

BOOK REVIEWS

This book is very easy to understand. It should present no burden even to the medical student. It will serve as a guide to those who wish to obtain practical advice in the management of a patient, without getting lost in physiology. The small amount of physiology present in the book is put clearly. The points made by the author in the introduction are fulfilled.

DER DIABETES MELLITUS ALS VOLKSKRANKHEIT UND SEINE BEZIEHUNG ZUR ERNAHRUNG. By Ernst-Günter Schenck and C. H. Mellinghoff. \$13.50, pp. 310, Dr. Dietrich Steinkopff Verlag, Darmstadt, Germany, 1960.

This book presents a statistical study of morbidity and mortality of diabetes, in and outside of Germany, and a review of nutritional factors which may contribute to the development of diabetes. The senior author leans heavily on the American studies of statistics of diabetes, especially those of Joslin and Wilkerson. For this reason, of more interest to us is what he has to say about diabetes statistics in Germany. Unfortunately, his data on incidence of diabetes in that country were obtained from statistics on death resulting from diabetes or from requests for special diets during the war. Such data do not compare favorably with those made available in the United States through our diabetes detection drives. Though of necessity not very reliable, the compilation of German statistical reports seems to indicate that diabetes morbidity and mortality vary greatly from one section of the country to another.

The question of diabetic diets in relation to degenerative complications of diabetes is discussed at length, but no conclusive evidence for or against the importance of nutritional factors in this area is presented. These uncertainties may possibly find their explanation in the anonymous replies to a questionnaire sent out by Parzran which reveal that scarcely 30 per cent of diabetic patients adhere to their prescribed diets. The decreased mortality from diabetes in Germany during the war is ascribed by the author to the use of diets which were low in fat and high in carbohydrate. It is of interest in this connection that fatalities among German diabetics during the war were due to infections in 38 per cent and to vascular complications in 35.6 per cent, while after the war, with a higher fat intake, fatalities from cardiac, vascular and renal complications of diabetes rose to 60 per cent of all diabetes fatalities. For these reasons the author advocates diets which supply three to four times more calories derived from carbohydrates than those derived from fat.

With increases in carbohydrate intake during the war the need for insulin also increased. Thus, doubling the carbohydrate intake from 125 to 250 gm. daily resulted in a 50 to 100 per cent increase in insulin requirement. To some extent this increased need for insulin could be alleviated by a reduction in fat intake.

The effects of starvation on the course of diabetes were observed during the war in countries under German occupation, such as Poland, France, Belgium, etc., in which starvation was deliberately imposed on the native populations. They consisted

of spontaneous hypoglycemic convulsions and high sensitivity to even small doses of insulin. The reports on starvation in those countries mention fatal hypoglycemia unresponsive to glucose and severe posthypoglycemic brain damage often terminating in death. From the reviewed book, it appears that German writers became acquainted with such manifestations of starvation in diabetes some two years after the War (1947).

During the war Germany was cut off from meat supplies from South America, and of necessity had to switch to porcine pancreases for its production of insulin. It is of interest that a substantially better recovery of the hormone was obtained from pork than from beef or calf pancreases.

From the presented considerations the author concludes that there is a need for a socio-hygienic, prophylactic as well as a therapeutic, approach to diabetes. To satisfy this need, there exist in Germany counseling organizations which offer their cooperation to diabetic patients in hospitals and clinics.

The second part of the book is devoted to a lengthy discussion of diets used in diabetes, but there are no data to indicate the importance of nutritional factors in relation to diabetes morbidity and mortality or to the degenerative complications of diabetes. The dissertation abounds, however, in statements to which American workers in the field may take exception. For instance, the junior author states that diabetics should avoid white bread and eat chiefly dark bread because of its slow absorption from the gut (p. 228). Cakes are of course prohibited entirely, since they are made with white flour and sugar; oranges should be taken only as an exception because of their high sugar content, while beer should never be drunk because it contains 4 to 5 per cent of readily absorbable carbohydrates.

One also finds in this book such assertions as: that smoking may precipitate the onset of diabetes, that juvenile diabetics do not become overweight even on high calorie diets, that liver damage contributes to the development of vascular complications, and that thiamine deficiency may be the cause of insulin resistance. One seldom finds such an array of unwarranted statements in a scientific dissertation.

INSULIN, *British Medical Bulletin*. \$3.25, Volume 16, Number 3, published by the Medical Department, The British Council, 65 Davies Street, London W.1, September 1960.

The September 1960 number of the *British Medical Bulletin* is devoted to a collection of succinct and authoritative essays on the chemistry of insulin and the physiology and biochemistry of insulin action. The problems of insulin and noninsulin hypoglycemic agents in practice are also discussed. The authors, who include the most distinguished British workers in the field, have produced models of precise and easy-reading scientific writing. Unlike many similar ventures, this collection seems to have gone from manuscript to publication without the excessive delay that might have robbed it of its value as an account of the current status of the field. It is without exaggeration an invaluable addition to our literature on insulin.