

Johann Conrad Brunner

1653-1723

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Johann Conrad Brunner, known to every medical student for his description of the duodenal glands, should be appreciated also for his enquiring research into the role of the pancreas. While a practising physician in Diessenhofen, a small town at the northern border of Switzerland, he observed the effects of excision of the pancreas to settle the question whether this organ was essential for life.

He reported his experiences in two publications. In the first, "*Experimenta nova circa Pancreas, accedit Diatribe de Lympha et genuino Pancreatis usu*," Amstelaedami 1683, he noted in the sixth experiment, performed on July 19, 1679 (?) that frequent urination, immoderate drinking and a voracious appetite followed the extirpation. Also in the seventh experiment, dated March 23, 1683, Brunner comments on the intensive thirst of the animal.

In the second report, "*De Experimentis circa Pancreas novis confirmatis. Miscellanea curiosa sive Ephemeridum Medico*" — Physicarum Germanicarum Acad. Imp. Leopold, Natur. Curios. Dec. II Annus VII 1688, Norimbergae 1689, he described in full detail, accompanied by an excellent drawing, the technic of a pancreatectomy performed on a neighbor's hunting dog on Oct. 6, 1685. On the following day abundant urination was noted, on October 9 increasing appetite, but on October 12 the

dog escaped and returned to his own master who refused to return him to the experimenting physician. For a long time Brunner tried in vain to get hold of the dog, and six months passed before he caught the animal again. A post-mortem examination showed the pancreatectomy to be incomplete.

The repeated observations of polyuria, polydipsia and polyphagia indicated that Johann Conrad Brunner had performed the first recorded subtotal pancreatectomy leading to a Sandmeyer-type of diabetes. Brunner, however, who later in 1686 became professor of anatomy and physiology at the University of Heidelberg, did not connect the symptoms with diabetes. More than 200 years later, von Mering and Minkowski also excised the pancreas of a dog in order to investigate pancreatic function. Again they met the same cardinal symptoms which were similar to those Minkowski had seen in diabetic patients. The fame of Johann Conrad Brunner rests not on his work on the pancreas, but on his description of the duodenal glands which bear his name.

REFERENCE

Ole Christian Zimmermann: Die erste Beschreibung von Symptomen des experimentellen Pankreas-Diabetes durch den Schweizer Johann Conrad Brunner (1653-1723), *Gesnerus* 2: 109-30, 1945.

BOOK REVIEWS

REDUCE AND STAY REDUCED. By Norman Jolliffe, M.D. \$3.50, pp. 264, Simon and Schuster, Inc., New York, 1957.

This book, written primarily for the reducer, has gone through seven reprintings of its first edition in 1952. The present second edition has been modified to incorporate recent concepts for the prevention of atherosclerosis so that the diets contain less than 30 per cent of the calories from fat. In addition, low sodium and emergency liquid diets, and simplified diagrams have been added.

The first part of the volume concerns itself with the

"Appestat" concept of the appetite and hunger regulating mechanism, tests for obesity, indications for reducing and not reducing, and the basic physiology and mathematics of weight regulation and control. Since this volume is not intended as a thesis on hunger regulation, it would be inappropriate to review it as such. The "Appestat" theory is certainly an oversimplification of the present knowledge of the short and long term regulatory factors of food intake, satiety, and weight. The phrase is, nevertheless, attractive and has become established in both scientific and popular literature. In this work it has been used deftly by its originator to supply a logical concept to the reducer so that he may obtain a better understanding of his problem. The second part