

# Reviews of Recent Books



**Practical Clinical Chemistry: A Guide for Technicians**, ed. 2, by Alma Hiller. Thomas, Springfield, Ill., 1957, pp. 265, \$6.50.

This book contains the routine methods employed in the chemistry laboratory of the Presbyterian Hospital of Chicago. Beginning with three introductory chapters (General Laboratory Procedures, Standard Solutions of Acid and Alkali, and Photometry), the volume contains detailed descriptions of acceptable methods for amylase, direct and total bilirubin, bromsulfalein, calcium, carbon dioxide combining capacity, cephalin flocculation, chloride, total cholesterol, creatinine, icterus index, total nitrogen, nonprotein nitrogen, inorganic phosphorus, alkaline and acid phosphatase, protein, sugar, sulfonamides, and uric acid. Following the adequate index is a section of removable outlines of each method, which may serve as a handy reference for the laboratory technologist.

Differences from the first edition include (1) minor changes in the bromsulfalein, icterus index and nonprotein nitrogen methods, (2) instead of the Bloor method for total cholesterol, substitution of the Pearson technic utilizing *p*-toluenesulfonic acid, (3) modification of the Folin-Wu sugar method to include the more stable arsenomolybdate color reagent of Nelson, (4) substitution of the shorter Caraway method for uric acid for that of Kern and Stransky, and (5) the addition of the Moore caramelization technic for rapid estimation of urinary sugar.

Dr. Hiller chose the nonprotein nitrogen method rather than urea nitrogen because of simplicity in technic; this reviewer would have preferred the latter. The chloride method is the excellent one of Van Slyke and Hiller.

The fact that a second edition has been issued speaks for the deserved popularity of a book by a well-known, capable worker in the field of clinical chemistry.

H. F. WEISBERG

**Calcium Metabolism**, by J. T. Irving. Wiley, New York, 1957, pp. 177, \$2.75.

This little book covers a wide range of subjects pertaining to calcium, which the author enthusiastically proclaims in the opening sentence as the most important inorganic element in the body. The extent of coverage of the world literature is exemplary. Possibly the most important contribution of this book is the almost complete marshalling of the references per-

taining to calcium metabolism. Only one notable area is excepted in this regard, and surprisingly enough it concerns the "Extra-Skeletal Functions of Calcium." This engaging area of calcium metabolism, the last chapter before the summary, is covered in less than two pages without a single reference. This omission is unwarranted even though the author points out that 99 per cent of body calcium is in the bones and teeth and 1 per cent in other cellular and bodily activities.

Two of the most valuable chapters are concerned with bone formation and bone chemistry and physics. In these chapters the author has been particularly concerned with a clear, terse presentation of highly complex subjects and has succeeded admirably with a more critically appraising discernment than is evidenced in some other parts of the book. In other chapters the reader has the feeling that various references have been included because they touched upon the subject, not because they contributed to our knowledge of the subject. On these occasions, an aura of superficiality often pervades several paragraphs and leaves the reader with the desire that a higher level of criticism had been attained and that more pertinent details had been included from the meritorious studies with the deletion of non-contributory investigations.

Even with the foregoing weaknesses, which are not sufficiently serious to detract from the main theme, this book will prove useful to all concerned with various aspects of calcium metabolism because it is the best current compilation of information on this subject.

J. H. SHAW

**Heart Disease—Cause, Prevention, and Recovery** by Philip S. Chen. The Chemical Elements, South Lancaster, Mass., 1958, pp. 189, \$3.00.

This small and well printed volume is allegedly written for the layman who wishes to have a thorough understanding of the nature of heart disease.

Part 1, written jointly with Philip S. Chen, Jr., serves as an introduction to structure and function of the heart and briefly defines the main types of heart disease. It is clearly written and substantially correct except for misleading values for cardiac output.

Part 2, entitled "Cause and Contributory Factors of Heart Disease," includes an introduction to the biochemistry of fats, but consists mainly of a rather uncritical collection and dogmatic presentation of facts, opinions, and advice regarding the possible role of

food, diet and living habits in health and disease. The author's personal conviction that meat, milk, animal fats, smoking, and lanolin are major health hazards is everywhere apparent and no effort is spared to cite supporting opinions.

