

MEDICINE

Sex Hormones for Diabetes

► THE POSSIBILITY of curing some cases of diabetes that are not too severe is suggested by experiments reported by Dr. Bernardo A. Houssay, Nobel Prize winner and director of the Institute of Biology and Experimental Medicine, Buenos Aires, in the *BRITISH MEDICAL JOURNAL* (Sept. 1).

Female sex hormones might be the medicine that produces the cure, it appears from Dr. Houssay's experiments with rats.

Insulin, of course, is standard treatment for diabetics which keeps them alive and well. This is the hormone from the islets of Langerhans in the pancreas. In diabetes these islet tissues have degenerated and no longer produce enough insulin to handle starches and sugars. But insulin is not a cure. It is replacement treatment, which must be taken continuously throughout life in most cases of diabetes.

The female hormone treatment, if it works in humans as it does in rats, would constitute a cure because it would stimulate any existing islets of Langerhans to produce more insulin and would in addition stimulate production of new insulin-producing cells in the pancreas.

This actually happened in the rats Dr. Houssay experimented on.

Clue to the possible female hormone treatment of diabetes came when he removed part but not all of the pancreas of the experimental rats. The females got diabetes less often than the males. Further experiments showed this was due to a protecting action of the ovaries and the hormones they produce.

"It is difficult to say yet how far this action occurs in other species and I would rather not discuss now whether or not it occurs in man," Dr. Houssay states in his report.

But he goes on to say: "The probability of preventing some forms of experimental diabetes, and even of curing a certain proportion of cases of not too severe diabetes certainly exists."

He believes it worth while to continue this line of investigation using the female hormones over long periods, perhaps combined with insulin, in order to prevent or treat other types of experimental diabetes "and eventually human diabetes."

Other substances which have no female hormone effect but which do stimulate growth of insulin-producing islet cells should be looked for, he stated.

Science News Letter, October 20, 1951

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METEOROLOGY

No Rain-Making Curbs

► THE \$3,000,000 rain-making industry will be allowed to operate and grow for the next two years without control or licensing, if a bill just introduced into Congress by nine Senators passes.

The bill, result of hearings on rain-making held earlier in this Congressional session, steers clear of all control measures, although the American Meteorological Society has declared that licensing by the Federal government is necessary now.

The bill would set up a temporary committee, to last two years, to coordinate all information about rain-making and to authorize research and experiments by four

government agencies, including the Weather Bureau. Sitting on the committee would be the Secretaries of Defense, Agriculture, Interior and Commerce and five public members. The committee will be expected to come up with suggestions for permanent legislation. Earlier bills, now discarded, had suggested a weather control commission with powers similar to those held by the Atomic Energy Commission.


Meantime, the American Meteorological Society has called for Federal legislation "to insure a reasonable degree of control of operations designed to modify the weather and to protect the public from unqualified operators." The weathermen also believe that control would be necessary in order to carry out large-scale experimentation in rain-making.

In presenting its opinion, the A. M. S. pointed out that it had already recorded its belief that "there is little evidence and no present scientific basis for the belief that man is able to exercise" large-scale control over the weather.

Sponsors of the rain-making bill just introduced are pointing it toward passage next year. Meantime, the Weather Bureau is planning to make a survey of rain-making in 17 western states.

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