

Reviews of Recent Books

Advances in Food Research, Volume V, edited by E. M. Mraz and G. F. Stewart, Academic Press, Inc., New York, 1954, pp. 538, \$11.50.

This is the fifth volume in the annual series of monographs presenting authoritative reviews on researches in food technology. Volume V deals with such diversified subjects as Oxidative Rancidity and Discoloration in Meat; The Chemistry of the Sugar-Sulfite Reaction and Its Relationship to Food Problems; The Chemistry and Technology of the Pretreatment and Preservation of Fruit and Vegetable Products with Sulfur Dioxide and Sulfites; Flavonoid Compounds in Foods; and the Color Problem in Foods.

A distinguishing feature of this volume is a chapter on Statistical Methods, which should prove of inestimable value to all investigators in food technology, as well as to those in experimental and clinical nutrition. Another chapter treated in detail, which is the first of a series to follow, is in the field of viticulture and enology, entitled Composition of Wines. I. Organic Constituents. The chapter on Rancidity in Meats treats not only of factors causing, but also of methods of preventing rancidity, such as the use of various antioxidants. The chapter on the Chemistry and Technology of the Pretreatment and Preservation of Fruits and Vegetable Products should be of particular interest to the fresh fruit and vegetable industries. In the chapter on the Color Problem of Foods, the mechanism of the fermentation of cocoa is described as a non-oxidative process, previously thought to be due to the action of polyphenoloxidase, but which is mainly accomplished by the destruction of the anthocyanins. Oxidation only takes place during the subsequent sun-drying of the beans. The changes during fermentation are vitally important in determining the flavor and aroma of the final product.—B. SURE

Síndrome Policarencial Infantil (Kwashiorkor) and its Prevention in Central America by M. Autret and M. Behar, Food and Agriculture Organization of the United Nations, Rome, 1954, p. 74.

In 1951 a joint FAO-WHO committee recommended that a nutrition mission be sent to Central America to study the problem of kwashiorkor and related conditions. This short but thorough report by two experts is the result of the survey.

The syndrome, presumably due fundamentally to protein deficiency in children, has also been called "infantile pellagra," malignant malnutrition, kwashiorkor, etc. For various reasons as stated, the term *infantile pluricarencial syndrome* is recommended.

There is a detailed description of the clinical features, which is enhanced by 11 figures, of which 4 are in color. The skin changes, the edema, and the unhappy facial expressions are striking.

The chapter on treatment emphasizes the importance of protein repletion; skim milk and animal protein are the mainstays, while fat is reduced. Although the vitamin intake must be supplemented, excessive amounts do no good and may even be harmful. The authors stress that the old idea that the syndrome was a hypovitaminosis is erroneous. Basically, the problem is that of general undernutrition and malnutrition, superimposed on a protein deficiency. Lipotropic agents, iron, transfusions, and parenteral fluids are also discussed.

The incidence is certainly higher than can be calculated from cases under medical care. Apparently in many Central American areas it is a serious public health problem. Poverty and ignorance are the chief provocative agents. A consideration of the influence of diet on the syndrome and advice on prevention conclude the report.

With 108 references, 17 tables, and 8 charts, this clear, well-written report is a model in nutritional surveys. S.O.W.

Fat Metabolism. A Symposium on the Clinical and Biochemical Aspects of Fat Utilization in Health and Disease, edited by V. A. Najjar, Johns Hopkins Press, Baltimore, 1954, pp. 185, \$4.50.

This little book contains a surprising amount of new and important information on biochemical and clinical advances as related to fat metabolism. It consists of eleven short presentations, all by eminent workers in this active field. Among the subjects treated are certain aspects of obesity, hyperlipemia, coenzyme A, phospholipids, and so on.

As the editor states in his introduction, the book is "mainly aimed at the clinical investigator. A special effort was made to express biochemical events in simple terms. . . ."

The illustrations, references, and index add considerable value to this book, which, in the reviewer's



opinion, is probably the best available exposition of our newer knowledge of lipid metabolism as related to clinical medicine. S.O.W.

Clinical Approach to Jaundice by Leon Schiff, Charles C Thomas, Springfield, Ill. 1954, pp. 113, \$3.75.

This monograph of 113 pages gives a systematic and complete summary in brief form of the practical aspects of the study of jaundiced patients. It is emphasized throughout that, despite better modern understanding of the pathologic physiology of jaundice, and despite improved laboratory aids, it is still necessary in all but the most typical syndromes that the physician utilize all his knowledge, judgment, and intuition. Adequate consideration is given to many important aspects of the history and the many intriguing physical findings which may be associated with the jaundice. All of the most useful laboratory tests are reviewed and their place in the study of the patient are evaluated. There is an especially fine section on the use of x-ray studies, and a good review of the help that frequently may be obtained by needle biopsy of the liver. A valuable summary and critical evaluation is supplied under the heading "Limitations and Pitfalls." There are a good bibliography and index. This little volume is highly recommended to practitioners and students.

C. M. MACBRYDE

Roberts' Nutritional Work with Children by Ethel Austin Martin, University of Chicago Press, 1954, pp. 527, \$7.50.

This is the second revision of the original publication in 1927 by Dr. Lydia J. Roberts. The revision, which is a complete rewriting of the previous editions, includes information which is useful as reference material in courses which embody the field of nutrition. It also contains information which is useful to practitioners of medicine who are especially interested in this problem in children.

