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Diabetics Can Use Sugar, According to DRR Study

A recent study indicates that sugar (sucrose) does not aggravate high blood sugar in diabetics and that diabetics need not be denied such sugar so long as they do not need to reduce their weight and the sucrose is consumed in nutritionally balanced meals containing protein and fat.

Dr. John Bantle, assistant professor of medicine at the University of Minnesota, reported on his findings at a recent meeting of the NIH Nutrition Coordinating Committee.

Noting his findings, Dr. Bantle told the group that allowing some sugar in the diabetic's diet might increase their compliance with their overall prescribed diet.

Dr. Bantle's research was supported through a General Clinical Research Center grant from the Division of Research Resources.

For many years, it has been accepted that simple carbohydrates (monosaccharides and disaccharides) are digested more rapidly than complex carbohydrates such as potato and wheat starch and therefore aggravate hyperglycemia (high blood sugar).

Sucrose is a disaccharide consisting of the monosaccharides, glucose and fructose (fruit

(See *DIABETICS*, Page 9)

Vasectomy Harmless Largest Study Shows

Men who have had vasectomies are just as healthy as other men, if not more healthy. This conclusion comes from the largest study ever performed on vasectomy, a project involving more than 20,000 men in four U.S. cities.

Researchers compared the rates of a wide range of health problems in men who were not sterilized with the rates in men who had been vasectomized for 1 to 41 years. The results of this study, called "The Health Status of American Men," was presented on Monday, Nov. 14 at the American Public Health Association meeting in Dallas.

About 10 million U.S. men have had vasectomies, and about 500,000 more undergo the operation each year. After the procedure, men continue to produce sperm, which their bodies absorb. Several years ago, studies showed that one-half to two-thirds of vasectomized men develop antibodies to sperm, an immune reaction which may persist for 10 years or more.

(See *VASECTOMY*, Page 10)

Ex-NIH Chemist Comes Home From Grenada, Courtesy of U.S. Rangers and 82nd Airborne

Waking to the scream of overflying jets and the boom-boom of Marine helicopters firing Gatling guns on that recent Tuesday when U.S. troops began pouring on to Grenada, Tom Fioretti, a former chemist with NIAID's Laboratory of Parasitic Diseases, was both dismayed and excited.

Dismayed because he thought that his medical school education, which had just begun 2 months before, might be over.

And excited by "all hell breaking loose" as the invasion started, as well as hope for rescue.

Tom and the other 300 or so students housed on the Grand Anse campus of St. George's Medical School knew tension had been building ever since Prime Minister Maurice Bishop had been ousted and then killed along with some followers. (The school's second campus, True Blue, was adjacent to the big airstrip the Cubans had been building and American troops captured it quickly and secured the nearby campus.)

General Hudson Austin, engineer of the coup, went on the radio and assured the students and others that Americans would be safe, Tom said.

Austin also announced martial law and a curfew and included Americans among those who would be shot for violating it, according to Tom.

"We didn't believe Austin and we didn't be-



Tom Fioretti

lieve our school administrators who urged us to stay on," says Tom.

But by that morning when the roar of war arrived to awake them, Tom said, "we were scared and thought we might be taken hostage."

Today, he doubts they would have been. "The Cubans could have wiped us out at any time and didn't and the Grenadians liked us Americans."

Even so, when U.S. Rangers arrived on the afternoon of the second day of the rescue

(See *GRENADA*, Page 5)



Standing tall, a U.S. Ranger protects rescued students.

Photos by Tom Fioretti

The NIH Record

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Training Tips

The following courses, sponsored by the Division of Personnel Management, are given in Bldg. 31.

Office Skills	Course Starts	Deadline
Scientific Terminology	2/7	1/17
<i>Executive, Management and Supervisory</i>		
Committee Dynamics	12/13	11/25
Managing Performance Feedback	2/8	1/20
<i>Communication Skills</i>		
Contract Freedom of Information Workshop	12/9 or 12/16	11/25
Assessment One: Job Analysis	1/11	12/12
Interpersonal Problem Solving	1/24	12/19
DELPRO		
*Delegated Procurement	1/9	12/22
*For new Delpro users only.		

To learn about these and other courses, contact the Development and Training Operations Branch, DPM, 496-6371.

NIH Information Offices' Role On Agenda at Dec. 9 STEP Forum

The next STEP forum will be held on Dec. 9, from 2 to 4 p.m., in Wilson Hall, Shannon Bldg.

The forum, entitled "Role of the NIH Information Offices," is intended to address the relationship of the BID and NIH information offices to the extramural programs and their impact upon extramural staff.

Featured speakers will be Anne Thomas, OD, Jim Augustine, DRR, and Betsy Singer, NIADDK. It is open to all NIH professional and support staff. □



Signing ceremony at Stone House for bilateral agreement for cooperative research between NCI and the Victor Babes Institute in Bucharest, Romania. L to r: Ambassador Mirchea Malitza, Romanian Ambassador to the U.S.; Dr. Vincent T. DeVita, Director, NCI; Prof. Constantin Arseni, president of the Romanian Academy of Medical Sciences; Dr. James B. Wyngaarden, NIH Director; and Dr. Ioan Moraru, Director, Victor Babes Institute.

Dr. W. F. Raub Receives NIH Toastmasters Award



Dr. Raub

Dr. William F. Raub, NIH Deputy Director for Extramural Research and Training, has received the Toastmasters International Communication Achievement Award from the NIH Toastmasters Club.

The presentation was made Nov. 5 by Henrietta Hyatt-Knorr, president, at a special open program at noon in Wilson Hall. Dr. Raub was cited for "outstanding achievement and contributions to excellence in communication."

The award is presented annually by the club to recognize outstanding communicators in the community.

