glucose tolerance test as an index of hepatic function and only under special circumstances is it of use as an adjunct to the oral method."

Soskin emphasized the fundamental role of the liver in the regulation of the blood sugar level and in its influence on the nature of the sugar tolerance blood sugar curve. Others have given special attention to the use of such tests in the study of various endocrine disorders affecting carbohydrate metabolism. In addition to the glucose tolerance test, the insulin tolerance test, the glucose-insulin tolerance test, and the insulin-followed-by-glucose tolerance test have been investigated.[8] Each of these procedures can contribute to the study of carbohydrate metabolism, but it cannot be claimed with certainty that they can be applied with advantage in routine clinical practice. In fact, the claim that any pattern of blood sugar curve is specific for a disorder of the liver or any other disorder may be challenged.

To a large extent these adaptations of the tolerance test still represent technics of research. On the other hand, the confirmation of the diagnosis of diabetes or the exclusion of this condition by observation of the blood sugar curve is usually a simple matter, whether the glucose is given by mouth or by vein. For this limited purpose the oral glucose tolerance test is still a procedure of definite value in selected cases.

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LABORATORY INVESTIGATION OF OBESITY

The importance of obesity in relation to diabetes has long been recognized. Information first came from a variety of clinical observations, including the common occurrence of diabetes in obese individuals, and the improvement in the diabetic state, even apparent remission, appearing after reduction of excess weight. Statistical studies have strengthened the evidence for this relationship. In a recent analysis of the weight of persons developing diabetes after the age of 40, it was found that approximately 60 per cent had previously been markedly overweight, and an additional 25 per cent had been moderately overweight. Only 15 per cent did not give a history of obesity preceding diabetes.[1]

In spite of the clinical significance of obesity, the condition has been studied experimentally only to a limited extent. Nevertheless, information of a highly significant nature has been secured. Every stock and poultry raiser knows that animals can be fattened for the market by limited activity and liberal feeding. Ingle used this plan in the experimental production of obesity in rats.[2] He found that tremendous adiposity could be induced, a rat with restricted activities attaining a weight more than twice that of a normal active rat.

Long's report in this issue concerning obesity produced in rats and in monkeys is of unusual interest.[3] As a result of bilateral lesions in the hypothalamus made by electrolysis, the animals acquired a voracious appetite resulting in the rapid development of extreme obesity. In certain cases, he noted progressive impairment of carbohydrate tolerance. He showed also that these animals became vulnerable to removal of a part of the pancreas. A partial pancreatectomy could be tolerated by the ordinary rat but was followed by glycosuria when the production of a brain lesion caused the development of obestity. These observations recall experiments conducted by Frederick M. Allen more than 30 years ago.[4] He found that a partial pancreatectomy in dogs, which had no apparent effect when they were eating in the usual way, was followed by diabetes when the dogs were fattened by overfeeding.

The recent reports of hereditary obesity in mice represent a new approach to the problem. A strain has been produced with many adult mice weighing 38 to 56 Gm., compared with the average weight of non-obese mice, ranging from 16 to 26 Gm.[5] In the limited number of cases in which tests could be made, it was found that the obese mice showed glycosuria and hyperglycemia indicating diabetes.[6] The amount of sugar in the urine

was in the neighborhood of 3 per cent; the blood sugar was usually above 200, as compared with the blood sugar level of 110 in the case of non-obese mice. In obese diabetic mice, ulcerative lesions of the skin were frequently seen. The obese rats studied by Long showed in many instances evidence of renal and vascular disease. Thus experimental obesity with diabetes tends to manifest complications similar to those seen in human patients.

In summary, the experimental studies of obesity show that while fattening depends on a caloric intake in excess of the energy expenditure of the individual, this may depend not merely on deliberate indulgence but also on a disorder of appetite resulting from an acquired or inherited disturbance in the central nervous system. They further strengthen the evidence that obesity predisposes to diabetes.

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DIABETES *LOOKS AHEAD*

With the birth of DIABETES as a new medical journal, the lives of its parents now come to a close.

In his Foreword, Dr. Joslin has pointed out the value of the annual *Proceedings* and the quarterly *Diabetes Abstracts,* which was firmly established during their ten years of existence. For the success of these publications, the Association is indebted to a number of its members; three individuals deserve special recognition. The *Proceedings* volumes were prepared by the Committee on Scientific Publications, headed for its first six years by Dr. I. Arthur Mirsky. The development of *Diabetes Abstracts* was especially the work of Dr. Franklin B. Peck, who was succeeded in 1949 by Dr. William R. Kirtley. Credit is due these men and their co-workers for the high reputation of the two publications.

Both of the predecessors of DIABETES were limited mainly to the Association's membership. The new publication will be available to all who are interested in the subject. It will continue to present abstracts of papers on diabetes and a selection of the papers presented at the Annual Meeting. In addition it will provide the Association with new opportunities for service to the medical profession.

Diabetes is a disorder which claims more than usual attention from practicing physicians, partly because it affects so many people, partly because practice with diabetic patients covers the entire field of medicine. The disease furthermore presents an unusual challenge to the investigator. In spite of the effectiveness of present day treatment there exists the hope that means may be found of bringing about reversal of the disorder, and also prevention of its complications.

The Journal will endeavor to fulfill the aims of the Association as far as they include dissemination of knowledge of diabetes, the promotion and maintenance of high standards of treatment, and the stimulation of investigation. Its contents will include material of interest to general practitioners and scientists, internists and specialists in various other fields. It will at all times keep as its primary goal the welfare of the diabetic patient.