Part 3 discusses the prevention of heart disease and is designed to extoll the virtues of the soy bean in the place of meat, milk, and eggs. There follows a chapter citing the bible's recommendations of a vegetarian diet and discussing in detail the Seventh Day Adventist's teaching with regard to diet.

This volume in essence presents the case for the nutritional cause and prevention of atherosclerosis and disease of the coronary arteries. Although many sources are quoted, these appear to have been selected on the basis of conclusions rather than merit of the evidence. Furthermore, although some references are given in full, most references are incomplete. In view of the contents of the book, the title may be considered misleading inasmuch as it does not reflect the main topic discussed. Because of evident bias and dogmatism, it is difficult to recommend this volume to any lay or professional group. However, much material of interest has been brought together in a manner useful to the discerning student of the relation of nutrition to health and disease.

W. H. ABELMANN

**Low Fat Cookery**, by Evelyn S. Stead and Gloria K. Warren with an introduction by Eugene A. Stead, Jr., M.D. and James V. Warren, M.D. McGraw-Hill, New York, 1956, pp. 184, \$3.95.

This book was written to provide easy-to-prepare recipes for persons desiring to restrict dietary fat and for those finding it necessary to reduce fat for weight reduction, hypertensive vascular disease, coronary artery disease, atherosclerosis, or diabetes. Mrs. Stead has had much meal planning practice in her role of homemaker, while Mrs. Warren is an experienced therapeutic dietitian.

This book contains 165 recipes along with their respective fat contents, including some for appetizers or hors d'oeuvres, soups, meats, fish and poultry, cheeses and cheese spreads, salads and salad dressings, sandwiches, sauces, vegetables, desserts, beverages, and breakfast items. An herb chart, tables of fat content of foods, and a week's sample menus on a 25-g and 50-g fat level are added aids. Other highlights are a good index, clever illustrations, and good organization.

On the whole, the recipes are set up in a manner that is easy to follow. In a few, more logical order of ingredient listing would add to the clarity of the whole recipe.

Most of the ingredients are readily available and within the average budget. The reviewer feels, however, that name brand products are listed too often, and with no indication as to whether a satisfactory result could be obtained with another brand. This may render some recipes useless because of unavailability of

ingredients or possible cooking failures when inadequate substitutions are made.

The table of fat content appears accurate, although listing values to tenths of grams when foods are measured and not weighed may be unnecessary. Real help may be gained from the herb chart.

The menus illustrate that a low-fat diet can be attractive and nutritionally adequate, but no information on how to plan meals is included. Since using fat content as the sole criterion for menu planning could be disastrous, some material on the subject would be valuable.

This writer feels that the book would be of limited use to the diabetic, since the recipes are not translated into exchanges or any other method of diabetic diet calculation. Restriction of dietary fat *per se* is still of debatable value for a person with cardiac disease. This book will have its primary usefulness for the homemaker who wishes recipe supplementation for the instructions given by the physician or dietitian.

EMMA SEIFRIT

**Hormones in Blood**, ed. by G. E. W. Wolstenholme and E. C. P. Millar (Ciba Foundation Colloquia on Endocrinology, Volume XI), Little, Brown, Boston, 1957, pp. 416, \$9.00.

This book serves to disseminate information concerning hormones in blood to endocrinologists and scientists who were not so fortunate as to attend this meeting. Outstanding investigators present data regarding chemical and biologic analyses of various hormones in blood, factors which influence their concentrations, and mechanisms of their transport. The chapters devoted to studies of adrenocortical hormones are of considerable interest and provide much information about synthesis, release, binding to plasma proteins, and degradation of these steroids. The difficulties inherent in present methods of determining content of neurohypophysial hormones in blood are well presented. Discussions of thyroid hormones in blood as well as plasma insulin concentration are enlightening.

Endocrinologists, biochemists, and physiologists will find this book of valuable assistance when considering problems related to analysis of hormones in body fluids. It will also serve as a modern reference on certain aspects of the biochemistry and physiology of many hormones.

ALBERT B. EISENSTEIN

**International Congress of Gastroenterology. Fifth Meeting, London, 1956**, ed. by Harold Edwards. S. Karger, Basel, 1957, pp. 762, S.Fr. 78.

