

Reviews of Recent Books



Nutrition for You, by Robert S. Goodhart, E. P. Dutton, New York, 1958, pp. 205, \$4.50.

The wide general interest in nutrition is reflected in the large number of short books on the subject written for the laity. Often these are of a "sensational" nature; not infrequently promising miracles through dietary manipulations. There has existed, therefore, a great need for an antidote—a book written for the public which presents authoritative information simply, thereby "setting the record straight." Fortunately, such a book is now at hand.

The author, the Scientific Director of The National Vitamin Foundation, writes for the intelligent homemaker in a forthright, factual manner. The style is easy and personal yet does not "talk down" or become annoyingly "chatty."

Outstanding is the emphasis throughout on the point that poor diets exist in this country today chiefly because of ignorance, misinformation, idiosyncrasies, and faddism. In addition, the author's liberal attitude toward nutritional practice is reflected in the absence of rigid standards of nutritional conformity. The book stresses the individuality of dietary habits and the wide range of foods which, if judiciously combined, result in a "proper" diet.

The prevention of nutrient losses in cooking, preserving, and storing food is covered in some detail. Many practical hints are furnished. In addition, a 60-page appendix presents the composition of foods in common household units.

There can be no quarrel with the dietary advice presented in this book. Those who are asked to recommend a "good" book on nutrition would do well to keep this excellent one in mind. S. O. W.

Processed Plant Protein Foodstuffs, ed. by A. M. Altschul. Academic Press, New York, 1958, pp. 955, \$26.00.

This book presents a very thorough discussion of the commercial processed plant protein foodstuffs for animals and man. The term "plant protein foodstuff" is interpreted in the usual sense, that is, plant materials unusually high in proteins. The ordinary cereals and vegetables which often supply most of the total dietary protein thus fall outside the scope of the book.

The first thirteen chapters deal with general topics,

which include Effects of Heat on Plant Proteins, Use of Processed Plant Proteins as Human Food, Potential Uses of Isolated Oilseed Protein in Foodstuffs, and Supplementation of Plant Proteins with Amino Acids. These selected chapter titles are some which should be of particular interest to those whose primary concern is in human nutrition. Other chapters are devoted specifically to subjects of interest in animal nutrition.

The remaining twenty chapters consider the specific vegetable protein sources—the various oil-seed meals, leaf meals, peas and beans, microbial proteins, algae, etc. The general pattern of each chapter is a discussion of the world production and trade, methods of processing, composition, and uses as food for man and domestic animals. It appears that all of the important or potentially important sources are included. Those who have been wondering where safflower oil comes from will find that the safflower is *Carthamus tinctorius*, is related to the thistle, and grows 18 to 40 inches high. It is one of the oldest oil seeds and has been found in the tombs of the Pharaohs. It was grown at that time as a source of a brilliant scarlet dye for silk. In 1948 over a million acres of safflower were planted in India.

The amount of protein available from these sources is indeed remarkable. For example, the estimated world production of soybeans is estimated as something over 23.8 million tons, with an average protein content of 43 per cent. This, according to a rough calculation, should yield about 10 pounds of first-class protein for each person in the world. Peanuts would yield about half this amount, cottonseed about the same as peanuts, etc. Such figures at least suggest that much of the so-called "protein problem" of man may be due to his stupidity or general cussedness in having likes and dislikes that are not always well designed for efficient use of natural resources.

An evaluation of the "protein problem" per se falls outside the scope of this book. In some chapters there is the familiar inference that a great deal more protein for human nutrition is a serious need. Actually, there is very little evidence of protein malnutrition in adult man anywhere in the world, and the reviewer is willing to hazard the guess that, when all of the evidence is in, the protein deficiency which is evident in malnutrition in children will, like the classic protein deficiency of hunger edema, be shown to be largely caloric undernutrition. Nevertheless, with the ever-increasing world popula-

tion and the inevitable high cost of animal proteins, a greater and more efficient use of foodstuffs of all kinds through direct consumption by man would seem to be inevitable. Thus, the subject matter of this book should become of increasing importance in human nutrition.

