

MEDICINE

Drug May Aid Arthritics

Aureomycin may replace gold salts in the treatment of rheumatoid arthritis if it proves as effective on humans as it has in animal experiments.

► A DRUG that has the color of gold may come to replace the precious metal itself in treatment of a widespread human disease, rheumatoid arthritis.

Animal experiments suggesting this were reported by Dr. William C. Kuzell of Stanford University at the International Congress on Rheumatic Diseases in New York.

The golden yellow drug that proved as good as gold in treating arthritis in rats is the famous antibiotic, aureomycin. Rats and mice get a joint disease similar to human rheumatism when they are infected with germs known as pleuro-pneumonia-like organisms. This polyarthritis may be prevented or cured by gold salts which have been used with some degree of success in the rheumatoid arthritis of man.

Gold salts, however, are potentially poisonous. This has limited their usefulness in treating human arthritics. So Dr. Kuzell and associates, Grace M. Gardner, DeLorez M. Fairley and Helen B. Tripi, searched for a drug that would be as efficacious as gold salts and safer.

"The only compound tested which gave results equal to those with gold salts was aureomycin," Dr. Kuzell declared.

When given either by injection, by stomach tube or mixed with food, aureomycin prevented the development of any arthritis in the rats. In animals where the arthritis was allowed to develop aureomycin effected

a cure within 48 hours.

Penicillin, first of the antibiotic drugs discovered, made the infection in the rats worse. Chloromycetin and citrinin, two other antibiotics, did not alter it. Streptomycin showed some beneficial effect but of an order much less than that of gold or aureomycin.

Whether aureomycin will help humans with arthritis is not yet known. But since it is a safe drug to give and since the new and promising Kendall's compound E is not yet available for trial, it seems likely that aureomycin will soon be tried.

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BOTANY

Carob for Stock-Feeding

► LIVESTOCK on ranches in the dry Southwest may one of these days be munching a feedstuff mentioned in the Bible: "the husks that the swine did eat," of the Parable of the Prodigal Son. Actually, a more accurate translation would have been "pods," for the tree is a member of the legume or bean family, and its nutritious though tough fruits look like dried lima-bean pods that have turned to deep, rich brown.

In the Mediterranean lands, where it has been grown for centuries, the tree is known as "carob." Carob pods are rich in sugar, with a taste suggesting coarse dates. If the out-of-luck Prodigal Son "was fain to fill

his belly" with them, as the King James version puts it, he might have found them monotonous after a while, but he wouldn't have starved.

Carob trees do well in dry climates, and they will live and bear crops with no fertilization and only chancy water supplies, but they thrive better and are more profitable if they are treated more kindly and given their share of irrigation water. They require a fairly warm climate—about equivalent to that required for citrus-fruit culture, though they will stand a little more cold.

A consistent campaign to obtain wider planting, for stock-feeding purposes, has been undertaken by a San Diego physician, Dr. Walter Rittenhouse. At his suggestion Dr. J. Eliot Coit, an agricultural botanist at the University of California at Los Angeles, has written a pamphlet giving all essential facts about the tree and its culture. Dr. Rittenhouse is distributing this publication. He states that he was stimulated to start his campaign by a suggestion in a Nature Ramblings column, a feature in the SCIENCE NEWS LETTER, which advocated substituting permanent tree plantings for erosion-encouraging rowcrops, where practicable.

An important recent development has been the discovery that carob can be grafted on the roots of a related native American shrub or small tree, the mesquite, common in the Southwest. This was reported to Dr. Rittenhouse by Lloyd H. Moss of Santa Barbara. The two species are so nearly similar in appearance that an early Spanish missionary in the Mexican state of Sonora, listing the plants he found there, set down mesquite as "gueriba," or carob.

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Beeswax has been called a natural plastic, and probably one of the first plastics used by man.

The federal government's income from its cigarette tax of seven cents a package yielded about \$1,200,000,000 in 1948.



NEW USE FOR BIBLICAL CAROB—This fine, bushy-topped seedling carob serves as a shade tree on an avenue in West Los Angeles.