The meeting also featured a lecture, "Self-Esteem: How Can You Be a Good Communicator If You Don't Think You Are Worth Listening To," by Rachele Selzer, chief mental health counselor, Employee Counseling Service, OMS. □

Brain Imaging by PET Scan: Topic for Writers' Seminar

The NIH Science Writers' Seminar on Brain Imaging: Positron Emission Tomography (PET) will be held on Nov. 29, from 9 a.m. until noon in Bldg. 10, 14th floor auditorium.

Dr. Steven Larson, chief, Nuclear Medicine Department, CC, will give an introduction to PET, a new technology which allows scientists to study the living human brain at various times and under different circumstances.

The moderator, Dr. Thomas Chase, chief, Experimental Therapeutics Branch, NINCDS, will describe his use of PET in research on Alzheimer's disease.

Brain imaging of glucose utilization in cerebral tumors will be discussed by Dr. Paul Kornblith, chief, Surgical Neurology Branch, NINCDS.

The use of PET in studies of normal aging and of Down syndrome will be presented by Dr. Neal Cutler, chief, Section on Brain Aging and Dementia, NIA.

Following the speakers' talks, Dr. Robert

Kessler, CC, will conduct a tour of the PET and Neuro-PET facilities. Drs. Giovanni Di Chiro and Rodney Brooks—two members of the NINCDS team that built the Neuro-PET—will be on hand to answer questions. Because of a limited number of spaces for the tour, priority will be given to members of the press.

Science Writers' Seminars, sponsored by the intramural scientists of NIH and the Division of Public Information, OD, are designed to provide members of the press with background information on the various areas of research conducted at NIH.

For additional information, call Bobbi Bennett, 496-1766. □

Keep away from people who try to belittle your ambitions. Small people always do that, but the really great make you feel that you, too, can become great.—Mark Twain □

Clinical Center Admixture Unit Celebrates 20th Anniversary of Pharmaceutical Excellence

Prior to 1963, Clinical Center intravenous medications were prepared on the units under conditions that were sometimes unsafe for both patient and nurse. The majority of drugs used then and today were requested by National Cancer Institute physicians.

Besides providing care to seriously ill patients, nurses were required to prepare many toxic and complex drugs often with little knowledge about their incompatibility or stability.

There was also danger of contamination because mixing was done in open areas and on nonsterile counters. But that was the state of the art in all U.S. hospitals at the time.

The CC Pharmacy Department was concerned about this situation and assumed responsibility for preparing all intravenous (I.V.) medications on the pediatric oncology unit. A pharmacist, trained in manufacture of parenteral medications, standardized the mixing and preparation of drugs.

The Pharmacy Department acquired chemical hoods to provide a sterile environment, and compatibility and stability of solutions were carefully controlled by the Pharmaceutical Development Service Laboratory.

Gradually, the Pharmacy Department expanded this small unit into one servicing the entire Clinical Center and the centralized Intravenous Admixture Unit (IVAU) was created, which is now celebrating its 20th anniversary.

Hoods were modified to include high-efficiency particulate filters. This was the first practical application of a concept originated in the space program.

The laminar-flow hood, designed at NIH, became the prototype for industry, ultimately produced and sold commercially. Today, pharmacists and technicians prepare IV medications with modern equipment under rigidly enforced controlled conditions.

Horizontal flow hoods provide a clean environment to prepare the product but may expose workers to aerosols generated during preparation. These hoods are useful in the production of most I.V. medications; however, anticancer drug products and other potentially toxic drugs are made under vertical laminar flow biological safety cabinets.

Previously, I.V. drugs were produced only in large-sized containers closed with screw caps, i.e., an "open" system. Mixing all the drugs together for a patient in one bottle was common practice. However, drugs can interact together and result in a reduction of potency or, even worse, production of insoluble particles.

Currently, the IVAU uses a "closed" system consisting of small, partially filled minibottles sealed with a rubber stopper under vacuum pressure. This system enables the nurse to administer multiple small bottles to a patient to minimize the amount of fluid given and prevent drugs from interacting.

The Pharmacy Department has become an authoritative source for information on drug stabilities and incompatibilities. In fact, it has published the *Parenteral Drug Information Guide*, the most used and definitive handbook on injectable drugs available today.

In addition to the safety of I.V. drugs pro-

duced, the accuracy of labeling and the patient I.V. record is considerably important. In 1963, drug labels were produced laboriously with a "set-type" machine.

As technology improved, so did the labeling process. It evolved from a mag-card typewriter, to a word processor and, finally in 1975, to computer generation. The computer produces both a label and a patient drug profile, with the I.V. order transmitted electronically to the IVAU.

Thomas Mayo, CC pharmacy technician since 1962, said, "I've seen drastic change in the I.V. Admixture Unit. There have been improvements from the set-type method of labeling, to the use of the computer, to how and where we mix the different kinds of solutions, and a great increase in staff due to the additional workload. It's very exciting to work here."

"It's because of technicians like Mr. Mayo that we have been able to handle the tremendous increase in workload," Dr. Joseph Gallelli, chief, Pharmacy Department, said. "In 1963, we prepared 14,000 I.V. admixtures per year. Today, in 1983, we'll be preparing more than 200,000.

"The huge success of the I.V. admixture program has been made possible because we have an excellent staff of dedicated pharmacists and technicians."

A formal training program to teach technicians and pharmacists to prepare I.V. admixtures has been developed by the Pharmacy Department. It has been duplicated by many hospitals.

The Pharmacy Department and the NIH Division of Safety have collaborated in writing recommendations on safe handling and proper disposal of injectable antineoplastic drug products. A videotape and brochure have been produced which have received national recognition.

The Pharmacy Department's IVAU has truly been a pioneer in I.V. admixtures. It all began 20 years ago with a few pharmacists recognizing the need for improving the way I.V. medications are prepared. The unit has become the standard of excellence, against which all I.V. additive programs in the country and around the world are compared. □

Rose and Mylander Take Top Spots in Speech Contest

Diane Rose and Maureen Mylander of the NIH Toastmasters Club each took first place in the Toastmasters Area 53 Speech Contest Oct. 13.