The topic of amino acid supplementation is treated in a practical way. Methionine and lysine are the two amino acids which are generally limiting in proteins. The practicality of methionine supplementation in poultry feeding casts a shadow of things to come. A demonstration of need and the relative costs will be the factors which determine how widely this practice becomes in the future. Supplementation with small amounts of synthetic amino acids to improve the biological value of specific foods or diets is easily possible, but bulk synthesis of amino acids to compete with natural protein sources does not appear to be a likely possibility.

Dean presents, in his discussion, numerous practical examples of the way vegetable protein sources have been prepared in a manner acceptable for human consumption. In other places, examples of "all-vegetable coffee cream, all-vegetable frankfurters," etc., are given. Although there is much that remains to be done, there is no doubt that adequate diets for human beings can be derived from vegetable sources. Perhaps greater utilization will come when less attention is put upon "what people need" and more attention to making foods "that people like." A realization of the extensive data upon protein and amino acid needs of domestic animals makes it clear that our knowledge of the needs of human beings is largely a matter of guesses and it may be argued as to how "educated" these guesses are.

This should be a very useful book for people in many different fields. From the standpoint of human nutrition the subject matter is more germane to the problems of the so-called technically underdeveloped areas of the world. It is unfortunate that complete coverage of a topic results in a book of over a thousand pages and a cost that will limit its availability.

D. MARK HEGSTED

Transactions of the 6th Meeting of the International Society of Geographical Pathology. S. Karger, New York, 1958, pp. 522, Sfr. 67.60.

In July, 1957, a conference was held in Paris on geographic pathology, with special emphasis given to peptic ulcers. The transactions of the meeting are presented in this trilingual book. Much of the data is based on vital statistics of countries obtained at varying levels of completeness. In spite of obvious problems in this regard, the amount of data is considerable.

A number of especially interesting papers are included, among them a study on smoking and peptic ulcer, and others which indicate an extremely high morbidity from gastric ulcer in Japan and the prevalence of ulcer among the poor populations of India and the Congo. Several reports on dietary factors in different areas add to the usefulness of these papers.

Those who are interested in the regional differences in disease as clues to etiology, and all interested in the worldwide ulcer problem will find much valuable information in this book.

A. E. S.

General Biochemistry, by Joseph S. Fruton and Sofia Simmonds, Wiley, New York, 1958, ed. 2, pp. 1,077, \$18.00.

The first edition of this textbook was published in 1953. In the intervening five years so many significant developments in biochemistry have occurred that the publication of a second edition was inevitable.

The book is based on the authors' many years of teaching at Yale University. It is aimed at the serious and rather advanced student and, accordingly, stresses enzyme chemistry and intermediate metabolism. Although not emphasizing medical or clinical aspects it nevertheless presents a comprehensive and thorough review of "pure" biochemistry which, as the authors remind us, the medical student will need to know for an adequate understanding of many problems of human physiology and pathology.

Useful features are the large number of references presented (although without article titles) as footnotes, the many illustrations and a good detailed index.

This may be considered one of the better standard reference works in a highly complex and ever-broadening field.

S. O. W.

Ciba Foundation Colloquia on Endocrinology. Volume 12: Hormone Production in Endocrine Tumors, edited by G. E. W. Wolstenholme and M. O'Connor. Little, Brown, Boston, 1958, pp. 351, \$9.00.

The induction and function of tumors of the hypophysis, thyroid, adrenals, and sex glands in various species, especially in rodents, are discussed in twelve major and eight short papers. The various facets of histogenesis and function are reviewed by the participants who restate and summarize their views, most of which have been expressed previously. The reader will find adequate and useful information about the progress made in this intriguing area of experimental endocrinology. While all subjects under discussion are of interest to the biologist, pathologist, and endocrinologist, the clinical nutritionist will be primarily interested in the discussion of thyroid and hypophyseal tumors, and find of particular interest those data that refer to dietary factors and to associated obesity. Thyroid tumors, adenomas and carcinomas, may be produced in rats and mice by addition of goitrogens to the diet, or of carcinogens such as acetaminofluorene, or simply by feeding a low-iodine diet without supplements of either goitrogens or carcinogens. Many of these tumors are transplantable. Metabolic studies on animals bearing such tumors are not available. Hypophyseal tumors



