



## EDITORIALS

### **THE DIABETES DETECTION CAMPAIGN OF 1952**

In its early years, the activities of the American Diabetes Association were directed almost exclusively to the medical profession. Its direct responsibilities to the diabetic population, and to the public in general, had been defined in the Constitution but it was not until 1948 that major steps were taken to fulfill its stated objectives in this field. It was in that year that the Association launched its magazine for diabetics, the A. D. A. FORECAST.

At the same time, a special committee was appointed "to increase public information about diabetes and to aid in the campaign to bring unknown diabetics under treatment through increasing the circulation of the A. D. A. FORECAST." It was thought that publicity might be more effective if promoted during that week in December, 1948 in which the American Medical Association held its midyear meeting. The Committee on Diabetes Week, later named the Committee on Diabetes Detection, was formed under the energetic leadership of Doctor Howard F. Root to stimulate nation-wide interest in diabetes. It secured the cooperation of local Diabetes Associations, county and state medical societies, and numerous individuals throughout the country. Although promotion of the magazine had been an initial consideration, this became merely a part of a broad objective to discover undiagnosed and neglected diabetics and to enable them to secure effective treatment. The Diabetes Detection Drive, initiated in Diabetes Week, became the opening phase of our year-round campaign.

Renewed efforts have been made annually. After a second year of distinctive achievement, Doctor Root turned over leadership to Doctor John A. Reed in 1950. Each year has seen the work of the Committee develop to a greater degree of effectiveness. The name was changed in 1951 to indicate that it is concerned with

both diabetes detection and education. It is impossible to give an accurate appraisal of the results but unquestionably two benefits have been gained. Diabetics unaware of the disorder have been enabled to secure early diagnosis and to protect themselves from disability and even disaster. Known diabetics who have neglected treatment have returned to medical supervision. In addition to the service rendered to individuals, there has been gained more widespread knowledge about diabetes.

The Campaign of 1952 will open with Diabetes Week, November 16-22. Plans have been made by Doctor Reed and his Committee to make even greater efforts than in the past. Information of other details has been placed in the hands of the leaders in each district and community. They are seeking workers among the medical profession and others interested in diabetes. The members of the American Diabetes Association have a special responsibility to make the campaign a success. This is a challenge and an opportunity to further the welfare of diabetics.

### **INTERNATIONAL MEETINGS**

Since the war, there has been an increase in the number of international medical and scientific organizations. In the past summer, for example, there took place no less than four such assemblies or conferences of interest to those concerned with diabetes.

The International Diabetes Federation met in The Netherlands, July 7-12. It represented the first Congress of the Federation, formed three years ago to coordinate the activities of the various national associations which have developed to promote the welfare of diabetics. The program, presented partly in English and partly in French, included scientific sessions and also meetings at which physicians and lay workers discussed matters of

particular interest to patients and laymen. In addition to the exchange of information in the formal program, the opportunity for personal acquaintance of individuals with a common interest in diabetes was particularly valuable.

The International Dietetic Congress met in Amsterdam concurrently, and on one day joint meetings were held. The advantage of a close relationship between dietitians and physicians in the management of diabetes is recognized locally and internationally.

The Ciba Foundation conducted a conference in London from June 30 to July 3. This institution was formed by the Ciba Company in 1947 for the promotion of international cooperation in medical and chemical research. One of its functions is to bring together groups of scientists active in similar fields of research. Charles H. Best was chairman of the recent conference which dealt with endocrine inter-relationships in carbohydrate metabolism. It was attended by approximate forty-five scientists from Europe and North America.

A symposium on experimental diabetes and its relationship to the clinical disease was presented at Leyden, The Netherlands, during the four-day period immediately following the Congress of the International Diabetes Federation. It was organized by the Council for the Coordination of International Congresses of Medical Sciences, (now named The Council of International Organizations of Medical Sciences), established under the joint auspices of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the World Health Organization. F. G. Young, of Cambridge, was chairman.

The papers and the informal discussions presented at the London and Leyden conferences will be published in book form. The papers presented at the International Diabetes Congress will also be published in full or in abstract form. As a result of these four international meetings, there will thus be enrichment of the literature relating to diabetes.

#### **FAT AND BODY COMPOSITION**

Within recent years, as a result of the introduction of new technics, there has been a shift in emphasis from metabolic balance studies to investigations of the total composition of the body. From such studies we are beginning to accumulate knowledge of the fat content of the normal body and the distortions in this component which occur in diseased states.

Brozek and Keys<sup>1</sup> have investigated the total fat content of normal men by means of the measurement of the specific gravity of the body. With subjects whose body weights were within 10 per cent of the standard weight, they found that the specific gravity decreased with age. Thus, in the process of aging, a shift occurs in the partition of the body components with an increase in the fat content. This can be detected in an increase in skin folds and a decrease in the difference between the circumference of the chest and abdomen.

In two recent communications from a group at the Harvard Medical School and the Peter Bent Brigham Hospital<sup>2,3</sup> the fat content of the body has been determined indirectly through the estimation of the total body water content by the deuterium oxide dilution technique. These studies reveal significant variations in the total water content of the body throughout the life span. There is a trend toward high values at birth and in infancy, with a fall to the adult level at about 4 years of age where it remains until the fourth decade followed by a further decline in older age. At about the age of 16 years, a significant sex difference appears; the male body has a 17 per cent greater water content than the female body.

Since there is an inverse relationship between the fractions of body water and body fat, it is apparent again that the fat component of the body increases with age, and after puberty is greater in the female than in the male body. At any given age, the normal partition of water and fat may be markedly affected by diseased states and the degree of distortion may determine the toleration, on the one hand, to dehydration and, on the other hand, to semi-starvation.

Although the estimation of total body fat by the measurement of the specific gravity has revealed important basic information, it is not feasible for clinical use. However, the determination of the total body water by the deuterium oxide dilution technic eventually may have a clinical application.

ROSEMARY MURPHY, M.D.

<sup>1</sup> Brozek, J. and A. Keys: Age changes of total body fat in normal adult men. *Federation Proc.* 11:18-19, March 1952.

<sup>2</sup> Edelman, I. S. et al: Further observations on total body water I. Normal values throughout the life span. *Surg., Gynec. & Obst.* 95:1-12, July 1952.

<sup>3</sup> Moore, F. D. et al: Further observations on total body water II. Changes of body composition in disease. *Surg., Gynec. & Obst.* 95:155-180, August 1952.