

MEDICINE

New Use Found For Pectin

Patients with such diseases as tuberculosis and diabetes may be helped by pectin's ability to prolong antibiotic and other drug action in the body.

► PATIENTS with tuberculosis, diabetes, other gland disorders and asthma may in future be helped by a discovery of Drs. Henry Welch, Harold L. Hirsh and S. Ross Taggart of the penicillin division, U.S. Food and Drug Administration and the District of Columbia Health Department.

Pectin, they found, can slow down the rate at which penicillin, streptomycin and other drugs escape from the body. This means fewer "shots" to disturb sick patients and greater economy in the use of the drugs.

The discovery that pectin can be used in this way was announced at the Washington meeting of the syphilis study section of the National Institute of Health.

Pectin is the fruit chemical housewives all over the country are counting on right now to stiffen the jellies they are making. Just before Pearl Harbor it was suggested as a substitute for blood to fight shock in war wounded. Its physical characteristics were considered enough like those of blood to make it suitable for replacing the fluid lost in hemorrhage, and it was found to be harmless when injected into human veins.

Dr. Welch and associates turned to pectin in a search for a chemical to keep penicillin in the body longer than a few hours. Oil and wax have been used with penicillin to slow the mold remedy's escape from the body. But these substances sometimes make the "shots" of penicillin painful, sometimes cause lumps and sterile abscesses, and sometimes lead to the patient's becoming sensitized to the drug so that he cannot take any more of it.

Pectin slows penicillin's escape from the body about the same as the oil and wax but, unlike these chemicals, it does not cause pain, abscesses or any of the other troublesome complications. It has been used in penicillin treatment of 350 patients without any unpleasant reactions.

Streptomycin's escape from the body is slowed even more effectively than penicillin's by use of pectin. The anti-germ action of a one-half gram dose

can be maintained for two days (48 hours). At present, six times this amount of streptomycin must be used each day (24 hours) to treat TB patients. Cost of the drug is one limiting factor in its wider use. But if only a twelfth as much need be used, the cost can be reduced to an almost insignificant amount. Trial of streptomycin-in-pectin for tuberculosis treatment is about to start at Freedman's Hospital in Washington.

Drugs such as adrenalin and ephedrine which constrict small blood vessels also have their effect prolonged when they are combined with pectin. Study of pectin's effect on these drugs has so far been made only in laboratory animals, but they suggest great future benefit to asthma patients.

Sex hormones are now injected in oil

MEDICINE

Mayo-Like Center Founded

New Mexico foundation will have as its major interest expansion of the Lovelace clinic's cancer service and research in aviation medicine.

► A MEDICAL foundation supported by a medical clinic, like the famed Mayo Foundation and Clinic, has been established in Albuquerque, N. Mex. As a result, that city is expected to become the medical center of the Southwest.

One of the founders is Dr. W. Randolph Lovelace, II, surgeon famed for his high-altitude studies which included a 40,200-foot parachute jump to test the bail-out oxygen bottle for B-29's.

His uncles, Dr. William Randolph Lovelace, and Dr. Edgar T. Lassetter, are other founders of the new medical center. These two men 25 years ago founded the Lovelace Clinic. With their nephew, they have now given the physical assets of the clinic, valued at \$1,000,000, and its good will and name to the new foundation, which will be known as the Lovelace Foundation for Medical Education and Research. The clinic will operate henceforth as a voluntary association of salaried physicians under a

board of governors. Its income in excess of operating expenses will go to support the foundation.

Study of the apparent beneficial effects of Albuquerque's climate on arthritis, sinusitis and diseases of the chest, expansion of the clinic's cancer detection and treatment service, and research in aviation medicine will be major interests of the foundation.

A basic function of the foundation will be the awarding of fellowships enabling young doctors to take post-graduate training at the clinic in preparation for recognition as qualified specialists. The elder Dr. Lovelace is a member of the group that founded one of the organizations for certifying medical specialists, the American Board of Surgery. A trustee of the new foundation is dean of the University of Colorado Medical School, Dr. Ward Darling. President is Floyd B. Odlum of New York and Indio, Calif.

Science News Letter, October 4, 1947

Science News Letter, October 4, 1947