Ms. Rose, Division of Personnel Management, OD, won the Humorous Speech Contest for her speech about dieting, titled "A Four-Letter Word."

Ms. Mylander, Office of Communications, OD, won the Table Topics Contest for the best impromptu speech.

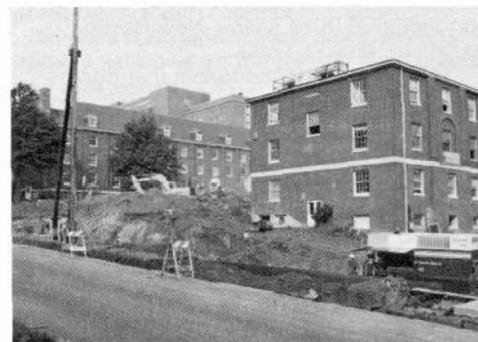
Both winners competed at the District E Toastmasters Contest recently in Gaithersburg.

The NIH R&W Toastmasters Club meets every Friday at noon in Bldg. 31, Rm. B2C05. □

Building 8 to Get Face Lift

Plans to achieve a new look, a new addition, and a new purpose for Bldg. 8 took a major step forward in October as excavation for the addition began.

A contract for the first phase of construction was awarded to relocate a number of exterior utility lines, add another story and a pitched roof to the existing building, disman-



Bldg. 8 from the south on Oct. 21, during pile-driving in support of excavation work.

tle the existing interior, and erect the structure for a new building wing along South Drive.

Laboratories will be installed and renovation of the complete interior of the old building will be included in the next construction phase.

On completion, research laboratories for NIADDK, presently located in Bldg. 4, will move into the renovated building and the new addition. At that time, the "round robin" will continue and a major construction project for Bldg. 4 will get under way. □

Attention Motorists!

Effective Monday, Nov. 28, Wilson Dr., which connects Rockville Pike to Center Dr. will be open for two-way traffic 24 hours a day. The present one-way eastbound traffic pattern, between 4:30 and 5:30 p.m. will be discontinued.

Wilson Dr. has been expanded to three lanes beginning east of the stone bridge, which is just east of the entrance to the Bldg. 21 area. On Nov. 28, when entering Wilson Dr. from Center Dr. to leave the campus (eastbound), only the right (south) lane will be for eastbound traffic until **past** the stone bridge; the left (north) lane will be for incoming traffic.

Once past the stone bridge, the far right (new) lane will be for left or right turns onto Rockville Pike; the center lane will be for left turns only. The extreme left lane will be for incoming (westbound) traffic. □

NIH Library Is Being Recarpeted

A complete recarpeting of the NIH Library (Bldg. 10) has begun, starting with the upper level.

The library staff is attempting to arrange the work so that no temporary closings of any sections will be necessary. Certain areas will be inaccessible for brief periods, and the staff regrets any inconvenience to users. □

Alcohol Abuse, Phobias Top U.S. Disorders, Not Depression as Previously Believed

Alcohol abuse and simple phobias are the most common lifetime mental health disorders in the general population, according to preliminary findings from the Epidemiological Catchment Area (ECA) survey of the National Institute of Mental Health. The survey was conducted at three sites—New Haven, Baltimore, and St. Louis.

"This contradicts the truism that depression is the most common psychiatric disorder," said Dr. Lee Robins of Washington University School of Medicine, one of the survey directors.

The survey data rank major depressive episodes and drug abuse/dependence third and fourth.

However, the survey did not include all disorders in the Diagnostic and Statistical Manual (DSM-III), the psychiatry profession's listing of diseases and definitions of psychiatric illnesses), and some depressive disorders were not assessed.

Also, the wording of questions about phobias varied at the three sites, as did instructions to interviewers and the list of specific phobias asked about.

Dr. Robins pointed out that results among the three sites were remarkably similar. All three communities showed similar sex and age differences in rates of disorder, which helped verify the uniformity of the survey instrument.

At a recent NIMH seminar, Dr. Robins unveiled ECA findings of lifetime prevalence. Dr. Jerome Myers of Yale University reported preliminary findings on 6-month prevalence

rates of psychiatric disorders at the three sites, and Sam Shapiro of John Hopkins University presented findings on the use of health and mental health services.

The ECA survey contained questions about 15 psychiatric disorders based on DSM-III criteria. Findings included:

- Lifetime prevalence rates (the proportion of persons who have experienced a psychiatric disorder in their lifetime) of the four most common psychiatric disorders for all three sites are: alcohol abuse/dependence, 13.6 percent; phobias, 11.3 percent; major depressive episode, 5.7 percent; and drug abuse/dependence, 5.6 percent.

- The three least common psychiatric disorders in terms of lifetime prevalence are schizophreniform (a minor, unusually more curable form of schizophrenia), somatization (multiple physical complaints without physical basis) and anorexia nervosa.

- Based on survey totals, men have higher rates of psychiatric disorders than women. Alcohol abuse/dependence and antisocial personality are more prevalent among men, while major depressive episodes and phobias are more common among women.

- The 25 to 44 age group has the highest rate of psychiatric disorders.

- There is virtually no difference between blacks and whites for most psychiatric disorders. Blacks tend to have slightly higher rates of phobias and drug abuse/dependence, while whites have slightly higher rates of major depressive episodes and anorexia nervosa.

- While cognitive impairment (impairment in comprehension, judgment, memory or reasoning) is highest among persons over age 65 (as might be expected), this disorder was found in all age groups.

- The association of major depression with bereavement is practically nonexistent, "a most surprising finding," Dr. Myers remarked.

- While a greater proportion of women than men sought professional help for a mental health problem, men were more likely to consult a mental health specialist than women, Mr. Shapiro reported.

One exception to the uniformity in survey results concerned rates of phobias. Phobia rates by site for both sexes showed Baltimore with a 13.4 percent 6-month prevalence rate, New Haven with a 5.8 percent rate, and St. Louis with a 5.4 percent rate.

