although apparently influenced by genetic factors, increases as the protein content rises, i.e., it increases about 0.3 µg/gram for each 1 per cent rise in protein. This observation (Greer, Ridyard, and Kent, *J. Sci. Food Agric.* 2: 12, 1952) needs confirmation.



Arginine and histidine are listed among the non-essential amino acids. Such classification needs an explanatory note that they are non-essential only for nitrogen equilibrium of the human adult. These amino acids may have other essential physiological functions for man.

A question often raised is: What influence does toasting have on the nutritional value of bread? The authors' answer is that toasting makes the amino acid, lysine, which is deficient in wheat, unavailable and has a marked destructive effect on the components of the vitamin B complex.

From the nature of its contents this book should be of interest to nutritionists, dietitians, bakers, and millers. BARNETT SURE

Annual Review of Medicine, Vol. 6, edited by D. A. Rytand and J. Anderson, Annual Reviews, Inc. Stanford, Calif., 1955, pp. 459, \$7.00.

The Annual Review series has become established as a useful guide through the maze of the world's scientific literature. This volume, as its predecessors, maintains a high level of brief but wide coverage of the significant developments in many branches of medicine.

The chapter on Nutrition and Nutritional Disease was prepared by Lepkovsky and Borson. Some 218 references are documented, and among the topics are obesity, liver disease, pyridoxine, gestation, and the gastrointestinal tract. The subject and author indices are very useful, as is the annotated list of review articles.

This book continues to be unique in affording a critical bird's-eye view of the complicated panorama of modern medicine. S.O.W.

Vitamins and Hormones. Advances in Research and Applications. Vol. XII, edited by Robert S. Harris, G. F. Marrian, and Kenneth V. Thimann, Academic Press Inc., New York, 1954, pp. 305, \$7.50.

This is another in what has become an outstanding series of survey articles. Most workers in the fields of nutrition, metabolism, and endocrinology are familiar with the high caliber of the reviews by recognized authorities which characterize this series. The present volume continues the tradition. Among the

eight subjects covered are the chemistry of vitamin B₁₂, vitamin A requirements, hypervitaminosis A, and a contribution by a member of this editorial board, C. S. Davidson, on nutritional disturbances in liver disease.

In this reviewer's opinion, all serious students of endocrino-vitaminology should become familiar with these fine annual volumes, because they are among the best sources for the appreciation of recent advances in research and application. S.O.W.

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 a more extensive review.

Feeding Your Child, by S. M. Wishik, Doubleday & Co., Inc., New York, 1955, pp. 223, \$3.50.

Vitamins in Theory and Practice (4th ed.), by L. J. Harris, Cambridge University Press, 1955, pp. 336, \$6.50.

Diseases of the Liver and Biliary System, by S. Sherlock, Charles C Thomas, Springfield, Ill., 1955, pp. 720, \$10.00.

Nutrition for Practical Nurses, by P. S. Howe, W. B. Saunders Co., Philadelphia, 1955, pp. 174, \$2.50.

Annotated Bibliography of Vitamin E (1952-1954), Vol. III, compiled by P. A. Harris and W. Kujewski, Eastman Kodak Co. (distributed by National Vitamin Foundation, Inc., New York), 1955, pp. 182, \$3.00.

Nutrition and Diet Therapy (11th ed.), F. T. Proudfit and C. H. Robinson, The Macmillan Co., New York, 1955, pp. 854, \$5.25.

Nutrition Sourcebook, compiled by O. E. Byrd, Stanford University Press, Stanford, Calif., 1955, pp. 370, \$7.50.

Nutrition Practices: A Guide for Public Health Administrators, American Public Health Assoc., Inc., New York, 1955, pp. 80, \$1.00.

The Body Fluids—Basic Physiology and Practical Therapeutics, by J. R. Elkinson and T. S. Danowski, Williams & Wilkins Co., Baltimore, Md., 1955, pp. 626, \$10.00.

Allergy Cooking, by M. L. Conrad, Thomas Y. Crowell Co., New York, 1955, pp. 380, \$5.00.