may be induced by chemical, radiologic, or surgical thyroidectomy, or by feeding of a low-iodine diet. The neoplasms thus produced are transplantable under certain conditions; they may be nonfunctioning, or they may show thyrotropic, adrenotropic, mammatropic, somatotropic, or gonadotropic activity. Only those produced by ionizing radiation show adrenotropic function of different degree. The changes noted in mice developing the latter tumors or in hosts bearing grafts of such neoplasms are considered to be due to increased activity of gluco- and mineralocorticoids. The most striking effect is obesity. In fasted mice, liver glycogen is markedly increased, lipogenesis is enhanced; increased amounts of fatty acids and of tissue and serum cholesterol are synthesized from labeled acetate; blood sugar values are essentially unaffected; liver glucose-6-phosphatase activity is elevated without changes in live-phosphorylase or hexokinase. Associated with the aforementioned changes is a negative nitrogen balance resulting from replacement of protein by fat. A general index of this and the previous eleven Colloquia on Endocrinology sponsored by the Ciba Foundation added to the volume. This facilitates a quick orientation about the subject matter.

M. SILBERBERG

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.

The "Triad Disease" by N. Philip Norman, Lee Foundation for Nutritional Research, Milwaukee, 1958, pp. 216, \$4.75.

Etude des Carences Protidiques Observées chez l'Enfant en Pays Tropical: Kwashiorkor by Henri Dupin, Librairie Arnette, Paris, 1958, pp. 169.

Essentials of Therapeutic Nutrition by Solomon Garb, Springer Publishing Co., Inc., New York, 1958, pp. 147, \$2.00.

The Birth of Normal Babies by Lyon P. Shean, Twayne Publishers, Inc., New York, 1958, pp. 194, \$3.95.

Guide Coprologique pour l'Interprétation Clinique de l'Examen des Selles by J. Tauzin, Masson et Cie, Paris, 1958, pp. 131, 1,250 fr.

Vitamins and Hormones: Advances in Research and Applications, Volume XVI, edited by Robert S. Harris, G. F. Marrian, and Kenneth V. Thimann, Academic Press, Inc, New York, 1958, pp. 437, \$11.60.

Nutrition in Health and Disease by Lenna F. Cooper, Edith M. Barber, Helen S. Mitchell, and Henderika J. Rynbergen, J. B. Lippincott Company, Philadelphia, 1958, pp. 734, \$6.00.

The Health of a Nation: Harvey W. Wiley and the Fight for Pure Food by Oscar E. Anderson, Jr., University of Chicago Press, Chicago, 1958, pp. 333, \$6.00.

Modern Chemotherapy of Tuberculosis by Roger S. Mitchell and J. Carroll Bell, Medical Encyclopedia, Inc., New York, 1958, pp. 109, \$4.00.

Streptomycin and Dihydrostreptomycin by Louis Weinstein and N. Joel Ehrenkranz, Medical Encyclopedia, Inc., New York, 1958, pp. 116, \$4.00.

Chloromycetin (Chloramphenicol) by Theodore E. Woodward and Charles L. Wisseman, Jr., Medical Encyclopedia, Inc., New York, 1958, pp. 159, \$4.00.

Nutrition and Atherosclerosis by Louis N. Katz, Jeremiah Stamler, and Ruth Pick, Lea & Febiger, Philadelphia, 1958, pp. 146, \$5.00.

Penicillin by Harold L. Hirsh and Lawrence E. Putnam, Medical Encyclopedia, Inc., New York, 1958, pp. 148, \$4.00.

Clinical Endocrinology, ed. 2, by Karl E. Paschkis, Abraham E. Rakoff, and Abraham Cantarow, Paul B. Hoeber, Inc., New York, 1958, pp. 941, \$18.00.

Essential Fatty Acids, edited by H. M. Sinclair, Academic Press, Inc., New York, 1958, pp. 268, \$9.50.

Food for Better Performance by R. C. Hutchinson, Melbourne University Press (Cambridge University Press, New York), 1958, pp. 102, \$2.75.

Recent Progress in Hormone Research: Volume XIV, Proceedings of the Laurentian Hormone Conference 1957, edited by Gregory Pincus, Academic Press, Inc., New York, 1958, pp. 582, \$13.50.

Clinical Chemistry in Practical Medicine, ed. 5, by C. P. Stewart and D. M. Dunlop, E. & S. Livingstone, Edinburgh (The Williams & Wilkins Co., Baltimore, exclusive U. S. agents), 1958, pp. 342, \$6.75.

