MEDICINE

Polio Virus Isolated

Crystals of a chemical, protein in nature, may be agent causing infantile paralysis. If so, first step in obtaining a successful vaccine may be accomplished.

➤ A FIRST STEP in attempts to produce a successful vaccine for protecting against infantile paralysis may have been taken in research reported by Dr. E. Racker, formerly of Anderson Institute and the University of Minnesota and now at Harlem Hospital, New York (*Science,* Oct. 16).

Dr. Racker has obtained crystals of a chemical, protein in nature, which might be the infantile paralysis virus. The crystalline protein material was obtained from the brains of mice infected with infantile paralysis. When injected into brains of other mice, the protein crystals produced typical paralytic symptoms of the disease in 14 to 72 hours.

"As encouraging as these data are," Dr. Racker emphasizes, "It must be stressed that there is no evidence and no claim that the crystalline material obtained by this procedure represents the poliomyelitis virus. The possibility that the virus is adsorbed on the protein cannot be excluded."

Whether or not the crystals are the virus, the method of obtaining the material may give scientists a means of getting a more highly purified virus than they have had before. Purification of the infantile paralysis virus has been one of the great aims of scientists fighting this disease. The goal has been hard to reach because the infantile paralysis virus is one of the two smallest viruses known.

With a pure or highly purified, that is, nearly pure virus, scientists could do many more experiments looking for ways of controlling the disease, because they could inoculate more or cheaper animals than monkeys. And they might be able to develop a successful vaccine because with pure virus they could make the vaccine potent enough to be effective. Virus-containing material available at present has so little virus in it in relation to other things that the amount which can safely be given does not contain enough virus to be effective.

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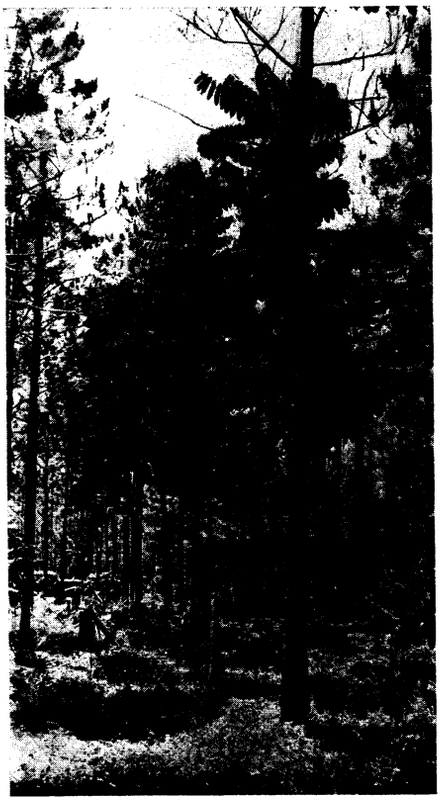

FOR FUTURE FLEETS — These African mahogany trees are growing very well in Florida where they are catching up on the pines in the foreground which are twice their age.

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NUTRITION

Insects Replace Steak?

➤ ANT EGGS, grasshoppers, crickets and snails might serve very well as nourishing substitutes for beefsteak, Dr. Russell M. Wilder and Thomas E. Keys, of the Mayo Clinic, suggest (*Journal, American Medical Association,* Oct. 17).

Dr. Wilder does not suggest that we immediately start eating these particular foods. With the gigantic problem of feeding hundreds of millions of starving people after the war in mind, however, he and Mr. Keys, reference librarian at the Mayo Clinic, have dug into the records to find all the things that might nourish man and have in the past, although now overlooked or scorned as food.

The Bushmen consider termite eggs appetizing, and the records show that both crickets and grasshoppers were eaten by Indians of our western plains when other food supplies ran out. A large white grub found in the pith of palm trees serves as food in the West Indies and is said to taste, when toasted, like roasted chestnuts.

We may not be driven to eating quite such strange foods, but we should, Dr. Wilder urges, follow the example of primitive man in eating the organ meats as well as the muscle. This means liver, kidneys, brain and the like instead of merely steaks, chops and roasts.

"The dog food manufactured by American packers," he declares, "containing much of what they designate as offals, is demonstrably superior in nutritive value to most of the meat they can for human food.

"Milk tops all lists of foods of high nutritious qualities, but wasteful practice enormously restricts its use for human food," Dr. Wilder states.

Look for whey-cola as a between meals thirst quencher and pick-up, if carbonated beverage manufacturers follow his advice. Whey, left when cheese is made contains some of the protein, some of the minerals and most of the vitamins of milk. None of it should be thrown away, Dr. Wilder declares, adding that in Germany no milk products may be thrown away and they may not even be used for feed without license.

We should grow more oats, Dr. Wilder urges. They can grow much farther north than wheat and are somewhat more nourishing. Guava, an unfamiliar fruit, has a high vitamin C content and it also should be cultivated more extensively. Soybeans, peanuts and lentils are other nourishing foods that have until recently been neglected.

Mistakes of famine sufferers after the last war which we must avoid today are turning to grass as a food and trying to make flour go farther by adding bran, chaff and straw.

"Grass serves poorly as human food," Dr. Wilder states. His comment on adding bran to flour is that "Nutrients diluted with large amounts of indigestible material are lost; they cannot be absorbed effectively."

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