



WHERE TO LOOK

This map will aid you in identifying the various members in this month's stellar ballet. Mercury is hard to see because it is so close to the sun. Look low in the west just after sunset. From about Feb. 23 on for a few evenings you will be able to see it with bright Venus, Jupiter, Mars and Saturn. Uppermost will be Uranus, but you will need the aid of a telescope to see it. On Feb. 20 you can see a conjunction of the glorious Venus and Jupiter; they will be just a degree apart at sunset.

PHYSIOLOGY—PSYCHIATRY

Lack of the B Vitamins May Cause Nervous Breakdown

Fearfulness and Jittery Activity Found To Be Early Signs of Developing Pellagra; Permits Prevention

NERVOUS breakdowns which transform strong, courageous men into weak, frightened creatures and drive over-tired women into constant, jittery activity are sometimes due to lack of the B vitamins, Drs. J. P. Frostig, of the University of California, and T. D. Spies, of the University of Cincinnati and Hillman Hospital, Birmingham, Ala., have discovered.

Discovery of the nerve-shattering effect of a diet lacking in these vitamins indicates that faulty diet widespread in a population may affect not only its health and strength but may break down its morale. It also provides a chemical approach to at least one group of nervous breakdowns.

The nervous symptoms which appear when the B vitamins are lacking in the diet give doctors the first signs by which they may diagnose pellagra, Drs. Frostig and Spies state. (*American Journal of Medical Sciences*, February.)

The nervous signs appear in patients who have no other symptoms of pellagra

and who might therefore be labeled neurotic or neurasthenic.

Doctors have long known that pellagra affects the nerves. Many pellagra patients in the past ended their days in insane asylums. The nervous symptoms which foretell an impending attack of pellagra, however, and which link vitamin lack with breakdown of morale, have apparently never before been noted as a sign of vitamin deficiency.

Regardless of what type of personality the patients normally have, when they begin to get pellagra, they all develop the same characteristics. They are restless, excitable, and easily frightened. Noises make them jump, odors bother them more than usual. They are tired but cannot sleep and are too "fidgety" to rest. They feel depressed and constantly expect some harm to befall them or their families. A brawny coal miner who liked to engage in prize fights said:

"I'm scared to death. If I see two men fighting with their fists, it seems to me that I will pass out."

Either of three parts of the vitamin originally known as B cures the condition. Chemically, these three B vitamins are known as thiamin, cocarboxylase, and nicotinic acid. They are all found in fresh meat, fresh vegetables, eggs, milk and yeast. When the nervous patients were given a dose of one of the three vitamins, they felt better within an hour, and within 24 hours neurological tests showed their nerves were reacting normally to touch, pain and the like.

While nervous symptoms had been seen in patients with pellagra, the exact relation between the B vitamins and nervous breakdown was established in a careful study of 60 pellagra patients here, with the support of the Rockefeller Foundation and the William C. Hogg Memorial Fund of the University of Texas.

Lesson for Belligerents

A LESSON for the warring nations of Europe appears in these latest studies of pellagra patients in peaceful America. Leaders of the warring nations know the importance of keeping their armies and civil populations well nourished. But to Napoleon's famous dictum, "An army marches on its stomach," scientists now add that the kind of food, as well as the amount, is of paramount importance for morale as well as for health.

Strong men become weak—"shaky, weary and apprehensive"—even on full stomachs if they lack the B vitamins that protect against beri-beri, pellagra and similar nervous disorders. Long before beri-beri or pellagra develops to the point where other symptoms make the diagnosis clear, tell-tale nervous signs appear. In their report to fellow physicians, Drs. Frostig and Spies state:

"Nutritional deficiencies widespread in a population may not only weaken the strength, but may also break down the morale. Sub-clinical pellagra and beri-beri may be an important factor in the fighting morale of an army, supporting Napoleon's contention that 'an army marches on its stomach.'"

Science News Letter, February 17, 1940

A clay tablet found at Nippur shows some of the drugs and prescriptions used in Babylonia about 2600 B. C.

Popcorn that expands 20 times its size when popped will be considerably more tender than corn that expands only 10 times.