Michael Somogyi, Ph.D.
1883–1971

Michael Somogyi was born in Reinersdorf, Austria-Hungary, 7 March 1883. At age 16 he enrolled at the University of Budapest and supported himself through to graduation with a degree in chemical engineering. He spent the following year there as Assistant in Biochemistry. The romantic books he had read about America induced him to come to the United States, but the only employment he could find was driving a horse and buggy for a German physician in New York and later working in a Cincinnati rope factory for $7.00 a week. He then sent back to Budapest for letters of introduction and returned to New York City, where he was an Assistant in Biochemistry at Cornell University Medical College from 1906–1908. He then returned to Budapest, where he was head chemist in the Municipal Laboratory for over a decade, including several agonizing years during World War I when he was put in charge of feeding the destitute. He received his Ph.D. at the University of Budapest in 1914. His doctoral dissertation was on catalytic hydrogenation.

In 1922, Dr. Somogyi was invited by a former colleague at Cornell University, P. A. Shaffer, to return to the United States, where he became an Instructor in Biological Chemistry at the Washington University School of Medicine in St. Louis. In 1926 he was appointed the first biochemist at The Jewish Hospital of St. Louis, a position held until he retired in 1957. In 1969 he suffered a massive stroke from which he never recovered. He died on 21 July 1971.

In 1922, while on the faculty of Washington University School of Medicine, in teamwork with Drs. Shaffer and E. A. Doisy, Dr. Somogyi was instrumental in working out the method for the preparing of insulin; the method is used to this day all over the world for the commercial production of insulin. The first child diabetic to be treated with insulin in the United States was an 18-month-old baby boy in the St. Louis Children’s Hospital in early October, 1922; the insulin used was prepared by this trio of researchers.

During Dr. Somogyi’s years at The Jewish Hospital of St. Louis, he consulted with his physician associates about the care of over 5,000 patients with diabetes mellitus. In 1949, at the ACS meeting in Atlantic City, N. J., he stated that many diabetic patients were receiving such large doses of insulin that they were “actually victims of chronic insulin poisoning.” As a result of this one paper, Dr. Somogyi received letters from all over the world requesting help. In addition to criticizing excessive doses of insulin, Dr. Somogyi also believed that many diabetic patients were on insulin therapy when they could be better managed with a proper diet and weight loss. He believed that insulin injection is inappropriate therapy for overweight diabetics. He discovered that the glucose tolerance of most diabetics improves with weight loss, often to the point where they become aglycosuric and can continue so on proper diet. He predicted, when oral hypoglycemic agents became available, that they would eventually be discarded as useless and even harmful.

Dr. Michael Somogyi published more than 70 papers on various aspects of clinical chemistry, including the preparation and purification of insulin, the measurement (in Somogyi units) and significance of diastase (amylose), fermentation, measurements of blood potassium, the determination of glucose in blood and urine, the determination of glycojen, the determination of ketone bodies in blood and urine, and the physiology of action of insulin and other hormones. Dr. Somogyi’s last three major articles appeared in the February 1959 American Journal of Medicine: “Quantitative Relationship Between Insulin Dosage and the Amount of Carbohydrates Utilized in Diabetic Persons,” “Exacerbation of Diabetes by Excess Insulin Action,” and “Diabetogenic Effect of Hyperinsulinism.” The effect discussed in this last paper is now known around the world as the “Somogyi effect,” which can be summarized in his phrase “hypoglycemia begets hyperglycemia.”

Dr. Somogyi was honored in 1914 by The Royal Academy of Sciences of Budapest for research in food chemistry, and he was honored by AACC with the Ernst Bischoff Award (1953) and the Donald D. Van Slyke Award (1964). He was on the Advisory Board of Clinical Chemistry from its beginning.

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