VITAMIN B6 PHOSPHATE MADE AT NCI

A pure form of vitamin B6 has been produced synthetically for the first time by three NCI scientists. Drs. Elbert A. Peterson, Herbert A. Sober, and Alton Meister of the Laboratory of Biochemistry have synthesized pyridoxamine phosphate in the pure crystalline state. Until now only crude, impure preparations of it have been available for experimental studies.

Vitamin B6, present in meats, cereals, and yeast, is an essential dietary factor for most of the lower animals as well as human beings. The lack of it causes anemia in dogs and pigs and a disease called acrodynia in rats. The body needs vitamin B6 in order to make proper use of amino acids, the building blocks of proteins.

The new product is important to research in cancer and other medical fields. Cancer tissue has a very low level of vitamin B6 and a way of using amino acids different from that of normal tissue.

Drs. Peterson, Sober, and Meister succeeded in producing the pure pyridoxamine phosphate by means of ion exchange chromatography. As the first step in the new process, purified pyridoxamine was reacted with anhydrous phosphoric acid, producing a mixture of compounds very similar chemically. Next, this crude mixture was fractionated by an ion exchange chromatographic column. From one of these fractions the pure pyridoxamine phosphate was crystallized.

Vitamin B6 is so potent that the daily requirement for a man is estimated to be only about 2 milligrams or 1/15,000 of an ounce. Although their experiments were done on a small scale, the scientists produced one gram of the vitamin-phosphate compound. They estimate this quantity might be enough to fill one man's B6 requirements for a lifetime.

The method was reported in the Journal of the American Chemical Society. It will enable chemists to prepare large amounts of this vitamin-phosphate compound in free, uncombined form.

NATIONAL CANCER CONFERENCE TO BE HELD MARCH 3-5

Top cancer researchers will attend the second meeting of the National Cancer Conference on March 3-5 at the Hotel Netherland Plaza, Cincinnati.

Sponsors of the program are the National Cancer Institute, the American Cancer Society, and the American Association for Cancer Research.

The 5th National Gastric Cancer Conference will be incorporated into the Cincinnati meeting as a panel on gastrointestinal cancer. Dr. Harold L. Stewart of NCI will serve as chairman of the panel on March 3.

Three years have elapsed since the first National Cancer Conference. Some 400 scientists are now scheduled to take part in the March meeting, and the presentation of considerable new material is anticipated.


Dr. Andervont will serve as chairman of the genetics panel on March 3.

Reflecting the dual purpose of the conference, the program has been divided into a Clinical Section and a Research Section. Outstanding specialists from the United States and abroad have been invited to present papers at the fourteen panels making up the two Sections.
Primaquine, an antimalarial drug, is now administered to all servicemen returning from Korea. This procedure has been endorsed by the National Research Council and the Armed Forces Medical Policy Council. Scientists of NMI-LTD's Section on Chemotherapy, headed by Dr. G. Robert Coatney, assisted in the development of primaquine, one of the 8-aminoquinoline compounds effective against malaria. The Section's contribution was twofold. In cooperation with the Bureau of Prisons and with the financial support of the Army, a clinical testing unit was set up in April 1951 at the Federal penitentiary in Atlanta to evaluate primaquine as a radical cure for vivax or relapsing malaria and to determine the critical dosage. Dr. Coatney also supervised tests of the drug conducted among military personnel at Fort Benning, Georgia. The evidence of these and other tests indicated that 15 mg. of primaquine administered daily for two weeks will cure the Korean type of malaria in most instances. It was also established that there are no toxic effects when primaquine is taken in prescribed doses. In this work, Dr. Coatney served as senior consultant to the Surgeon General of the Army.

Primaquine is not a preventive for malaria, nor does it serve as a suppressant in malarious areas. Its value rests in its effectiveness as a curative agent. As such, it is expected that the serviceman who has been exposed to malaria will be cured before an attack develops or before relapses of the disease can occur.

Last October 2,700 soldiers returning from Korean duty were given primaquine by Army physicians of the Military Sea Transport Service. It was shown that primaquine may be given without close medical supervision to large groups of men at sea.

Experimentation with primaquine dates back to the end of World War II when it was included among many thousands of drugs marked for testing as antimalarial agents. Most of the earlier laboratory and clinical studies, as well as certain current investigations, were done under Public Health Service auspices through grants-in-aid.

The Section on Chemotherapy is continuing its clinical investigations of primaquine with prisoner volunteers in Atlanta. Among other studies, Drs. Joseph Greenberg and Edward Josephson are investigating the mode of action of 8-aminoquinolines. One metabolite has been isolated and identified.

Temporary Assignment
At the request of the Office of Education, Mr. Irving Ladimer, of the Office of Research Planning, OD, has been assigned to the Commissioner’s office to assist in program development and establish a project reporting system. He will be working with Dr. Buell Gallagher, Assistant Commissioner.

