

These results lead the scientists to believe that streptomycin checks the growth of the tuberculosis germs, thus suppressing the symptoms of the disease, but that it does not actually kill the germs and in that sense cure the disease.

A few patients with tuberculosis of the skin were given streptomycin. Not enough time has elapsed to be sure of the permanency of the results in these patients, but in three of them inflamed lymph glands that were discharging pus cleared up promptly.

Streptomycin, obtained from a mold-like germ that lives in the soil, was discovered by Dr. Selman A. Waksman and associates of Rutgers University and the New Jersey Agricultural Experiment Station. His finding that the germ-chem-

ical was a powerful weapon against tuberculosis germs in the test tube led to its trials by the Mayo scientists.

When it showed itself much less toxic and more powerful than any of the sulfone drugs previously used in treatment of experimental tuberculosis of guinea pigs, trials on human patients were started. In these Drs. Feldman and Hinshaw had the assistance of Dr. Karl Pfuete, of Mineral Springs Sanatorium, and of colleagues at the Mayo Clinic, including Drs. Herman Moersch, Arthur Olsen, Harry Wood, Wallace Herrell, Fordyce Heilman, Dorothy Heilman, Robert Glover, R. L. J. Kennedy, L. F. Greene, W. G. Braasch, E. N. Cook, P. A. O'Leary, E. T. Ceder, L. A. Brunsting and F. A. Figi.

Science News Letter, September 29, 1945

MEDICINE

Blood Pressure Chemical

High blood pressure believed due to lack of essential substance like lack of insulin in diabetes. Search for practical replacement medicine.

► PATIENTS with serious high blood pressure, known medically as essential hypertension, may in future be taking regular doses of a new medicine to keep the blood pressure at safe levels just as diabetics today take regular doses of insulin to stay healthy.

This blood-pressure-lowering chemical is not yet ready for general use, but steps leading to its development have been taken by Drs. Arthur Grollman and Tinsley R. Harrison of the Southwestern Medical College in Dallas, Tex.

The incretory substance, as Dr. Grollman terms it, was first discovered in the kidneys. Medical men long ago believed the kidneys played a part in the development of high blood pressure, but the idea that these organs which act primarily as filters and waste handlers produce a chemical essential for maintaining normal blood pressure is relatively new. High blood pressure results, Dr. Grollman believes, when these organs are damaged so that they cannot produce this essential substance.

The substitution treatment, when it is ready for use, will help patients of all ages because it corrects the fundamental defect that causes the high blood pressure, replacing the substance which the patient's own kidneys fail to produce.

Right now Dr. Grollman is searching for a way to make this hormone generally available to the million or more essen-

tial hypertension patients in the nation. When made by extracting it from kidneys, 100 pounds of hog kidneys are needed to supply one day's dose for one patient.

Since the patients would have to go on taking the extract daily throughout life, this is obviously not a practical source.

The effective agent may also be prepared from the liver oils of certain fishes. Supplies of these fish liver oils are also somewhat limited and are needed as sources of vitamin A and vitamin D. (It is not the vitamins but another chemical in the oil which lowers blood pressure.) Certain plant oils may also ultimately be a source from which the compound may be made, Dr. Grollman stated in a report to the third annual hormone conference at Mont Tremblant, Canada.

If patients rush to the drug store to get one of the fish liver oils now marketed for their vitamin content, they are doomed to disappointment, Dr. Grollman warned. These oils do not contain the chemical in enough amount, if they contain it at all, to lower blood pressure.

Even with an abundant supply, patients would soon find it difficult to take nearly two ounces of oil daily, which is what would be required. So Dr. Grollman hopes the chemical itself can be extracted and put into a pill or some pleasant form of medicine.

Science News Letter, September 29, 1945

CHEMISTRY

Some Dried Vegetables Keep Better Than Others

► DEHYDRATED corn and sweet potatoes keep well, scientists of the U. S. Department of Agriculture found in studies of dehydration and prolonged storage of several common vegetables. Along with dehydrated beets and green beans, these four vegetables keep better than dehydrated white potatoes. But carrots, housewives should note, become poor or inedible sooner than any of these vegetables.

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