

Unfortunately, in some cases of diabetes, comprising chiefly spare subjects in the aged, and at some time all young subjects of the disease, carbohydrates can not be used without their total escape in the urine. In such cases the use of carbohydrate foods in any considerable quantity is distinctly injurious to the patient in more ways than one. In the first place, if these cases are put upon carbohydrates, in time they develop a decidedly decreased capacity for assimilating starch and sugar in all forms, because the cells concerned in sugar consumption are functionally weak and impaired, and their overwork leads with certainty to total impairment of function. In addition to this, the increased percentage of sugar in the circulation—hyperglycemia—which always occurs under such circumstances, can not but be responsible for at least some of the many secondary complications of the disease; and in the aged especially, I might mention the damage so often resulting to the cardiac muscle, which so suddenly terminates the lives of so many aged diabetics. Again, if carbohydrates be liberally supplied in severe cases, they are not only of little or no use to the patient, but they take the place of other foods which would be valuable in sustaining nutrition. The picture must be familiar to all of you, to see diabetics who tell you that they can not get enough to eat, and are weak and spare. They eat and stuff themselves, yet grow daily weaker and more emaciated because their food largely escapes as waste unutilized by the organism. While the stomach is overloaded the tissues are starved. We may, therefore, safely accept the proposition that the use of carbohydrate foods in the severe grades of diabetes surely proves injurious, if, indeed, not dangerous, and hence we must look to other sources to supply the deficiency made necessary by the withdrawal of this class of foods.

If we turn to the proteid group with the view of making this the exclusive source of supply, we are met by the serious fact that it is an absolute impossibility to introduce enough nutritive value in proteid to compensate the daily loss of material and force in the economy. Noorden points out that "1,000 grams of meat and six eggs furnish at most but 1,500 calories; a deficit of at least 1,000 calories remains with its injurious consequences," if we attempt to diet these cases exclusively on proteids, and yet an exclusive meat diet has among us enthusiastic advocates. It