It is obvious that the author is thoroughly familiar with past and current literature. The help of medical experts has contributed to the accuracy of the information and has assured proper interpretation.

Certain chapters deserve special mention. Chapter II accurately but briefly discusses the role of vitamins in nutrition and also correlates various states of nutrition with certain blood constituents such as proteins, hemoglobin, calcium, etc. Chapter III, which includes a historical review of the problem of growth and development, describes a variety of conditions which influence them. Chapter III gives more information than the majority of pediatric textbooks concerning the use of a variety of charts and guides now in use in evaluating growth and development. Chapter VI gives considerable information on the

relationship of nutrition to dental problems in children and is recommended as a useful source of information to pediatricians. Chapter VIII is recommended to those who are interested in the organization and interrelations of various nutrition groups at a local, state, national, and international level. Chapter XIV is especially useful for those concerned with the establishment and operation of school lunch programs; consideration is given to factors and needs which vary from one community or locality to another.

The material of this book is authoritative and is presented in a readable and interesting style. It is recommended to pediatricians as well as nutritionists.

JAMES N. ETTELDORF

Textbook of Biochemistry (second edition) by E. S. West and W. R. Todd, The Macmillan Company, New York, 1955, pp. 1313, \$12.00.

The need for a second edition in four years bespeaks the popularity of this well-accepted textbook, as well as the recent rapid advances in metabolism, nutrition, and biochemistry. The authors, from the Department of Biochemistry, University of Oregon Medical School, have encompassed an amazing amount of material in this book, but the excellent index and numerous figures, tables, and charts prevent the information from being hidden from the reader who consults it for reference.

Among the subjects of recent interest which are covered are alpha-lipoic acid, the pancreatic hyperglycemic factor (which should be called "glucagon"), coenzyme A, and various antimetabolites.

Nutrition is particularly well covered, and although the arrangement of chapters occasionally leads to a divided discussion and some duplication (e.g. co-carboxylase, porphyrins) nevertheless essentially everything of importance is included.

This textbook can be safely recommended as a solid, substantial, up-to-date reference work for student and advanced worker. S.O.W.

Eating Together by Camille Macauley, Farrar, Straus and Co., New York, 1950, pp. 419, \$3.95.

This book is written by a homemaker who was faced with the problem of meal planning and preparation for a family of five which included a diabetic adult and a diabetic child. In the first section of the book the diabetic patient and members of his family are led to an understanding of the essential nature of diabetes and the important principles in its treatment. The author describes in a very readable style some of the fears and problems which confront the diabetic individual, and gives practical suggestions for meeting them.

The second part of the book contains more than 100 menus for breakfast, at-home luncheons, lunch-

box meals, and dinners. All of the menus are planned around a diet prescription of protein, 90 Gm.; fat, 100 Gm.; and carbohydrate, 200 Gm. These menus can be readily adjusted to other prescriptions by modifying the amounts of meat, fat, or bread. This book was published prior to the adoption of the exchange lists now so widely used, and hence computations are more detailed than they need be. It would be necessary for the patient to have a good understanding of the calculation of his own diet and the method of substitutions to be used in the listed menus. In view of the wide variations in food composition, one might also question the need for weighing the foods.

The menus which are given illustrate how meals for the family may also become meals for the diabetic; and that food for the diabetic need not be monotonous. The protein, fat, and carbohydrate calculations for the stated portions are given for each food item. Family-size recipes for food combinations, together with the calculated values for one portion, are also given with each menu.

The book includes special sections on between-meal feedings, dining in a restaurant, fountain lunches, special occasion menus, tables of food substitutions, and a table of food values. The patient who is facing the problems of a monotonous diet and who has the time to make the necessary adjustment of the menus may find this book helpful. The information appears to be accurately stated. C.R.

Food Preparation Recipes by Kathryn Bele Niles, John Wiley & Sons, Inc., New York (Chapman & Hill, Ltd., London), 1955, pp. 372, \$3.90.

In addition to its large repertoire of recipes, this volume attempts to inculcate the principles underlying their formulation. To this end, the introductions to the various sections discuss the "basic methods" appli-

cable to a given type of food (eight for eggs, six for meats, and so on), and "master recipes" are followed by suggestions for substitutions and variations. This makes for an analytic, rather than a rote approach to culinary operations; it should, in time, render the attentive student relatively independent of the teacher, and able to work out her own variations of the themes presented. The inexperienced will particularly appreciate the criteria listed under the heading "Standard"—which describe in some detail the qualities (texture, color, consistency, etc.) the final product ought to possess, thus answering the tyro's frequent question: "How do I know when . . .?"

What to do if a custard curdles, how variety meats can supply high quality protein cheaply, and why the omelette skillet should never be washed or polluted with other foods—all these matters and more are helpfully expounded by the Home Economics Director of the Poultry and Egg National Board.

The volume is attractively designed and spiral-bound to open flat. C.-J. H.

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.

A Symposium on Amino Acid Metabolism, edited by W. D. McElroy and B. Glass, The Johns Hopkins Press, Baltimore, 1955, pp. 1048, \$12.50.

Nutritional Data (second edition), by H. A. Wooster, Jr., H. J. Heinz Co., Pittsburgh, 1954, pp. 155.

Kwashiorkor, by H. C. Trowell, J. N. P. Davies, and R. F. A. Dean, Edward Arnold (Publishers) Ltd., London (The Williams & Wilkins Co., Baltimore), 1954, pp. 308, \$10.00.

