

I have entered at some length into the question of acidosis and its bearings on food treatment in Diabetes in my work on "Carbohydrate Metabolism and Diabetes," and at pages 117-122 will be found what I have said upon the subject.

Mal-application of carbohydrate food within the system constitutes the essential error existing in diabetes, and what is wanted to be effected by treatment is to bring conditions back into line for it to be again turned to proper account. In a state of health, carbohydrate is taken and can be followed to the seat of absorption belonging to the alimentary canal. Here, however, it becomes lost to view. Neither the blood nor the urine affords evidence of the absorption that manifestly occurs. Physiologists say, notwithstanding they are confronted with this fact, that passage of the absorbed sugar into the blood occurs, but that its removal by the tissues prevents its coming into view. This constitutes an assumption which is not only unsupported, but is opposed by experimental evidence. In former times, when it was held that a tangible disappearance of sugar took place in the passage of the blood from the arteries to the veins, some show of foundation presented itself for the entrance of sugar into the circulation, but now that it is admitted that no such disappearance is to be recognised, the entrance could only lead to presence in the blood and outflow with the urine, which represents the state of things existing in diabetes. For sugar to reach the circulation without showing itself in the urine, it would be necessary for a capacity to exist for effecting its instantaneous removal, and that no such capacity is present is made evident by the experimental injection of minimum quantities intravenously.

To keep sugar out of the urine, it must be kept out of the circulation, and any hypothesis explanatory of the procedure connected with the physiological application of carbohydrate must be based upon this principle. To regard it as falling within the natural course of events that the food carbohydrate should pass through the circulation to the tissues in the form of sugar is tantamount to taking the pathological as representative of the physiological state, seeing that it is just such passage which is productive of diabetes.

To escape from diabetes, the food carbohydrate must not be allowed to reach the general circulation in the form of sugar. This is the basis to proceed upon, and the view that has been enunciated in these lectures fits in with it. It is contended that the absorbed sugar becomes dealt with at the seat of absorption, and, in company with the products derived from protein digestion, is, by the bioplasmic action attending lymphocyte