

About the presence of obesity in the diabetic, he says: "Nine out of ten diabetics whose disease began after thirty years of age were overweight at some period of their lives." And, again, he says, "I fear I am a little hard-hearted toward my obese friends," meaning that he believes reduction diets should be constructed on a radical reduction in the amount of fat.

From the dietary standpoint, some of the data on the carbohydrate value of foods can be challenged on the grounds that Dr. Joslin classifies the green vegetables still as 3 per cent, in spite of the fact that the value of available carbohydrate is well known to be closer to 1 per cent, or even lower in some instances. Again he teaches his patients the per cent of carbohydrate in various classes, whereas the great majority of dietitians all over the country prefer teaching the value of an average helping.

Every diabetic can profit by reading this manual because it will teach him to live successfully with diabetes.

HOW TO LIVE WITH DIABETES. By Henry Dolger, M.D., and Bernard Seeman. \$3.95, pp. 192, W. W. Norton & Company, Inc., New York, New York, 1959.

This book is well written and should be of interest to patients and physicians alike. The chapters dealing with the history of our knowledge and the background of the disease are readable and accurate. The reader is given an unbiased presentation of the problems concerning management and the facilities available to the physician and all ancillary personnel concerned with the treatment of diabetics. The authors show an excellent understanding of the psychology and emotional problems confronting the juvenile diabetic, and the section on special problems for women is interesting and instructive. The authors gaze into the crystal ball in forecasting future developments in the management of this disease and here there may be some individuals who will question their predictions, but in general the book is factual and extremely readable.

However, several unfortunate facts detract from the book. It seems to this reviewer that there is undue emphasis on the efficacy of oral agents in general and one in particular. The matter of primary and secondary failures of response to oral agents is insufficiently discussed. It also would be preferable if the chemical or generic, rather than the proprietary, name for the compound were used.

THE CHEMISTRY OF HEREDITY. By Stephen Zamenhof, Ph.D. \$4.25, pp. 106, Charles C Thomas, Springfield, Illinois, 1959.

Investigations over the past few years have defined in biochemical terms many features of the apparatus of heredity. Recent knowledge of the structure of nucleic acids, the enzymology of their synthesis, the sequence of biochemical events in the multiplication of viruses and organisms, and the definition of some phenotypes in terms of the amino acid sequence of a protein, are the chief foundation of the area that Stephen Zamenhof has described in his short monograph as "The Chemistry of Heredity." The fascination of this field is that it brings us to one of the fundamental problems of biology with a knowledge of certain parts of the heredity mechanism,

but with many relationships still obscure and the gap between the chemical and the genetic approach to the gene as yet unclosed. The variety of speculations which has been suggested to fill in these uncertainties has been scientifically stimulating, but has left many not actively working in this field unable to distinguish fact from fancy.

It is the great virtue of Dr. Zamenhof's book that the biochemical aspects of the problem of heredity are clearly set forth with a real communication of the nature of the evidence and its degree of relevance to the problem. Since this is done without assuming any chemical background or prior acquaintance with the material on the part of the reader, the book provides an excellent account, complete in itself, for one with some elementary knowledge of biology. At the same time, because the bibliography is unusually extensive, the more serious student can obtain a perspective and the means for further study.

The early chapters on heredity determinants as chemical substances and on the nucleic acids are especially successful. The Watson-Crick double helix and its catalytic impact on ideas relating nucleic acid structure to biological function are considered in detail. Of the later chapters, the one on hereditary defects in man is too brief to present the main ideas adequately. The book as a whole is another demonstration that the best popularizer of a scientific field is a scientist who has made contributions to it and who has taken the trouble to explain them.

THE CHEMISTRY OF LIPIDS IN HEALTH AND DISEASE. By H. K. King, M.A., Ph.D., F.R.I.C. \$3.75, pp. 104, Charles C Thomas, Springfield, Illinois, 1960.

This small monograph is a well-organized presentation of the chemistry and metabolism of lipids. An introductory chapter, "Lipids and Water," describes the factors of molecular structure and orientation that determine the behavior of lipids in an aqueous medium. The chemical structures of various types of lipids are considered in Chapter 2, the digestion and absorption of fats are reviewed historically, and the present status is described in Chapter 3. Unfortunately, the absorption and metabolism of sterols receives inadequate treatment in a very short section. The succeeding two chapters are devoted to the oxidative breakdown of fats and the biosynthesis of lipids.

The final two chapters, on lipids in disease, are skimpy and do not fulfill the promise of the title of the monograph. Chapter 7 contains material on dietary essential fatty acids and fat-soluble vitamins that may be found in texts on biochemistry, and much speculative material is offered in the final chapter on lipids and atherosclerosis. No mention is made of the chemistry or metabolism of lipids in such other well-known entities as Schüller-Christian's disease, Gaucher's disease or other lipidoses, biliary cirrhosis, the various types of steatorrhea, or, of particular interest to the readers of this journal, diabetes.

Despite these shortcomings, the monograph is extremely readable, and the basic aspects of the chemistry and metabolism of lipids are presented with considerable clarity.