

# Vitamin Therapy Urged

Schizophrenics Anonymous promotes vitamin therapy for the treatment of this mental disease, based on the assumption that its cause is biological—By Patricia McBroom

► FOLLOWING THE PATH of alcoholics, narcotics addicts and neurotics, people suffering from schizophrenia now have their own Anonymous organization.

The new Schizophrenics Anonymous has the same program and goals as the older AA—mutual inspiration and support.

In addition to this, however, S.A. is promoting a simple and controversial treatment, the use of vitamin B-3 or nicotinic acid, for this common but puzzling mental disease.

The therapy calls for massive doses of nicotinic acid (as much as three grams per day), based on the assumption that schizophrenia is primarily a biological disease and is caused by a poison manufactured in the bodies of afflicted individuals, as a by-product of metabolism.

Vitamin B-3, as an essential element in metabolism, could act to prevent the production of this poison, say its proponents, who think the poison comes from adrenalin.

In hard fact, no one knows what causes schizophrenia though many scientists believe it has a biological basis. Much controversy surrounds the metabolic poison theory. Some biologists

suggest that after 10 years of searching without success for a poison produced only in schizophrenics, researchers ought to conclude there is no such toxin and look elsewhere for the cause.

To complicate the problem, the title schizophrenia covers a wide variety of mental abnormalities. Whether all the different symptoms and degrees of severity now called schizophrenia are one illness or many is unknown.

Whatever its cause or true nature, schizophrenia at present has little hope of cure.

Schizophrenics Anonymous is in part, a reaction against the current practice of treating schizophrenics as psychologically disturbed rather than physically ill individuals. One of S.A.'s motivating spirits is Gregory Stefan, a New York newspaper man who published a highly critical account of his progress as a schizophrenic through U.S. mental institutions. His illness remained uncured and in fact worsened, reported Mr. Stefan, until he encountered vitamin B-3, which he claims helped cure him.

The vitamin therapy was first applied to schizophrenia by Dr. Humphry Osmond, the psychiatrist who administered mescaline, a hallucinogenic drug, to writer Aldous Huxley years ago. Dr. Os-

mond, now with the New Jersey Neuropsychiatric Institute in Princeton, N.J., told SCIENCE SERVICE that he settled on nicotinic acid because it could be given in very large doses without harm and is easily available.

Though he considers this therapy far from a complete answer, Dr. Osmond said he has seen great improvement in many of his patients since he and Dr. Abram Hoffer of the University Hospital in Saskatoon, Saskatchewan, Canada, started with it in 1952.

Improvement is slow sometimes requiring one or two years before major changes are evident.

Despite the reported success of Drs. Osmond and Hoffer, vitamin B-3 has not spread far as a treatment for schizophrenics. It has been tried against psychosis by other scientists with no success.

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## PUBLIC HEALTH

### More Than 100 Million Americans X-Rayed

► THE NUMBER of Americans exposed to medical and dental X-rays increased from 100 million in 1961 to more than 108 million in 1964, a U.S. Public Health Service study showed.

Dr. Donald R. Chadwick, chief of the PHS division of radiologic health, told a meeting of the Canadian Association of Radiologists in Montreal that this jump exceeds the population increase for that period. More than half of the X-ray examinations were of the chest area.

The main purpose of the study was to discover how the efficiency of X-ray usage in medicine can be improved to get maximum diagnostic value with a minimum of exposure to the patient.

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## BIOCHEMISTRY

# Diagnosis by Fungus

► A FUNGUS test that could possibly be used to diagnose schizophrenia has been developed in Poland.

A professor and a psychiatrist have found that the urine of some schizophrenics inhibits the growth of an aspergillus fungus. Dr. Halina Jurkowska of the College of Agriculture and Dr. Zenona Kadziela, chief psychiatrist of the District Office of Industrial Medicine, both in Cracow, Poland, concluded from this that urine from schizophrenics contains a poisonous substance.

Their research adds to controversy mounting about the metabolic poison theory of schizophrenia. This theory holds that schizophrenics manufacture a poison in their bodies during metabolism, a poison which will eventually show up in urine.

Despite efforts, the toxin has never been found and urine tests have been conflicting.

Drs. Jurkowska and Kadziela noted that the urine's ability to inhibit fungus growth appeared to be greatly affected by the psychic state of the individual. One woman, a catatonic schizophrenic, was tested for two years. As her con-

dition improved, her urine gradually lost its effect on fungus growth.

Also, different kinds of schizophrenia appeared to inhibit the fungus to differing degrees. A reduction was observed in about 35% of the cases.

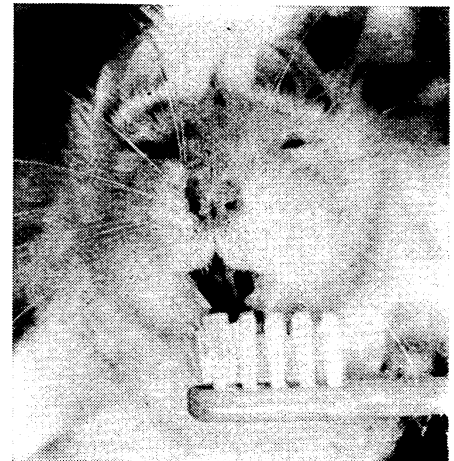
Age of the patients, sex, length of illness and kind of treatment seemed to have no bearing whatsoever.

In the United States, when this report was received, Dr. Arnold J. Friedhoff of the New York University School of Medicine, well known for his work on the biological basis of schizophrenia, said there have been persistent reports over the past 40 years that schizophrenics' urine inhibits the growth of "various things."

He told SCIENCE SERVICE that such experiments have frequently been done with inadequate controls. For instance, drugs given the patients could well be producing the inhibitory effects.

However, reports like the one from Poland have been so numerous that "one begins to feel that maybe they are true," said Dr. Friedhoff. He said he was not familiar with this particular research.

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Veterans Administration

**FIGHTING TOOTH DECAY**—In experiments on mice, researchers are investigating the possibility of increasing the amount of fluoride deposited in tooth enamel by using battery powered tooth brushes. The study is being conducted by the Veterans Administration scientists in Long Beach, Calif.