Dr. Robins cautioned against concluding too quickly that there is relatively little regional variation in the lifetime prevalence of psychiatric disorders in the United States. The results from two other sites—North Carolina and Los Angeles—have not been compiled yet and the researchers expect to see greater differences because the North Carolina site is more rural than the others and the Los Angeles site includes large numbers of Mexican-Americans.

In addition, Dr. Myers reported, data from an institutional survey not available at the time of the seminar may show slightly higher rates for some serious disorders, since these are more common among persons living in mental hospitals, nursing homes, and correctional facilities.

The survey papers will be submitted for publication in a future issue of *Archives of General Psychiatry*. —Judy Folkenberg, NIMH

Cystic Fibrosis Seminar Series Begins Nov. 22

Cystic Fibrosis (CF), an inherited disease of children, adolescents, and young adults, affects the exocrine (externally secreting) glands of the body, and is the most common lethal genetic disease in Caucasians.

CF appears in 1 of 2,000 live births in the United States. Currently, 20,000 to 30,000 people in this country suffer from the disease.

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases announces a Cystic Fibrosis Seminar Program, the second of its series of Tuesday morning lectures for senior scientists and young researchers, starting Nov. 22.

Tuesday mornings

A lecture of broad and general appeal will be presented Tuesday mornings from 8 to 8:45 a.m. in Bldg. 10, ACRF Amphitheater. Discussions and topical presentations will follow from 9 to 10 a.m. in Bldg. 10, ACRF Medical Board Rm. 2C116.

The Cystic Fibrosis Program Series includes the following topics in cellular and molecular biology:

Nov. 22: Dr. Harvey Pollard, chief, Laboratory of Cell Biology and Genetics, discusses regulation of exocytosis by calcium and cytoskeletal elements.

Nov. 29: Dr. Victor Ginsburg, chief, Section of Biochemistry, discusses how the structure of complex carbohydrates is genetically de-

termined (a lecture shared with the series on Biology of Complex Carbohydrates).

Dec. 6: Dr. Loretta Leive, chief, Section on Membrane Biology, lectures on phagocytosis by macrophages and defenses against microbes.

Chloride Channels

Dec. 20: Dr. Phil Skolnick, chief, Section of Neurobiology and Dr., Jeffery Barker, chief, Laboratory of Neurophysiology, NINCDs, collaborate in discussing chloride channels in the central nervous system.

Jan. 17, 1984: Dr. Dan Camerini-Otero, chief, Section on Molecular Genetics, Genetics and Biochemistry Branch, speaks on genetic recombination in mouse L-cells.

Jan. 31: Dr. Bruce Weintraub, Clinical Endocrinology Branch, covers the biosynthesis and carbohydrate processing of glycoprotein hormones, including clinical implications.

Feb. 7: Dr. Elizabeth Neufeld, chief, Genetics and Biochemistry Branch, addresses the natural history and genetic disorders of B-hexosaminidase.

The last lecture in the series, Feb. 14, will feature Dr. Jerry Gardner, chief, Digestive Diseases Branch, on the topic of regulation and secretion from pancreatic acinar cells.

For more information contact Dr. Ann Dean, 496-5408, or Linda Stalvey, 496-3583. □



Dr. Harald Loe, National Institute of Dental Research Director, was awarded the 1983 International Lecturer of the Year Award by the Academy of International Dental Studies during the American Dental Association's annual meeting held Oct. 1-4 in Anaheim. He was honored again Oct. 15 when Friends of the University of Connecticut School of Dental Medicine presented him the 1983 Friends International Award. Dr. Loe, a world leader in dental medicine, was recognized for his many outstanding contributions to dental research and education.

There are two kinds of fools: those who can't change their opinions and those who won't. —Josh Billings □

GRENADA

(Continued from Page 1)

operation to take them out, Tom and the others were happy to race for the rescue helicopters and get out. "I'm glad they brought us out safely," he says.

The rescue developed this way. The 300 or so students on the Grand Anse campus were confined to their dorms by the school officials. They were told to place mattresses over windows for safety. (The invading troops could not reach them as easily as those at the True Blue campus.)

For about a day and a half after the invasion began, the students crowded around the radio, slept little if at all, and waited.

During this time, Tom said his excitement began to turn to boredom. Earlier, he had climbed onto the roof of the dorm and shot pictures of the planes and helicopters and other sights of war with a borrowed camera—until a school administrator discovered him and ordered him in.

Before the shooting started, Tom had decided to catch up on his studies. He plowed through 13 chapters on embryology which he needed to do before taking midterm exams, which—because of the invasion—never were given. His grades had been excellent up until the "war" broke out, another reason he wanted the school to continue.

On Wednesday morning, the day after the invasion began, the students received word by phone from the U.S. military at the airfield near the True Blue campus: "We're coming



President Reagan welcomes home American students from Grenada.

after you but we don't know exactly when yet."

Meanwhile, they were told to crowd all the students into the three dorm rooms closest to the Caribbean side. This they did.

Three hours later as the banshee howls of the jets screeched louder and the helicopters' guns raked the area nearby for hostile troops, two U.S. Rangers—faces blackened and carrying M-16 rifles with bayonets fixed—kicked in the dorm door. "U.S. Soldiers. Freeze!" they screamed.

Satisfied that only students were in the

three rooms, the Rangers and others waiting outside began to move the students, single-file, toward waiting helicopters in the nearby water.

As the students ran, firing started on their flank. Flopping down at the Rangers' command, they lay flat until the Rangers' return fire scared off whoever was shooting at the students.

Leaping up on command, the students raced to the helicopters and—standing in ankle-deep water—clambered aboard.

Minutes later after a short flight, the helicopters sat down on the runway the Cubans had built earlier.

As the students jumped to the ground, their Ranger rescuers began to applaud, apparently happy that they had been able to save all of them.

Minutes later, as the students waited for checks of their passports and other papers, two F-14 jets roared over, doing tandem victory rolls in salute to the students.