The papers presented at the International Congress of Gastroenterology in London in 1956 and previously published in *Gastroenterologia*, Vol. 86, Nos. 3, 4, and 5 (1956) are more permanently preserved in this single volume. The published articles fall into several subjects: nonmalignant conditions of the esophagus; premalignant conditions of the alimentary tract; a miscellaneous group; and ulcerative colitis.

Among the papers on esophageal disorders, the American reader is reassured to find reports on generally familiar material from C. S. Code, Mayo Clinic, F. J. Ingelfinger and P. Kramer, Boston, and E. C. Texter and C. J. Barborika, Chicago. Less familiar is the work of J. Nauta, of Holland, on the closing mechanism between the esophagus and the stomach which describes an unusually extensive investigation combining anatomic and physiologic studies and includes photographs of the cardiac opening of the dog taken from the stomach side. The impressive number of rather basic investigations reported from European centers indicates that the recently renewed interest in the esophagus has not been confined to this country.

The papers on premalignant conditions of the alimentary tract are, with the exception of a report on exfoliative cytology by Dr. J. B. Kirsner and associates, of the University of Chicago, entirely from foreign sources. The provocative observations of R. Doll, of Great Britain, on environmental factors in the etiology of cancer of the stomach is the outstanding contribution.

The group of short miscellaneous papers constitutes a condensed summary of much of the important investigations in gastroenterology during the past few years. Included are papers by G. B. Jerzy Glass and his associates, of New York, on paper-electrophoretic analysis of gastric juice, by Sheila Sherlock and her associates, of Great Britain, on the treatment of hepatic coma, by J. Waldenstrom, of Sweden, on the diagnosis and pathology of carcinoidosis, by W. Sheldon, of Great Britain, on celiac disease, by F. Hollander, of New York, on enzyme inhibitors in the therapy of gastroduodenal ulcer, and by J. N. Hunt, of Great Britain, on the influence of low concentrations of acid in test meals on gastric secretion.

The reports on ulcerative colitis include summaries by a number of well-known figures such as H. L. Bockus and associates, of Philadelphia, J. A. Bagen, of the Mayo Clinic, and C. W. Wirts, of Philadelphia. G. Lumb, of Great Britain, presents a compact summary of his experience with rectal biopsy in ulcerative colitis. There are a number of papers on the natural history of the disease.

The official languages of the Congress are English, French, German, and Spanish, however, English pre-

dominates. The papers are illustrated with good reproductions of photographs and charts so that it constitutes an excellent summary of the world literature in the field of gastroenterology during the past several years.

J. B. HAMMOND

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.

*Nutrition for Practical Nurses, ed. 2* by Phyllis S. Howe, Saunders, Philadelphia, 1958, pp. 219, \$2.75.

*The Year Book of Endocrinology (1957-1958 Year Book Series)*, edited by Gilbert S. Gordon, Year Book Publishers, Chicago, 1958, pp. 381, \$7.50.

*Transactions of the Sixth Meeting of the International Society of Geographical Physiology.* S. Karger, Basel, 1958, pp. 642, S.fr. 67.60.

*The Cerebrospinal Fluid. Production, Circulation and Absorption* (Ciba Foundation Symposium), edited by G. E. W. Wolstenholme and C. M. O'Connor, Little, Brown, Boston, 1958, pp. 335, \$9.00.

*Nutrition and Diet Therapy for Practical Nurses* by Lillian Mowry, Mosby, St. Louis, 1958, pp. 165, \$2.50.

*Nutrition for You* by Robert S. Goodhart, Dutton, New York, 1958, pp. 215, \$4.50.

*Diseases of the Esophagus* by J. Terracol and Richard H. Sweet, Saunders, Philadelphia, 1958, pp. 682, \$20.00.

*Processed Plant Protein Foodstuffs*, edited by Aaron M. Altschul, Academic Press, New York, 1958, pp. 955, \$26.00.

*Hormone Production in Endocrine Tumors* (Ciba Foundation Colloquia on Endocrinology, Vol. XII), edited by G. E. W. Wolstenholme and Maeve O'Connor, Little, Brown, Boston, 1958, pp. 351, \$9.00.

*Is Overweight Curable?* by Leo B. Janis, Tioli Publishing Co., Toledo, 1958, pp. 164, \$4.75.

*Diseases of the Liver and Biliary System, ed. 2* by Sheila Sherlock, Thomas, Springfield, Ill., 1958, pp. 719, \$11.50.