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 metabloism. 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 Congres 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 discsusions 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[1] 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[2, 3] 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.

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

[2] 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.

[3] 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.