Processed promptly, the students were flown out to Charleston, S.C. From there Tom Fioretti flew home on a civilian airline to Baltimore's airport and a reunion with his parents.

What about Tom's future medical education? All is not lost. Rutgers University in New Jersey has made available campus buildings until the end of this semester (which is half over). By then, it is hoped, a more permanent future home for the reopened school will have been found.

Tom has already left for Rutgers. □

Dental Sealants To Be Discussed Dec. 5-7 During Consensus Conference

An NIH Consensus Development Conference on Dental Sealants in the Prevention of Tooth Decay, sponsored by the National Institute of Dental Research and the Office for Medical Applications of Research, will be held Dec. 5-7 in the Clinical Center's ACRF Amphitheater.

The chewing surfaces of children's teeth are the surfaces which are most susceptible to decay and least benefited by fluorides. In recent years a technique has been developed in which plastic film is applied to these chewing surfaces to seal the pits and grooves where food and bacteria can be trapped.

The purpose of this conference is to evaluate the effectiveness, safety, and implementation of this sealant procedure.

The Consensus Development Conference will bring together biomedical investigators, practicing dentists and physicians, academicians, dental hygienists, dental assistants, and representatives of public interest groups.

Key questions to be discussed are: With the current widespread use of fluorides and the generalized decrease in caries among children, is there a need for sealants? How effective are sealants? What are the indications for using sealants in individual and community-based caries preventive programs?

What are the clinical procedures involved in successful sealant application, and what training and education are required? What factors have influenced and should influence

the adoption and use of sealants for caries prevention? What is the current status of sealant research and what should be the research priorities for sealants and their implementation?

The consensus panel will weigh scientific evidence presented by the speakers, listen to audience discussion, and develop a consensus statement. After the draft consensus statement is presented, comments and discussion will be invited.

For further information about the conference, contact Sue H. Burroughs, NIDR, 496-4261 or Michael J. Bernstein, OMAR, 496-1143. □



This is how the staff of the Nuclear Medicine Department, Clinical Center, showed up for work on Halloween. Left to right are: Doris Diethrich, Sue Stottlemeyer, Aleta Sindelar, Rich Fejka, Marge Cawley and Susan Long.

Visiting Scientists Program

(Sponsored by the Fogarty International Center)

10/11—**Dr. Masaaki Taguchi**, Japan. Sponsor: Dr. Joost Oppenheim, Biological Response Modifiers Program, NCI, FCRF, Frederick, Md.

10/16—**Dr. Saraswati Sukumar**, India. Sponsor: Dr. Mariano Barbacid, Laboratory of Cellular and Molecular Biology, NCI, Bg. 37, Rm. 1A07.

10/17—**Dr. Frederique Arlette Popitz**, France. Sponsor: Dr. David H. Sachs, Immunology Branch, NCI, Bg. 10, Rm. 4B14.

10/23—**Dr. Mona Moller**, Norway. Sponsor: Dr. Snorri Thorgeirsson, Laboratory of Carcinogen Metabolism, NCI, Bg. 37, Rm. 3B25.

10/24 **Dr. Alberto R. Cruciani**, Argentina. Sponsor: Dr. David Rodbard, Laboratory of Theoretical and Physical Biology, NICHD, Bg. 10, Rm. 8C312.

10/24 **Dr. Ryoji Hirmatsu**, Japan. Sponsor: Dr. Bruce C. Nisula, Developmental Endocrinology Branch, NICHD, Bg. 10, Rm. 10B09.

10/24 **Dr. Oberdan Leo**, Italy. Sponsor: Dr. Jeffery Bluestone, Immunology Branch, NCI, Bg. 10, Rm. 4B03.

10/26 **Dr. Daniel J. O'Shannessy**, Australia. Sponsor: Dr. Richard H. Quarles, Section on Myelin and Brain Development, NINCDS, PK5 Bg., Rm. 424.

10/30 **Dr. Elena Mattia**, Italy. Sponsor: Dr. Richard Klausner, Laboratory of Biochemistry and Metabolism, NIADDK, Bg. 10, Rm. 9N204.

11/1 **Dr. Alberto Abbruzzese-Saccardi**, Italy. Sponsor: Dr. J. F. Folk, Enzyme Chemistry Section, NIDR, Bg. 30, Rm. 113.

11/1 **Dr. Kimihiro Akagi**, Japan. Sponsor: Dr. Cephas Patch, Office of the Scientific Director, NICHD, Bg. 6, Rm. 1A15.

11/1 **Dr. Christopher D. V. Black**, United Kingdom. Sponsor: Dr. John Weinstein, Laboratory of Mathematical Biology, NCI, Bg. 10, Rm. 4B54.

Edith Jones Retires After 30 Years in Nutrition

"It's the end of an era," according to the Clinical Center's Nutrition Department staff, commenting on the retirement of their boss. Edith Jones, chief of the Nutrition Department, retired on Oct. 31 after 30 years of public health service. She is the only current department head whose service began when the CC opened its doors.

On July 6, 1953, Ms. Jones' staff of 52, including seven who are still with the nutrition department, served their first meal to the 26 patients on the 12th floor of the Clinical Center. "Opening the main kitchen was like operating a battleship with a LST (small landing craft) staff," explained Ms. Jones.

During her career, Ms. Jones supervised the planning of metabolic research diets; for example, making sure a patient ate 30 grams instead of 25 grams of beef, and that he received beef from the same carcass for a given period of time if necessary for the accuracy of the study. "Dietetics in a research hospital is much different from dietetics in a general hospital," Ms. Jones said.

Because of the unusual needs of the research programs at NIH, many diets are restricted or monotonous. Part of the nutrition department's task is to help keep patients happy by offering several substitutes.

In addition to planning and supervising special diets for research patients, Ms. Jones oversaw food preparation for the Clinical Center's cafeteria until 1966. The staff of the three Institutes here at the time could purchase coffee for 5¢ a cup, roast beef for 45¢, and homemade baked breads.

