

MEDICINE

Cause of Pellagra Disease Is Not Yet Found

HINTING at the existence of another food factor, perhaps another vitamin, and upsetting the prevalent theory as to the cause and prevention of both human pellagra and canine black tongue disease, Drs. C. P. Rhoads and D. K. Miller of Rockefeller Institute for Medical Research present evidence that vitamin G is not the factor.

They infer "some factor as yet unidentified" is the preventive of the black tongue disease in dogs, not vitamin G, or B₂, as it is also called. Because black tongue is like the pellagra disease that has at times taken heavy death and illness toll among ill-nourished people, particularly in the southern states, the reported investigations are expected to reopen the question as to whether vitamin G deserves the credit for preventing and curing the human disease.

Yeast, lean meat and some other foods cure and hold in check both the human and dog diseases. No change in treatment is suggested but science is asked to look for another food factor to praise for preventing at least the dog disease.

The discovery (*Science*, Feb. 8), was made by producing the disease in dogs by feeding them a diet shown to contain considerable amounts of vitamin G.

Black tongue disease of dogs is generally considered to be the canine counterpart of pellagra and studies to determine the pellagra-preventing ability of foods are made on dogs that have black tongue disease.

The cause of black tongue disease, the Rockefeller scientists point out, has been held in turn to be an infectious agent, insufficient amount of carotin in the diet and inadequate amount of iron in the diet. The most widely held theory is that advanced by the late Dr. Joseph Goldberger of the U. S. Public Health Service. He and associates were able to cure and prevent black tongue disease in dogs and pellagra in humans by feeding certain foods rich in their content of the vitamin B complex. From these and other investigations it was suggested that the preventive and curative substance was vitamin B₂ or G.

Now Drs. Miller and Rhoads find

that while autoclaved yeast extract, which contains vitamin B₂ or G, will cure or prevent black tongue, it is not the vitamin in the extract that does the job. In the first place, they found that the extract does not contain much of the vitamin and in the second place they could not produce the disease by feeding the dogs a diet devoid of the vitamin. Finally, they found that young rats will grow at a normal rate while on a black-tongue-producing diet. This, they state, is conclusive proof that the black-tongue-producing diet contains the vitamin in considerable amounts. Consequently it cannot be the vitamin which prevents the disease but must be some other factor.

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MINING-AVIATION

The Airplane a Boon To Wilderness Mines

HOW the airplane cuts through space and time to speed mining operations and save lives in isolated wilderness regions, was described at a symposium on aerial transportation in mining held by the American Institute of Mining and Metallurgical Engineers meeting.

In Alaska an entire 1,000 pound Diesel engine, food and fuel were sent by air in eight working days to a mining camp where a trip of four months was necessary by horses and wagon, said C. W. Poy, mining engineer of Valdez, Alaska. Everything, even the knock-down engine, was sent to earth by parachutes without injury.

Robert L. Deane, Idaho mining engineer, declared aviation is a boon to mining in that state because of the mountainous character of the country.

Since 1929, when there were six landing fields in the state, the number has now grown to 72, he said. On one mining project a normal three-day trip by dog-team is now replaced by a 30-minute air "hop."

For prompt treating of the sick and injured the airplane truly is a life-saver, said Mr. Deane. At one location patients had to be carried 22 miles on skis from



APPRAISED EVIDENCE

Dr. E. H. Sellards, University of Texas, whose name appeared by error under the photograph of Prof. J. E. Pearce of the same university in the Science News Letter of February 2, 1935. Dr. Sellards appraised the geologic evidence on ancient man in Texas at a site recently discovered by Prof. Pearce.

a 9,500 foot summit and then had 105 miles to go to reach a hospital.

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