Polio Fund
The annual drive for funds to combat polio netted a total of $135.87 from NIH contributors.

Housing Survey
Questionnaires have been distributed to all employees for information on their housing and housing needs. This survey is being conducted in cooperation with the Montgomery County Housing Authority. Please return these forms to the Personnel Branch at once.

Lecture Series
Mr. W. H. W. Komp of the Laboratory of Tropical Diseases, NMI, gave three lectures in February at Ohio State University at the invitation of the Department of Entomology. He discussed yellow fever and methods used in mosquito identification.

Appointment
Dr. Howard L. Andrews, Chief of NIAMD's Section on Nuclear Radiation Biology, has been appointed the Public Health Service member of the Biomedical Test Planning Committee of the Atomic Energy Commission.

Reminder
The Credit Union office is not open on Mondays.

Navy Seminar
Dr. Abraham M. Shanes of NIAMD's Laboratory of Pathology and Pharmacology addressed the Biophysics Seminar group at the Naval Medical Research Institute on January 31. The subject of his talk was "Bioelectrical Phenomena and their Physical, Chemical and Biochemical Basis."
NIH STENOS TO BEGIN
REFRESHER COURSE

A shorthand refresher course for NIH stenographers will begin on February 26. The ten sessions of the course will be held on Tuesdays and Thursdays weekly at 10 a.m. in Room 101, Building 1.

Twenty girls are signed up for the course, which will be taught by Mrs. Ruth Edwards of the FSA Administrator’s office. Administrative officers will be notified if another class can be scheduled at a later date.

1952 RED CROSS FUND
DRIVE NOW IN PROGRESS

The 1952 Red Cross fund drive for $1,385,300 from the Washington area was launched yesterday.

Over 20,000 volunteers have been organized to carry the fund-raising campaign into homes and business establishments in the District and surrounding communities. At NIH, keymen have been appointed in each Institute to collect donations or pledges.

Nationally, the Red Cross is seeking $85 million this year to finance its many emergency services, including obtaining blood for the wounded in Korea. A Red Cross Bloodmobile will visit NIH on February 27.

The current demand for Red Cross services is nearly as great as during World War II, so give generously when you are approached by the keyman in your Institute.

NCI PUBLISHES SURVEY
ON CANCER IN DENVER

On February 14, NCI published a report on cancer morbidity in Denver, Colorado.

This is the fourth of a series of studies covering ten major cities and providing current information on the nature, size, and distribution of the cancer problem in the United States.

Already published are studies dealing with the Atlanta, New Orleans, and San Francisco areas. Other surveys will cover Birmingham, Chicago, Dallas, Detroit, Philadelphia, and Pittsburgh.

For copies of the Denver study, call Ext. 2041.

NIH Spotlight

Bernice H. Storrer

Choosing between a career in merchandising and government service was quite a problem to Miss Bernice H. Storrer. In May 1950, NIAMD won a new secretary and Jelleff’s lost an assistant dress buyer.

Born and raised in Minnesota, Bernice is the only member of her family to leave the hometown of Albert Lea. She studied accounting at La Salle Extension University in Chicago and later at the University of Minnesota.

She became a field agent for the Department of Internal Revenue in St. Paul, Minn. Her job was to audit individual income tax returns. Many of the men she called on were surprised when “B. Storrer,” as she signed her letters, turned out to be an attractive young lady. After a year in St. Paul, she was transferred to Rochester, Minn., where she met many of the Mayo Clinic doctors. Bernice says her interest in her work at NIH stems from this early association.

Early in 1948, Bernice came to Washington to apply for a position as an overseas investigator for the Displaced Persons Commission. When her hopes for assignment to continental Europe fell through, Bernice decided to accept an offer from a Connecticut Avenue specialty shop to train as their millinery buyer. She enjoyed her work, especially the exciting trips to New York, seeing the new hat collections and selecting those she hoped would appeal to her customers. About a year later, Bernice went to Jelleff’s as assistant dress buyer.

CLINICAL TRAINEESHIPS
ESTABLISHED AT NIAMD

A program of clinical traineeships in the prevention, diagnosis, and treatment of arthritis and the metabolic diseases has been established at NIAMD.

The purpose of the first group of awards is to improve the competency of physicians in the treatment and rehabilitation of arthritis patients.

Applicants must not be over 40 years of age, must be American citizens, graduates of an approved medical school, and have completed a one-year internship in an approved hospital. Trainees will be placed in qualified institutions of their choice.

For further information call Dr. Ralph E. Knutti, Chief of NIAMD’s Extramural Programs, Ext. 525.