Yearly traditions have become Ms. Jones trademark. Every year since 1958, on the anniversary of the CC's opening, Ms. Jones has given a red carnation to every nutrition employee who has been here for 5 years.

Every Thanksgiving and Christmas would find Ms. Jones at the CC. "The chief of the Nutrition Department should be here on these holidays. We like to make the holidays extra special for the patients who can't be at home," said Ms. Jones.

A major accomplishment of her career was the change from decentralized to centralized food service. Food was originally sent out of the main kitchen in bulk containers on electrically heated food carts to kitchens located on every CC floor, then assembled on food trays. Today, after 6 years of renovation of the main kitchen, food is prepared in the main kitchen and assembled on trays before delivery to patients.

In her 30 years of service, Ms. Jones explained, "We've never missed a meal," a remarkable record despite the 1979 blizzard, a



Ms. Jones

fire on 9-West, several food strikes, and 6 years of working in the midst of construction.

Dr. John L. Decker, CC Director, commenting on Ms. Jones retirement, said, "she has an unequalled record of service to the Clinical Center. She looks upon many of us as Johnnies-come-lately. We look upon her as truly a part of the Clinical Center. The place is diminished by her retirement."

Ms. Jones leaves the CC with mixed emotions, "This is my home and my family, but the time is right to retire," she said.

A native of Roanoke, Ala., Ms. Jones received her Bachelor of Science degree from the University of Alabama, served an internship at John Hopkins Hospital, and earned her Master's degree from the University of Tennessee.

She received the Distinguished Service Award from the University of Alabama in 1956 for her outstanding contribution to the field of home economics and the Majorie Hulsizer Copher Award in 1971 for "her long term active participation and her work in the field of dietetics." She also served as president of the American Dietetic Association from 1962 to 1963.

"She was a leader in the profession of dietetics at the local level, national level, and international level," said Elaine G. Offutt, Chief of Patient Dietetic Service. "If Ms. Jones puts one-quarter of her energy into making a success of her retirement as she has her work career, we will have no doubt she will be successful and have a happy retirement." □

Wellcome Stipend Supplements Given at FAES Twice a Year

The Foundation for Advanced Education in the Sciences, Inc., is administering special funds known as Wellcome Stipends to augment the stipends of doctoral-level guest workers at NIH.

A maximum of \$3,000 a year may be granted to each approved individual as an income supplement to a maximum total stipend of \$14,000 a year.

The selection committee will consider the

scientific merit of the research to be conducted as well as need and professional qualifications of the applicant.

Awards will be made twice a year, Mar. 31 and Sept. 30. Applications for March 1984 must be received in the FAES office by Feb. 29 and by Aug. 31 for the September awards.

Application forms are available in the FAES office (Bldg. 10, Rm. 2C207A) or by calling 496-7976. □

NCI Establishes New Branch; Betty Sullivan Named Chief

Betty Ann Sullivan has been named chief of the new Management Information Systems Branch in the NCI Office of Program Planning and Analysis. The branch provides technical direction for the development and maintenance of NCI's management information systems. It also provides NCI staff with advice and expertise concerning use of technologies for automated data processing (ADP) in the field of information systems, and advice on planning for and training in ADP information systems.

Ms. Sullivan graduated *magna cum laude* from Bridgewater College in Virginia in 1962 with a B.A. in mathematics. In 1964, after graduate studies at the University of Illinois, she joined NIH as a mathematician in DCRT. She became a computer programmer there in 1966, working as deputy chief of the Information Retrieval Unit.

In 1967 she joined NCI as a computer systems analyst in the Laboratory and Clinical Trials Section, Division of Cancer Treatment, and was named chief of the section in 1969. While there, she developed systems for the computerization of data from NCI trials in the Clinical Center, including a system for reporting the cost of investigational drugs.

She held part-time consulting positions at NCI until July 1975, when she joined the Systems Planning Branch. Assigned to the Management Information Systems Project Office, she led efforts to provide computer support to administrative staff and financial management staff of NCI.

In November 1978, she was named ADP systems security coordinator for NCI and in June 1979, Ms. Sullivan became NCI's management information systems coordinator. □



Three members of the Grants Review Branch, Division of Extramural Activities, NCI, recently received Special Achievement Awards for outstanding efforts in support activities for the review of the Community Clinical Oncology Program. Pictured are (l to r): Helen Brockdorff, Dr. Dorothy MacFarlane, formerly executive secretary of the Cancer Clinical Investigation Review Committee, who presented the awards, and Denetices Ramsey. Another recipient (not pictured) is Sybil Wilson.

Every man has a right to utter what he thinks truth, and every other man has a right to knock him down for it.—Samuel Johnson □

Major Depression Occurs in Children; Equally Severe and Chronic as in Adults

Major depression disorder—a serious illness manifested by mood, eating, and sleeping disturbances, and often suicidal behaviors—is readily detectable in children between 10 and 12 years of age. The disorder is similar in severity and chronicity as found in adults.

Dysthymia (mood disorder), a condition less severe than major depression but far more prolonged, starts earlier, typically between 7 and 8 years of age. It is "a strong predictor of children at risk for subsequent major depression."

These disorders were recently investigated in an ongoing study of depressed children supported by the National Institute of Mental Health (NIMH).

Reporting on her findings, Dr. Marica Kovacs, associate professor, department of psychiatry, Western Psychiatric Institute and Clinic in Pittsburgh, acknowledged that before the study she thought childhood depression to be milder and less chronic than depression in adults. "Now I see similarity in patterns," she said.

Among findings surprising to Dr. Kovacs were:

- Major depressive episodes in children last close to an average of 9 months. She found only a 17 percent recovery rate at 3 months and 44 percent at 6 months.

Eighteen months after disorder onset, 93 percent had recovered (2 months free of significant symptoms). The remaining 7 percent have not gotten better during the 5 years that the study has been in progress, Dr. Kovacs said.

