

is clear, however, that we can only increase the ratio of proteids with safety to certain limits, after which we must look to other sources to supply the deficiency resulting from withdrawal of the carbohydrates. It is precisely in this direction that the greatest advance has been made in the dietetic treatment of diabetes in recent times. By the substitution largely of fat we obtain a closely allied group of foods, chemically speaking, which represent a value in units nearly three times greater, and eminently suitable for our purposes. The French school was the first to recognize the value of the use of fats in these cases, and this principle has been incorporated in the French practice for a considerable time past. More recently it has been adopted in Germany and with much success. It has already been shown that the calorie value of fats is over 9 units per gram, while that of proteid and carbohydrates is only 4 units. It so happens in diabetes, for the most part, that there is a remarkable tolerance for fats; indeed, many of these patients have a special liking for fatty foods. In moderate grades of diabetes no difficulty will be encountered in substituting fats for a partial withdrawal of carbohydrates. These cases will, under such management, lose their glycosuria, gain in weight and strength, and progress most satisfactorily. The only question in this connection calling for serious consideration is that of the entire substitution of proteid and fats for carbohydrates in those graver forms of the disease in which all the carbohydrates taken into the system are immediately eliminated, or still more serious when even larger amounts of carbohydrates are excreted than are taken into the organism, as is sometimes the case. The argument that diabetic patients will not assimilate large quantities of fats has been repeatedly disproved, both experimentally and in actual practice, so that the converse of this may be accepted as a rule to which there are few exceptions. Indeed, as much as 150 grams of fat have been given—representing 1,350 calories—and with results most satisfactory. It has been demonstrated through Weintraud's experiments and observations upon metabolism, that the entire substitution of fats for carbohydrates effectually prevents the wasting of the body albumin and conserves the weight and strength of the patient.

There has existed a somewhat prevalent idea—although an