

cially brain surgery; and blood grouping globulins essential in blood typing procedures before transfusions.

First aim of the program was to develop a concentrated protein for treatment of shock that would be lighter weight and less bulky than blood plasma. The mobile nature of Naval and Marine operations and the need to conserve space in all types of ships, planes and land vehicles, dictated this need. It was filled when, in 1940, Dr. Cohn perfected a process for separating the protein fractions of blood plasma and Capt. Lloyd R. Newhouser, of the Navy Medical Corps, developed a satisfactory dispensing package for the albumin which was to replace plasma in many cases.

When, after months of painstaking tests of the albumin as a shock-reliever, the Navy finally let contracts to manufacturers for processing it, a foresighted clause was included directing them to store at low temperatures the plasma fractions which remained after the albumin was removed. As a result, the various by-products of albumin processing were available as soon as their usefulness was established.

Cooperating with the Navy in the program which has developed these valuable products for Navy, Army and, now, civilian use, are the National Research Council and the Committee on Medical Research of the OSRD.

Science News Letter, June 24, 1944

PUBLIC HEALTH

Penicillin for Syphilis

Large-scale treatment undertaken for disease in the early stages at more than 50 rapid treatment centers. Already successful for gonorrhea.

► **LARGE-SCALE** use of penicillin in the treatment of early syphilis is being undertaken by the U. S. Public Health Service and a number of state health departments, Medical Director J. R. Heller, Jr., Chief of the Public Health Service Venereal Disease Division, announced.

Selected patients with early syphilis will receive penicillin in rapid treatment centers, of which there are more than 50 in the United States. Thirty-six centers in 18 states are already participating in the penicillin program. The drug has already been successfully used at these centers for treating gonorrhea cases which did not respond to sulfa drugs.

Studies of the effectiveness of penicillin in the treatment of syphilis will be conducted by the Public Health Service in cooperation with the National Research Council.

"This program of penicillin therapy for syphilis is a research as well as a treatment program," said Dr. Heller. "If these studies prove that penicillin is as effective as everyone hopes, we will be armed with a powerful new weapon in the national fight against syphilis."

"The effectiveness of penicillin in the treatment of syphilis has not been fully evaluated," Dr. Heller pointed out. "However, evidence of its possibilities, following the original treatment of syphilis patients by PHS physicians at Staten Island in 1943, is sufficient to warrant its

large-scale use in the interest of public health.

"It is of interest that about one-third of all the syphilis patients admitted to rapid treatment centers are infected also with gonorrhea. Penicillin has already proved its value in treating gonorrhea. If it should prove equally as effective in treating syphilis it would be possible, for the first time in medical history, to treat patients with both these venereal diseases with a single drug."

Science News Letter, June 24, 1944

CHEMISTRY

Fruit Juice Concentrated By New Method

► **CITRUS FRUIT** juice may be concentrated to about one-fourth of its normal volume to save space in storage and shipping by a new method developed by Dr. A. L. Stahl of the University of Florida Agricultural Experiment Station. Housewives, by adding three quarts of water to one quart of the concentrate, will have a gallon of normal juice.

In the method developed by Dr. Stahl, the juices of mature fruit are extracted by reaming, then placed in a constant freezer and frozen to a slush consistency. The water in the juice freezes, while the minerals and other dissolved solids and other valuable parts remain in a semi-liquid state. The partly frozen mix-

ture is then placed in a centrifuge revolving at moderate speed. The action separates the juice from the icy part of the slush.

The process is still in an experimental stage. A pilot plant is to be set up by the State Citrus Commission and the college station to develop commercial production methods.

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