

cerned with the problem of making our knowledge of nutrition an effective tool for improving human life and with discussing the benefits which laboratory experiments have shown can reasonably be expected from an optimal diet. Nutritional improvement of any population is a matter of foods, and Professor Sherman translates the previously discussed knowledge of nutrient requirements into the need for various food groups. Different methods of budgeting a good diet are presented for use in educational activities. Although improvement in individual food habits is primary for better nutrition, Professor Sherman considers national or governmental policies which may affect food consumption. The possibilities and responsibility of the government to improve the national diet are especially evident under present war conditions.

From his long experience in laboratory research on animal nutrition, Professor Sherman is unusually well qualified to interpret such research as to its significance for the benefits to human life to be expected from nutritional improvements. This he has done clearly and effectively in the final chapter, entitled "Scientific Critique of the 'Offer' of Higher Health and Longer Life." As Professor Sherman points out, there is no longer any doubt that certain diseases are due to shortages of normal nutrients, but it is more difficult to gain general understanding and acceptance of the "positive or constructive aspect of the new concept" of nutrition. The evidence for and meaning of the constructive aspect "which relates nutrition to superior health which we thought was attributable to heredity, or original good luck in chromosomal endowment, or to 'natural constitution'" are concisely presented. Professor Sherman has assembled an impressive amount of data to show the value of better than average nutrition and this book is recommended to all who want to know why it is important to eat the right kinds of foods even though they now enjoy good health.

DOROTHY G. WIEHL

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THE CONQUEST OF EPIDEMIC DISEASE¹

THE number of books on epidemiology published during the last decade is very limited and the history of this field has hardly been

¹Winslow, Charles-Edward A.: *THE CONQUEST OF EPIDEMIC DISEASE*, Princeton, Princeton University Press, 1943. 411 pp. \$4.50 cloth.

treated at all. While it is true that there is no scarcity of books treating particular contagious diseases from a historical point or view, either in the form of scientific monographs or in a more popular form, no writer seems, in modern time, to have written a book dealing with the evolution of the theories regarding the occurrence of epidemic disease. Professor Winslow's book will therefore be welcomed by students of epidemiology.

It covers the history of the "Great Plagues" from antiquity up to modern times and discusses particularly the history of the concept of infection. Three introductory chapters deal with the problem of human thought and the use of generally held concepts in primitive medicine. Professor Winslow finds that there are three main norms of human thought in this field, the Demonic theory, the "Wrath of God" theory, and what he calls the metaphysical theory, using this word as meaning the science of the supersensible. All three ideologies may still be found working today, at different intellectual levels of the population, he points out, and a more rigid scientific investigation may detect traces of all of them even in the same individual.

In the following chapters human endeavor to establish the cause of epidemic disease is treated. Hippocrates' "Air, Water and Places" is described and its importance discussed. After a discussion of Galen's contribution to this field follows a chapter on primitive concepts of contagion in which an interesting comparison is made between the medical philosophy of the Old and the New Testament. Plague is described as the "Great Teacher" and the early history of quarantine is given together with an extensive discussion of the earliest plague pamphlets. A very clear and penetrating study is made of Fracastorius' "De Contagione." Professor Winslow comes to the conclusion that Fracastorius thought of the "germ" "not as living organisms, but as chemical substances," a view somewhat different from the one held by Singer and Goodall. A description of Kirscher's work is interesting as it, in Professor Winslow's words, was: "the first really effective presentation of the theory that living organisms were the primary cause of disease." Professor Winslow's chapter on Sydenham and the later chapter on Pettenkofer must be judged from the particular angle from which the book is written. Professor Winslow's personal interest has been chiefly in the pragmatic aspect of epidemiology and as a pragmatic epidemiologist he has little use for the theories of Sydenham and Pettenkofer, and thus we find no mention of the modern, chiefly German, school of Geo-

medicine, which, particularly under the leadership of Zeiss, has revived the interest in this aspect of epidemiological theory.

Dr. Mead's "Discourse" on how to avoid a repetition of the Marseilles disaster in London is given in considerable detail. A chapter is devoted to yellow fever, dealing particularly with the work of Rush and Noah Webster. The importance of the sanitary awakening is emphasized in a special chapter and the work of the three great pioneer epidemiologists, Panum, Budd, and Snow, is analyzed. A following chapter is devoted to the work of Pasteur and Koch with regard to the theory of contagion. The "carrier" concept is discussed and a special chapter is devoted to insect transmission of disease.

The final chapter discusses Chapin's "Source and Modes of Infection" and Professor Winslow concludes that only in one respect have the studies of the last twenty years indicated a real modification of Chapin's viewpoint. This is in regard to the importance of aerial dissemination of infection.

Professor Winslow's book should prove useful to the medical student wanting a somewhat wider background for his studies in bacteriology and epidemiology than the average textbook will give him. The public health officer will also find much of interest to him here and the book might be of great use to him during his graduate studies.

ARNE BARKHUIS



MANUAL OF INDUSTRIAL HYGIENE¹

THE need for trained personnel to furnish industrial hygiene services has been greatly intensified by the war production program. Not only have many new physicians, engineers, and nurses been called into industrial service but many experienced personnel already in the field have had to cope with new problems as a result of the conversion of plants to war purposes. A *MANUAL OF INDUSTRIAL HYGIENE and Medical Service in War Industries* has been prepared, therefore, by the Division of Industrial Hygiene of the National Institute of Health to describe

¹*MANUAL OF INDUSTRIAL HYGIENE and Medical Service in War Industries*: Issued under the Auspices of the Committee on Industrial Medicine of the Division of Medical Sciences of the National Research Council. Prepared by the Division of Industrial Hygiene, National Institute of Health, United States Public Health Service. A Composite Book with 16 Contributors. Edited by William M. Gafafer, D.Sc. 508 pages with 20 illustrations. Philadelphia and London, W. B. Saunders Company, 1943. \$3.00.