

MEDICINE

Vitamin C May Be Cure and Preventive of Lead Poisoning

Oranges and Cabbages May Aid Disease That Affects 1,000,000 or More American Industrial Workers

VITAMIN C, from oranges, cabbages and other fruits and vegetables, may be both the long-sought cure and preventive of lead poisoning, industrial disease which threatens 1,000,000 or more American workers.

Apparent cures by the vitamin treatment of a score of patients suffering with chronic lead poisoning have been achieved by Prof. Harry N. Holmes and Dr. Edward J. Amberg and Kathryn Campbell, of Oberlin College (*Science*, April 7).

Spongy, bleeding gums of workers exposed to lead hazard gave the scientists their first clue to the new vitamin C treatment. Scurvy caused bad gums, also. Vitamin C cures and prevents scurvy. Therefore they used vitamin C in treating lead poisoning. It worked.

Four house-painters who had used the treatment unknowingly for years were discovered later by Dr. Holmes and his colleagues. By eating a diet unusually rich in this vitamin, they had apparently protected themselves from lead poisoning for years. Here was unexpected long time confirmation of the discovery.

Half of a group of 34 patients showing lead poisoning were given daily 100 mg of synthetic vitamin C in tablet form, but no extra calcium, for several weeks. With practically all of them, the Oberlin scientists report, there was a marked gain in vigor, color of skin, cheerfulness, blood picture, appetite and ability to sleep well. The other half of the group continued their previous treatment with calcium gluconate to drive toxic lead into the bones and supplemented this with 100 mg. of vitamin C daily.

"They gained in health, but not so well as the 17 men given vitamin C alone," Dr. Holmes and associates report.

"The conclusion, supported by test tube experiments," the scientists state, "is that vitamin C reacts with toxic lead ions to form a poorly ionized and much less toxic compound. Therefore lead destroys this vitamin, so necessary to buoyant health, while generous vitamin C supplements to the diet remove the lead from the field of action."

Men exposed to the lead hazard are

advised to include in their diet plenty of such rich sources of vitamin C as tomatoes (fresh or canned), raw cabbage, oranges or grapefruit, raw spinach (or even cooked, in very little water), raw turnips, green peppers and cantaloupe. Or they may take 50 milligrams in a vitamin C tablet as an addition to the diet.

Science News Letter, April 22, 1939

MEDICINE

Sulfapyridine Shortens Pneumonia in Children

THE NEW drug sulfapyridine apparently shortens the course of pneumonia by three or four days when used in treating infants and children.

Six Cincinnati physicians report on the effect of the drug on the pneumonias of infancy and childhood after a trial period at the Children's and the Cincinnati General Hospitals, Cincinnati (*Journal, American Medical Association*, April 15).

Of 70 small pneumonia patients, half were given sulfapyridine and the others were used as controls. It was demonstrated that the fall in temperature and the clinical recovery were significantly earlier in the sulfapyridine group than in the control group.

The optimum dosage needs further study, and the series of cases was too small to permit an evaluation of the effects of sulfapyridine in preventing the complications of pneumonia, according to the six authors of the article.

They are: Drs. Armine T. Wilson, Arthur H. Spreen, Merlin L. Cooper, Frank E. Stevenson, A. Graeme Mitchell and Glenn E. Cullen.

Science News Letter, April 22, 1939

CHEMISTRY

Synthesis of Vitamin B₆ Accomplished in Laboratory

VITAMIN B₆ has now been completely synthesized in the chemical laboratory, Drs. Stanton A. Harris and Karl Folkers, of Merck and Company's Research Laboratories, report (*Science*).

The vitamin which Drs. Harris and Folkers have built up from chemicals occurs naturally in yeast, rice polish and other whole grains, liver and certain other foodstuffs. This part of the vitamin B complex is known as the rat anti-dermatitis or rat antiacrodynia factor because rats that do not get enough of it in their diet develop skin diseases.

Science News Letter, April 22, 1939



DAWN OF THE NORTH

That is the English meaning of the name, *Aurora Borealis*. There have been some fine displays of these weird, flaring electrical discharges in the upper air during the past few months. It is to be doubted, however, if a better camera recording has been made recently in the United States than this picture by R. A. Seymour of Newberry, Mich.