

a healthy individual, which would seem to support the above conclusion, as well as being an indication to operate rather than the opposite.

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MEDICINE

UNDER THE CHARGE OF F. G. FINLEY, H. A. LAFLEUR AND W. F. HAMILTON.

DIABETES. *The Practitioner* (London).

The July number of *The Practitioner* is termed "Special Diabetes Number," as fully one hundred and sixty pages are devoted to a brief but withal comprehensive discussion of many phases of the important subject of Diabetes. One finds among the names of those who contribute to the discussion, W. D. Halliburton, J. Rose Bradford, I. Walker Hall, Sir Lauder Brunton, Malcolm Morris and R. T. Williamson—household names in medicine. These, with the names of others, speak for the high order of the matter contributed and their papers bring together the results of specialists and thus "reflect the exact state of contemporary knowledge and opinion."

Halliburton reviews the teaching on carbohydrate metabolism and discusses the two chief theories as to the destination of liver glycogen, which may be formed even while the animal is on a purely *pro tem* diet—and which is increased by glycerin and ammonium carbonate. These two theories are: (1) that the glycogen is converted during life by the agency of a ferment into sugar, that this leaves the liver of the hepatic veins and is thus distributed for utilization in the tissues; (2) that glycogen never justifies its name, but is transformed into substances other than sugar. Between these extreme views the opinion prevalent among physiologists is of the nature of a compromise. Halliburton says that the liver is no doubt able to convert part of its glycogen into fat, but most of its glycogen is regarded as leaving the liver as sugar (dextrose). The kind of sugar leading to an increase of hepatic glycogen is *par excellence* dextrose, and those belonging to the monosaccharide family, of which tarvulose is the next in importance to dextrose.

An upset of this glycogenic function is the common cause of diabetes, and consists in either an increased formation of sugar from glycogen or to a diminished formation of glycogen from the sugar of the portal vein. "The organism certainly is unable to burn, that is to utilize sugar."

But diabetes is not a single disease as it can be produced in animals by many and diverse experimental methods. The forms thus induced differ from one another in some important points.