

MEDICINE

Antibiotic from Bananas

➤ BANANA skins, which have been called nature's germ-proof wrapper, may owe their power of stopping germ penetration to an anti-germ chemical like penicillin and streptomycin. And a banana antibiotic may prove active against fungus infections as well as against germs of the bacteria class.

Preliminary tests indicating this were reported by four U. S. Department of Agriculture researchers, W. E. Scott, Hazel H. McKay, P. S. Schaffer and Thomas D. Fontaine, at the symposium on antibiotics held in Washington under the auspices of the U. S. National Institutes of Health.

Antibiotic substances from sweet potatoes were also announced by a team of Agriculture researchers headed by B. H. Bruckner and including all but Mr. Scott of the banana investigators.

Bananas apparently produce two antibiotics. One, active against fungi, including

specifically the fungus causing wilt disease of tomato plants, has been obtained from the pulp and skin of both green and ripe bananas. The other, apparently formed during the ripening process, is active against bacteria and is found in the pulp and skin of ripe bananas only.

The sweet potato plant also produces two antibiotics, one of which has activity against fungi. Among the bacteria against which it was tested is a non-disease-producing relative of the tuberculosis germ, called *Mycobacterium phlei*. The sweet potato antibiotic seems not only to stop this germ's growth but actually to kill it.

Work on both banana and sweet potato anti-germ chemicals is in very preliminary stages. Whether any of them will become useful medicines depends on tests still to be made.

Science News Letter, April 23, 1949

Blood Test for Cancer

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babies. The fast growth in these conditions has given reactions similar to cancer in other attempted blood tests for the disease.

It will take only a few minutes of your time and only about 20 cents of your money for the test itself. Of course, if your doctor is doing it he will be giving you a general examination at the same time, to see whether you have any other ailments, and you will be paying him his regular fee for this service. The cheapness of the test itself and the fact that a technician can run 20 of them in a day are among the factors that make it suitable for mass screening at cancer detection centers.

The test is based on a disturbance in the way the body handles protein. What causes the cancer is still to be determined, but Dr.

Huggins thinks scientists can get ahead much faster now on finding the basic cause of cancer. When that is done, methods of prevention and better treatments may follow.

Researches by many scientists, going back to 1932, on proteins in the blood serum of cancer patients, gave important clues and background knowledge which led Dr. Huggins and his colleagues to the test just announced.

Dr. Huggins is already famous for his discovery of a sex hormone method for controlling prostate gland cancer. He reported his latest discovery to the American Cancer Society on the eve of his departure to deliver the presidential address before the meeting of the American Association for Cancer Research in Detroit.

His research was supported last year by an American Cancer Society grant of almost \$75,000 and will be further sup-

ported by another \$89,600 grant this coming year.

Science News Letter, April 23, 1949

On This Week's Cover

➤ THE amount of light produced by tiny radio dial bulbs is determined and recorded in a spherical chamber, developed by Westinghouse, some 200,000 times larger in volume than the bulb. When the bulb is placed, the sphere is closed. Its white insides is a perfect diffusing surface at any point where the light strikes.

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