

Try To Stunt Growth of T B Germ

Medicine

Reducing Glycerin in Body New Method of Attack

PIONEER attempts to stunt the growth of the tuberculosis germ in the body by cutting down the supply of growth-promoting food, glycerin, were reported by Drs. Esmond R. Long and Arthur J. Vorwald of Chicago to the National Tuberculosis Association.

Glycerin is regularly used to promote growth of the human type of tuberculosis germs when these germs are grown outside the body on artificial culture media. Up to a certain limit the amount of growth is directly proportional to the amount of glycerin present. Glycerin is also present in the blood and tissues of the human body, although the exact amounts are not known.

The Chicago investigators found that by increasing the amount of glycerin in the body of animals infected with tuberculosis, they could greatly increase the growth of the germs in the body. Attempts at decreasing the concentration of glycerin apparently produced a moderate reduction of the number of tuberculosis germs and of the extent of the disease.

Because of lack of adequate chemical methods, the investigators are not sure whether the apparent reduction was actually the result of removal of free glycerin from the body, as planned.

Suffocate It

EXPERIMENTS indicating that suffocation and starvation are weapons with which the body fights the invading tuberculosis germ, were reported by Dr. R. O. Loebel, E. Schorr, and H. B. Richardson of New York.

These investigators studied the respiration of tuberculosis germs and the amount of oxygen the germs need in order to live and to reproduce. They also investigated the kinds of food material needed by the germs.

From their studies, they believe that the clumps of cells called tubercles

which the body forms around the invading germs of tuberculosis would effectively hold the germs in check in part, at least, by cutting down their supply of oxygen and of food which would amount to suffocating and starving them out.

Race

THAT a search for differences in body structure and function between negroes and whites may reveal the explanation for the striking difference between the two races in their response to infection with tuberculosis, was suggested by Dr. Max Pinner of Detroit.

The fact that tuberculosis kills many more negroes than white people in this country cannot be entirely explained on the ground of living conditions, crowding, lack of hygienic care and cleanliness, because, as Dr. Pinner pointed out, the Jewish community in

lower New York, with living conditions similar to those of the Negro community, has the lowest specific death rate from tuberculosis in New York City.

The Negro's reaction to tuberculosis seems to be characterized by a high degree of susceptibility and a low degree of immunity, Dr. Pinner stated. The reasons for this may be found in racial characteristics of an anatomical or functional nature.

Science News-Letter, May 17, 1930

Bread in the Desert

A PLANT with flowers but no leaves, that gets most of its food by tapping the roots of other plants and grows to be ten or twenty times as heavy as its host, yet without causing the latter any apparent injury, was described to the National Academy of Sciences by Walter T. Swingle of the U. S. Department of Agriculture. It has the further distinction of being good for human food, and of maturing a good crop on as little as three inches of rain a year—believed to be a record for food plants possible in dry regions.

It was originally discovered about eighty years ago, in the desert near the California-Mexico boundary, but until a little over a year ago remained a great rarity. Now, however, it has been rediscovered in great abundance, and has received its first thorough botanical study. Its botanical name is *Ammobroma sonora*.

The part used for food is the thick, fleshy root, in which the plant stores water and a reserve of food material. The original discoverers found the Papago Indians using it for food, and when they tried it roasted over a fire they found it very good. Mr. Swingle suggested that inasmuch as no other useful plant can be induced to grow in this arid region, it might be worth while for the white man to follow the lead of the Indian on a larger scale.

Botany

Science News-Letter, May 17, 1930

The Answer Is In This Issue

Why are *negroes* more prone to *tuberculosis* than whites? p. 306—What *leafless* plant is good for *food*? p. 306—How many *organic* compounds have been *described* physically and chemically? p. 307—What *anesthetic* is most efficient applied to *eyeball*? p. 307—Does *iodine* corrode metal? p. 307—What *inventors* hold over five hundred *patents* each? p. 308—Who invented the *watt-hour* meter? p. 308—Under what circumstances were the "*Java-Man*" bones found? p. 310—How can *food* be kept at *high* temperatures? p. 312—*Where* are scientists hunting for traces of the *earliest* Americans? p. 313—What are the *difficulties* of high *magnification* photography? p. 314—What are the *Dutch* doing to combat *alcoholism*? p. 316—*Where* can one see remains of twelve fossil forests? p. 317—What means are used to *combat* the old-world *locust*? p. 319.



SCIENCE NEWS-LETTER, The Weekly Summary of Current Science. Published by Science Service, Inc., the Institution for the Popularization of Science organized under the auspices of the National Academy of Sciences, the National Research Council and the American Association for the Advancement of Science.

Edited by Watson Davis.

Publication Office, 1918 Harford Ave., Baltimore, Md. Editorial and Executive Office, 21st and B Sts., N. W., Washington, D. C. Address

all communications to Washington, D. C. Cable address: Scienserv, Washington.

Entered as second class matter October 1, 1926, at the postoffice at Baltimore, Md., under the act of March 3, 1879. Established in mimeographed form March 13, 1922. Title registered as trade-mark, U. S. Patent Office.

Subscription rate—\$5.00 a year postpaid, 15 cents a copy. Ten or more copies to same address, 5 cents a copy. Special reduced subscription rates are available to members of the American Association for the Advancement of Science.

In requesting change of address, please give old as well as new address.

Advertising rates furnished on application.

Copyright, 1930, by Science Service, Inc. Reproduction of any portion of the SCIENCE NEWS-LETTER is strictly prohibited since it is distributed for personal, school, club or library use only. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service, details and samples of which will gladly be sent on request.