Since her training and experience had been for office work, Bernice decided to change jobs once more. In 1950 she came to the Administrative Office of NIAMD. Bernice claims to be lucky in getting interesting jobs to do. When Dr. Ralph Knutti came to head NIAMD’s Extramural Programs and Technical Services in July 1951, Bernice joined him as Grants Assistant. Among her many duties, she is responsible for proper handling of grant applications, preparing books of grant applications and the agenda for meetings of the National Advisory Council on Arthritis and Metabolic Diseases. She also arranges all details for the Council meetings, including transportation and hotel reservations.

Bernice crowds much excitement into her evenings and week ends. She is a member of the Wayfarer’s Club, sponsored by the Unitarian Church, which stages a weekly dance during the summer. Camping and monthly hikes are other activities of the club, but Bernice enjoys most the summer week ends spent sailing on Chesapeake Bay in a chartered schooner.

Her favorite sport is golf, which she used to play almost every week end. Her game usually is pretty consistent, but Bernice recalls the time her drive hit the roof of a nearby house.

Bernice is the newly elected recording secretary of the NIH Recreation and Welfare Association.
INK NEVER RUNS DRY IN NIH DUPLICATING UNIT

Humming duplicating machines maintain a steady chorus in Wing 1 of Bldg. T-6. This is the home of NIH's only printing plant—the Duplicating Unit of the Division of Research Grants.

The unit, headed by Mrs. Leora Rabb with a staff of seven, handles approximately 8,650 jobs yearly. This represents nearly 5,000,000 total pages of duplicated material.

Although its specific responsibility is to reproduce research grant applications, the unit does do mimeographing and offset work for other NIH offices on a reimbursable basis. Available for this operation are four mimeograph machines and six direct-image offset machines.

The type of material and the size of the job should determine which process is used, states Mrs. Rabb. Work reproduced on the offset machines is better looking than when mimeographed, but the process is not practical for a small number of copies.

The Duplicating Unit does not prepare copy. Paper plates and the special typewriter ribbon necessary for offset copy preparation are available from NIH's central stockroom.

A new collating machine was recently installed in the shop. This machine automatically collates up to eight pages of material. The shop also boasts an automatic punch and stapling machine but has no facilities for folding or binding.

Since the Korean conflict, the unit has been faced with a serious paper shortage. Mrs. Rabb asks that NIH members cooperate in conserving paper by requisitioning the minimum number of copies for any job.

The unit attempts to give NIH 3-day service. However, since its peak periods for duplicating research grant applications fall in July, November, and March, orders placed during these months may be delayed.

The Duplicating Unit is intended to complement the duplicating shop of the Federal Security Agency, which technically supervises NIH work. Large jobs—for which over 25,000 sheets of paper have to be run off—should be sent downtown to the Printing and Duplicating Branch.

ACTUAL SCENE FROM TELEVISION SHOW

Dr. Dean Burk, NCI, is shown in a scene from the "Johns Hopkins Science Review" telecast February 11. Also appearing on the show were Vernon Riley, NCI, and Dr. Victor Shocken of George Washington University. Subject of the program was photosynthesis.

BUTTON, BUTTON, WHO'S GOT THE BUTTON?

There's a real search on for a brown wooden slide case that's missing from Room 107, Building 1. For more than a month now, the chase has been on.

Contents of the box are 50 colored slides (3 1/4" x 4") of the Clinical Center, and they are much in demand. Have you checked that slide box in your office lately? If you find the errant box, call Dr. Trautman's office, Extension 448.

RECENT SHIFT IN NIH ADMINISTRATIVE POSTS

Several recent administrative changes have resulted in shuffling of key institute personnel. The men involved and their new jobs are:

Richard H. Henschel, Executive Officer of the Clinical Center; Harold W. Curran, Assistant Executive Officer of NIH; Robert H. Grant, NIH Administrative Officer; James F. Monahan, Administrative Officer of NIH's Research Branch; and John M. Hannan, NCI Administrative Officer.

NIH FIRST TO SEE NEW MODEL CENTRIFUGE

The first public showing of a pilot model refrigerated centrifuge will be held in Wilson Hall February 28 from 10 a.m. to 4 p.m.

The Purchase and Supply Branch has arranged for this demonstration with the manufacturer, Ivan Sorvall, Inc., of New York City.

This centrifuge will accommodate their high speed SS-1 rotors which can be run up to 13,000 rpm while maintaining a guaranteed temperature of minus 50° C. Under test conditions, results of minus 10° C were obtained. This model can use their large capacity Types G/1, G/2, and G/3 heads. Temperature results are even more satisfactory with these heads since the speed will never exceed 5,000 rpm.

All interested persons are invited to attend this demonstration.

LABORATORY COURSES

A schedule of laboratory refresher training courses to be given in 1952 by the Communicable Disease Center, Atlanta, Ga., has been announced. Information and application forms should be requested from the Chief, Laboratory Training Services, Communicable Disease Center, USPHS, P.O. Box 185, Chamblee, Ga.