- Major depression proved more chronic in children than expected. Within 6 months of the first episode's remission, 17 percent had another episode. By 12 months, 22 percent had a recurrence, and within 2 years, 44 percent of the children experienced a second full-blown major depression. A number of children have had several episodes since the study began, she said.

- Dysthymia is even less remitting than major depression. After 2 years of continuous symptoms (1 year of continuous symptoms are required for diagnosis), only 16 percent of the children recovered compared to the 93 percent recovery rate for major depressive episodes. The average length of continuous dysthymia is 3 years and the highest recovery rate—80 percent—occurs after 5 years of symptoms.

- When following the course of dysthymic children over a 5-year period, 73 percent will develop their episodes of major depression, "superimposed on the dysthymia. Eventually a few of the children go on to develop mania," the investigator said. She considered dysthymia to be the leading factor in identifying children at risk for affective (emotional) disorders.

Until now, Dr. Kovacs has studied 85 depressed children between 8 and 13 years of age, who were stringently diagnosed over a 4- to 6-month evaluation period by Diagnostic and Statistical Manual III criteria.

To be accepted for study, children have to meet criteria for at least one of three de-

pressive diagnoses: major affective disorder, dysthymia, or adjustment disorder with depressed mood.

Except for those with adjustment disorder, at least 80 percent of the children have multiple disorders, some having as many as five diagnosable conditions, Dr. Kovacs said. Thirty-eight percent with major depression have underlying dysthymia and 50 percent of dysthymic children have symptoms of major depression.

Anxiety disorder, the most common concurrent diagnosis for all three depressive groups, had no effect on recovery rates and appeared associated with decreased risk of a second episode of major depression.

However, underlying dysthymia placed children with major depression at greater risk for repeated episodes. Thirty-six percent of "double-depressed" children had a second episode 4 months after remission compared to only 6 percent of "single-depressed" kids.

This chronicity and perniciousness is similar to that found in double-depressed adults by investigators in the NIMH Clinical Research Branch collaborative program on the psychobiology of depression.

Children who had adjustment disorder with depressed mood were relatively lucky. They recovered more rapidly and completely—90 percent by the end of 1 year. None developed dysthymia or major depression.

Dr. Kovacs's study also includes an age-matched, non-depressed, psychiatrically diagnosed comparison group. The most common conditions found in this group are attention and conduct disorders.

The investigator examined phenomena that might be associated with recovery from the initial bout of a depressive disorder, for example, sex of the child, age of onset of the disorder, whether the child was receiving treatment. Only age of onset was clearly and unequivocally associated with recovery—the earlier the onset the later the recovery.

Only one demographic factor differentiated the two groups—sex ratio. The depressed group had equal numbers of boys and girls in contrast to three boys for every girl in the "mixed diagnosis" group.

Both cohorts were characterized by a high prevalence of deprivation, poverty, and large numbers of parental figures. Only 30 percent lived with both biological parents.

High divorce rates and low socioeconomic status appear to be typical of children with problems and not related to a specific disorder, Dr. Kovacs emphasized. Neither is the presence of "rejection," a condition often thought related to the development of depression. "I looked at potential indices of rejection and found no differences between the two groups."

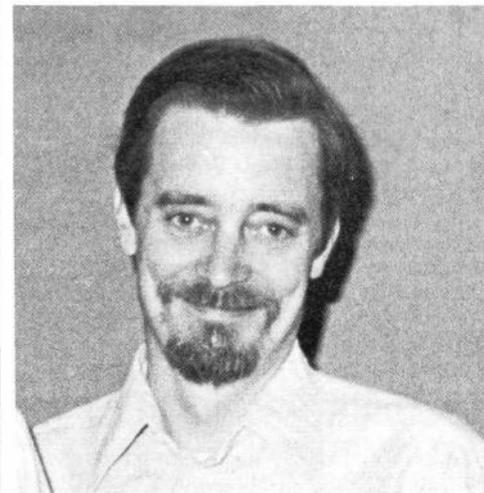
She cited the need to replicate her findings, particularly regarding the relationship of early dysthymia with later major affective illness. This finding has major importance in terms of intervention and prevention. —**Marilyn Sargent** □

Principles have no real force except when one is well fed.—*Mark Twain* □

Ronald F. Wicks, DCRT, Dies Suddenly at Age 46

Ronald F. Wicks, a computer systems analyst with the Division of Computer Research and Technology since 1977, died suddenly Oct. 3.

Mr. Wicks, 46, had worked as the Data Base Administrator in DCRT's Data Management Branch for all of his 6 years at NIH.



Ronald F. Wicks

He was the administrative and technical coordinator for the development of NIH's Administrative Data Base System. The ADB System is the "electronic headquarters" for coordinating and controlling the flow of material and financial paperwork at NIH.

Mr. Wicks was the key person in the project to develop the ADB System, and without his knowledge and expertise it could not have been developed so quickly and efficiently.

Before coming to NIH, Mr. Wicks spent 17 years as a computer specialist with the IBM Corporation where he developed several of its database management systems.

He is survived by his wife Diane, and two children, Jenifer and Nathan.

Expressions of sympathy may be made in the form of contributions to Greenacres Elementary School Scholarship Fund, 11701 Danville Dr., Rockville, Md. 20852.

December Walking/Hiking Club Schedule

Dec. 4—Buck Hollow Trail, Shenandoah National Park. A moderate 8-mile circuit hike with 1700 ft. elevation change in a gradual ascent. Meet at NIH at 8:30 a.m. For information call Sally Stevens (w) 496-4124.

Dec. 10—Wheaton Regional Park, Md. A short 4-mile walk in nearby Wheaton Regional Park, combined with a visit to the Christmas display at Brookside Gardens. Meet at NIH at 11 a.m. Bring lunch and cameras. For information call Elizabeth Weisburger (w) 496-6272, (h) 530-4042. □

CC Appoints New Associate Hospital Administrator

Robert L. Bruun has recently been appointed Associate Hospital Administrator of the Clinical Center. Prior to joining the CC, he was Assistant Administrator for St. Joseph's Hospital in Houston, Tex., where he was primarily responsible for the design and implementation of ambulatory care programs. He also formulated strategies to increase use of the hospital's services. He holds an adjunct faculty appointment at the University of Texas Health Science Center at Houston.

