SYNTONOGRAM

Vol. 15, No. 6 September 1952

DIET IS MAJOR FACTOR IN POLIO PREVENTION

Dr. Sandler, as recognized authority in nutrition research, was the first doctor to transmit polio to the rabbit, believed to be immune, a test he completed in 1938.

His theory is two -fold - - - he believes he has found a major cause for polio in humans, and he believes that preventive measures are simple, easy, and quickly applicable.

Dr. Sandler believes that the major cause is the low blood sugar in the human body, caused, paradoxically as it may sound, by eating too much sweets and starchy food.

The preventive measures? Cut out foods containing sugars and starches.

In 24 hours, according to Dr. Sandler, the body can build up sufficient resistance to the polio virus to prevent disease. The diet would have to continue, of course.

"I'm willing to state without reserve that such a diet, strictly observed, can build up in 24 hours time a resistance in the human body sufficiently strong to combat the disease successfully. The answer is simply in maintaining a normal blood sugar."

Here is Dr. Sandler's program:

1. Eliminate from the diet sugar and foods containing sugar, such as: soft drinks; fruit juices (except tomato juice); ice cream; cakes, pastries, pies; candies; canned and preserved fruits. (Saccharin may be substituted for sugar.)
2. Cut down the consumption of starchy foods, such as: Bread, rolls, pancakes; potatoes, rice; corn, cereals and grits.
3. Substitute for such starch foods and starchy vegetables, the following: Tomatoes, string beans, cucumbers, greens lettuce, turnips, carrots, red beets, cabbage, onions and soybeans.
4. Do not eat fresh fruits or melons more than once a day, and then only in small quantities.
5. Eat more protective meals a day, advises Dr. Sandler, and avoid exertion and fatigue because they are known to be associated with low blood sugar content. Avoid swimming in cold water. Rest as much as possible.

Eat three substantial meals a day, advises Dr. Sandler, and avoid exertion and fatigue because they are known to be associated with low blood sugar content. Avoid swimming in cold water. Rest as much as possible.

Dr. Sandler suggests that the recommended diet be followed until the polio danger season officially is declared over by local health authorities.

"One of the puzzling characteristics of polio, D. Sandler said, "Has been its prevalence in warm weather. Many people cut down on protective protein foods - - - such as meat, fish and poultry - - - because of a mistaken idea that a 'Light' diet is better for them in warm weather. And they increase consumption of cooling foods and beverages - - - most of them heavily sweetened. It is

this increase in consumption of sugar that produces a lowering of the body's resistance to the polio virus and other diseases."

This is the basis for the Sandler theories:

A normal blood sugar content of 100 milligrams in each 100 cubic centimeters of blood is necessary to maintain resistance to bodily infection. Any appreciable lowering of this blood sugar content (say, to from 75to 55 mg.) can lower the barriers and permit bodily invasion by the virus of polio.

Dr. Sandler offers as the scientific basis for these statements research done with rabbits and monkeys. This research he began at Willard Parker Hospital in New York during the metropolitan area's record polio outbreak in 1931.

Authorities had noted that rabbits normally are resistant to polio virus. Dr. Sandler, observing that studies showed that in rabbits the blood sugar never dropped below 100mg, began pondering the far-differing case of the rhesus monkey, a notoriously easy prey to poliomyelitis. In monkeys, blood sugar content frequently was observed to fall to abnormally low levels, around 50 mgt.

Furthermore, observations on humans who recovered from polio revealed low blood sugar - - - hypoglycemia is the technical term - - - to be frequently present. From these - - - rabbits, monkeys and humans - - - Dr. Sandler first deducted that low blood sugar could be an important factor in susceptibility to the polio virus.

The job was to check this deduction through experiments in which the blood sugar content of rabbits would be lowered and their susceptibility to polio again tested.

In the laboratories of the Morrisania Hospital in New York 10 years ago, Dr. Sandler began a series of experiments in which insulin was injected in rabbits to lower the blood sugar for periods of four to six hours. Once the blood sugar content had been thus dropped, the doctor attempted again to transmit the polio virus to the normally highly resistant animals. The rabbits then fell easily victims.

The animals showed evidence of polio infection within eight to 10 hours after intracerebral inoculation with the virus, indicating rapid spread of the disease during the period of hypoglycemia. (Dr. Sandler reported on these studies in the American Journal of Pathology in January, 1941.) Some rabbits died within 14 hours after infections.

Characteristic nerve-cell destruction with paralysis was in evidence.

Chronic hypoglycemia (low blood sugar) is a common disorder in childhood and adolescence, Dr. Sandler points out, and is readily influenced by diet as well as exertion. This he believes, serves to explain the high incidence of polio in younger age groups, a well as the frequently reported occurrence of the disease following strenuous physical exertion.

Dr. Benjamin O. Sandler received his degree in medicine at New York University in 1931. He interned at Morrisania City Hospital in New York City and later was on the staff there as well as

Polyclinic and Montefiore Hospitals in New York City. From July 1941, until February, 1947, he was in the U.S. Naval medical corps, attaining the rank of Commander.

Dr. W.I. Davis

Palace Bldg.
Tulsa, Oklahoma