

Reviews of Recent Books



Progress in Medical Genetics, Vol. 1, edited by A. G. Steinberg. Grune & Stratton, Inc., New York, 1961, pp. 341, \$9.75.

Until recent years, genetics, particularly human genetics, was a quiet science devoted to red-eyed *Drosophila* or pigmented hamsters. Then an explosion occurred, the repercussions of which have not yet ceased. Much of the new developments in genetics, based on direct chromosome analysis as well as better alleviation of "inborn errors," has made it necessary for the progressive clinician to keep in step with the rapid developments in this field. This book consists of eight essays by distinguished investigators. The articles are of a uniformly high caliber and are fully documented.

The subjects include mutation, congenital malformations, blood grouping problems, hemoglobinopathies, consanguineous marriages, and chromosomes and human disease. The end result is an excellent survey in depth of our present (and subject to change tomorrow) concept in this somewhat unfamiliar but extremely important field. This reviewer quite agrees with J. B. S. Haldane's statement, "I now believe that we know much less about natural selection in man than I thought was known thirty years ago." This book is highly recommended.

S. O. WAIFE

Ciba Foundation Study Group No. 5. Regulation of the Inorganic Ion Content of Cells, edited by G. E. W. Wolstenholme and C. M. O'Connor. Little, Brown & Company, Boston, 1961.

This report was prepared in honor of E. J. Conway, and contains his paper on critical energy barriers, active transport of ions in muscle and his redox pump theory. Other papers on osmotic regulation and ion transport are by H. H. Ussing, W. Wilbrandt, H. J. Schatzmann, A. Rothstein, P. C. Caldwell and R. D. Keynes. Discussants include R. H. Adrian, D. A. T. Dick, I. M. Glynn, A. V. Hill, A. L. Hodgkin, J. Hoffman, O. Jardetzky, M. Maizels, N. V. B. Marsden, A. M. Monnier, H. Netter, H. Passow, S. V. Perry, T. J. Shaw, J. F. Sutcliffe, I. Tasaki and T. Teorell. A variety of physiological and physicochemical methods were employed by the workers. Conway and Ussing used isolated

frog skin; Wilbrandt and Schatzmann, human, ox or sheep erythrocytes; Rothstein, baker's or brewer's yeast; Caldwell, also Keynes, used squid nerve axons and muscle fibers.

In 1941, Boyle and Conway's classic paper described all changes in volume, electric potential and ionic composition of frog sartorius muscle in response to changes in the salt content of the medium, on the basis of simple assumptions regarding membrane permeability of the fiber membrane. The Boyle-Conway treatment has been applied to nerve fibers successfully by such workers as Caldwell and Keynes, whose experiments suggest that the main energy source for conduction of impulse in nerve and muscle fibers is a movement of Na^+ and K^+ ions down their concentration gradients. Effects of micro injections of metabolic inhibitors as cyanide, dinitrophenol (DNP) or azide revealed that the efflux of Na^+ and influx of K^+ ion was reduced, but not the influx of Na^+ and efflux of K^+ ions. The loss of salts from red cells in low electrolyte media, is interpreted as being due to an increase in cation permeability of the membrane induced by a negative membrane potential. Urethane, low concentrations of cocaine and calcium chloride decreased the induced permeability.

Recorded discussions complete to the polemics, take up matters of technic and concept. There is an excellent index and helpful bibliography. The small, but information-packed book is heartily recommended to a select audience—researchers, graduate students or pharmacologists currently intrigued by the fascinating experimentation to be carried out in problems of ion transport and cell permeability.

E. COHEN

Medicine Makers of Kalamazoo, by Leonard Engel. McGraw-Hill Book Co., New York, 1961, pp. 261, \$4.50.

This is a most interesting account of the first seventy-five years of The Upjohn Company, from 1885 to 1960, from a family concern to a publicly held corporation. Although restricted almost entirely to discussion of the interests, activities, successes and tribulations of the medicine makers of Kalamazoo, it has pertinence beyond that, and con-

siderable general interest. It amounts to a good case history of the pharmaceutical industry in the United States. While in some respects Mr. Engel's style is peculiar, to say the least (for example, a rough count gives me seventy-four sentences beginning with "But" and twenty-four sentences beginning with "And"), the narrative is easy to follow. The book makes good bedtime reading. R. S. GOODHART

Food Preferences of Men in the U. S. Armed Forces, by D. R. Peryam, B. W. Polemis, J. M. Kamen, J. Eindhoven and F. J. Pilgrim, Department of the Army, Chicago, 1960, pp. 160.

"G.I. Joe" may be assured that someone does care about his food likes and gripes! This 160-page book presents the results of a comprehensive survey of food acceptance and preference problems among members of the armed forces. Considerable effort was made to survey a representative, statistically valid sample, taking into account many factors such as duration in service, age, cultural background, geographical origin, and the like. Certainly much valuable information has been accumulated which should help in solving recognized acceptance problems. I am sure that it surprised no one to find that fresh milk, hot rolls and biscuits, strawberry shortcake, grilled steak, ice cream sundae, fried chicken, french fried potatoes, and roast turkey were the best liked foods by members of the armed forces. Who wouldn't put these first! Likewise the votes

for mashed turnips, fried parsnips, candied parsnips, and cabbage baked with cheese were very few. I am sure that most mothers have long ago learned that foods in the latter category seldom received rave notices from the family and have deleted them from the menu. Perhaps the "chow line" will now demonstrate the same good judgment as mother.

For those interested in foods and food acceptance, this little book has much to offer.

W. A. KREHL

BOOKS RECEIVED FOR REVIEW

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 extensive review.

Diet Manual, compiled by the Dietary Staff of Vanderbilt University Hospital. Vanderbilt University Press, Nashville, 1961, pp. 157, \$4.00.

Quick Reference Book for Nurses, 8th Edition, by Helen Young and Eleanor Lee. J. B. Lippincott, Co., Philadelphia, 1962, pp. 800, \$4.75.

Basic Nutrition and Diet Therapy for Nurses, by Lillian Mowry. C. V. Mosby Co., St. Louis, 1962, pp. 264, \$3.25.

Soviet Medical Research Related to Human Stress, edited by William H. Fitzpatrick and Chester W. DeLong. U. S. Department of Health, Education and Welfare, Washington, 1961, pp. 121.

