

bolic pathways of carbohydrate metabolisms were presented, as well as some aspects of hormonal effects on oxidative pathways in the liver and on mitochondria. The significance of the mitochondria for alternative pathways of electron transport was hypothesized. The Pasteur effect in relation to limiting factors in glycolysis of ascites tumor cells was described, emphasizing the importance of the availability of inorganic phosphate in limiting the rate of both lactic acid production and glucose uptake. The role of triphosphopyridine nucleotide in the regulation of glycolysis in cell-free preparations by decreasing glycolysis was reported to be enhanced by addition of liver mitochondria, which can oxidize the reduced form of the nucleotide.

There were papers on yeast cell fermentation and enzyme induction by bacteria that developed hypotheses of feedback mechanisms, or "automatic adjustment." There is an abundance of diagrams, and equations that are necessary for understanding current theories and hypotheses. The general discussion at the end of the symposium contains a considerable amount of information on the use of the word "feedback" by biochemists; the term came originally from purely physical systems. However, perhaps a question can be raised as to whether feedback of the engineer and of the chemist can be directly compared. This reviewer felt that a knowledge of feedback of electronic circuiting might be a better prerequisite to reading portions of the symposium than a background in biochemistry. At any rate, there is no doubt that the book is the first to feature such a variety of aspects of non-hormonal regulation of cellular metabolism. It should be a provocative addition to the bookshelf of all biochemists engaged in fundamental research.

E. COHEN

Essentials of Medicine. The Art and the Science of Medical Nursing, 18th edition, by Charles P. Emerson and Jane S. Bragdon. J. B. Lippincott Co., Philadelphia, 1959, pp. 857, \$6.75.

This standard medical text for nurses is now in the eighteenth edition, having first been published fifty-one years ago. The book's success is no doubt due to its comprehensive coverage, clear language and numerous illustrations. The discussion of various disorders is followed by a useful section, "Treatment and Nursing Care." The book can be recommended as an authoritative reference in medical nursing.

R. S. W.

Food, The 1959 Yearbook of Agriculture. The U. S. Department of Agriculture, Washington, D. C., 1959, pp. 736, \$2.25.

This Yearbook of Agriculture is the latest in the series of annual volumes that have been printed for 110 years. Its sixty-five chapters and 736 pages tell much of what seventy-two nutrition experts in the U. S. Department of Agriculture, other Federal agencies and twelve colleges know about weight control, food energy, vitamins, proteins, amino acids, fats, carbohydrates, calories,

minerals, quality in food, costs, fads, habits and nutrition programs.

It has thirty-six pages of simple recipes that further the book's main theme—"for good health, eat some of the basic foods every day." Fourteen pages give questions (with answers) that many people have asked about food. One section spells out the nutritional needs of expectant and nursing mothers, infants, teenagers and young adults and people over twenty-five years of age.

Other chapters discuss grades of meat, eggs and fish; freezing, canning, storing and preparing food at home; food plans at different costs, changes in U. S. diets, learning and teaching good eating habits, school lunches and our future food supplies and needs.

Representing, as it does, authoritative opinion, the book can be highly recommended as one maintaining the well known level of excellence in previous Yearbooks.

S. O. W.

BOOKS RECEIVED

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.

History of the American Dietetic Association, edited by Mary I. Barber, J. B. Lippincott Co., Philadelphia, 1959, pp. 328, \$6.00.

Essentials of Medicine: The Art and the Science of Medical Nursing, 18th edition, by Charles P. Emerson, Jr. and Jane S. Bragdon, J. B. Lippincott Co., Philadelphia, 1959, pp. 857, \$6.75.

The General Foods Kitchens Cookbook, Random House, New York, 1959, pp. 436, \$4.95.

Principles of Nutrition, by Eva D. Wilson, Katherine H. Fisher and Mary E. Fuqua, John Wiley & Sons, New York, 1959, pp. 483, \$5.95.

Ciba Foundation Study Group No. 1: Pain and Itch—Nervous Mechanisms, edited by G. E. W. Wolstenholme and Maeve O'Connor, Little, Brown & Co., Boston, 1959, pp. 120, \$2.50.

Ciba Foundation Study Group No. 2: Steric Course of Microbiological Reactions, edited by G. E. W. Wolstenholme and Cecilia M. O'Connor, Little, Brown & Co., Boston, 1959, pp. 113, \$2.50.

Human Nutrition and Dietetics, by Sir Stanley Davidson, A. P. Meiklejohn and R. Passmore, Williams & Wilkins, Baltimore, 1959, pp. 844, \$15.00.

Klinische Radiologie des Magens und des Zwölffingerdarms, by Pierre Porcher, Hans-Ulrich Stössel and Paul Mainguet, Georg Thieme Verlag, Stuttgart, 1959, pp. 264, DM 72 (\$17.75).

Metabolic Care of the Surgical Patient, by Francis D. Moore, W. B. Saunders Co., Philadelphia, 1959, pp. 1,011, \$20.00.

Therapeutic Nutrition with Tube Feeding, by Morton D. Pereira, Charles C Thomas, Springfield, Ill., 1959, pp. 58, \$3.75.