He has worked in various positions involving hospital administration including six years as Associate Director and, subsequently, Deputy Director of the U.S. Public Health Service Hospital in Baltimore and Deputy Director of the U.S. Public Health Service Hospital in Nassau Bay, Tex.

Dr. Bruun received a bachelor's degree from Loyola University in Chicago, a master's degree in Health Care Administration from George Washington University, and a doctor of science in Health Services Administration from Johns Hopkins University.



Mr. Bruun

NIA Funds Additional Teaching Nursing Homes

Secretary of Health and Human Services Margaret M. Heckler announced three grants totaling \$7 million over the next 5 years to fund research on the geriatric health problems seen in nursing homes.

"I believe these awards reflect the Administration's continuing commitment to the health concerns of the elderly and to research into such problems as Alzheimer's disease," the Secretary said. President Reagan has proclaimed November to be National Alzheimer's Disease Month.

These awards bring to five the number of teaching nursing home programs currently sponsored by the National Institute on Aging. The new programs will be located in Boston, Cleveland and Baltimore.

Traditionally the nursing home has been outside the mainstream of medical research. As a result, many of the chronic health problems that cause the elderly to be institutionalized are poorly understood. One of the primary goals of NIA's teaching nursing home program is to increase knowledge about the diagnosis, prevention and treatment of such conditions as senile dementia, incontinence, depression and sleep disorders.

Five institutions will participate in the Boston program which will receive \$528,000 for the first year. They are the Hebrew Rehabilitation Center for Aged, Beth Israel Hospital, Massachusetts General Hospital, Harvard Medical School and Boston University's School of Nursing.

Dr. John W. Rowe, director of the division of aging at Harvard Medical School, will serve as principal investigator.

Among the areas that Dr. Rowe and his colleagues will emphasize are the neurological and endocrine changes seen in the brains of Alzheimer's patients, and the effects that antidepressant medications have on these changes.

They will also explore the connection between blood pressure and loss of consciousness in the elderly, and the diagnosis and

treatment of urinary incontinence.

Another study will examine the effects of sun exposure and diet on vitamin D levels in older people. Adequate amounts of vitamin D may play an important role in the delay or prevention of osteomalacia (bone softening) or osteoporosis (bone thinning).

The department of epidemiology and community medicine at Case Western Reserve University will receive the second grant which totals \$371,000. for the first year. Cooperating in the program will be the university's office of geriatric medicine, the School of Nursing and four area nursing homes.

Dr. Amasa B. Ford, associate dean for geriatric medicine and director of the office of geriatric medicine, will direct the project that includes a followup to a 1975 study on the physical and mental health, and the economic and social status of Medicare participants in the Cleveland area. The Cleveland group will also investigate age-related changes in the strength and endurance of the respiratory muscles.

The third grant will be awarded to the Johns Hopkins University School of Medicine's Program in Gerontology and Geriatric Medicine. This project will include the university's department of nursing and School of Public Health, the Baltimore city hospitals and the Mason F. Lord Chronic Care Hospital.

Dr. William R. Hazzard, associate director of the department of medicine at Johns Hopkins, will be the principal investigator. Funding for the first year is set at \$441,000.

Research will concentrate on the effects of aging on cardiovascular, neurological and hormonal function in obese individuals. Dr. Hazzard and his associates will also examine the potential benefits of exercise and weight loss for older people in terms of sleep-related problems, cardiovascular fitness and cognitive functions such as memory and learning. □

Hepatitis-B Vaccine Free To More NIH Staffers

The current hepatitis-B vaccination program for employees on patient care has been expanded to include nonpatient care NIH employees.

The vaccination program is voluntary and the vaccine is free.

The original program was begun because employees working with human blood and blood products on their jobs have a 3 to 5 times higher risk of getting hepatitis-B. Successful vaccination can eliminate this risk.

The vaccine is prepared from the noninfective hepatitis-B surface antigen. To date, the only side effect reported is a mild local inflammatory reaction (redness and swelling). There has been no evidence of more serious side effects. Specifically, there has been no association between the vaccine and hepatitis or Acquired Immune Deficiency Syndrome.

Employees who choose to receive the vaccine will be asked to complete a questionnaire and consent form, and report to the Occupation Medical Services Health Unit, Bldg. 10, ACRF, 6th Fl. clinic to be tested for preexisting protection to the hepatitis-B virus. Those employees who don't already have protection will then be offered the 3-dose vaccination series.

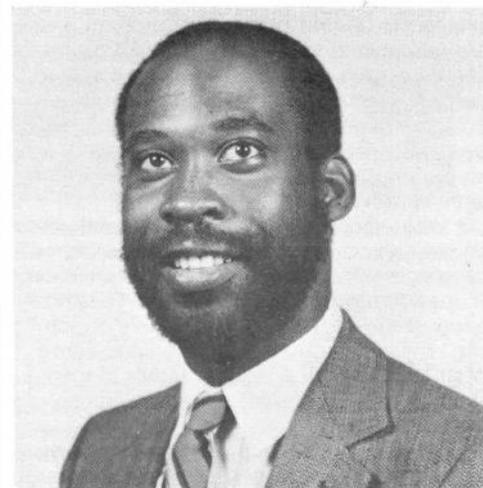
So that the total number of potential vaccine recipients can be estimated, laboratory chiefs of each BID have been requested by OMS to submit the number of nonpatient care employees under their supervision who handle human blood or blood products or both.

Once this information is received, OMS will present several 20-minute educational conferences on hepatitis-B and the vaccine to prevent it.

The dates and locations for these conferences will be announced.

If you are interested in receiving this vaccine, notify your laboratory chief.

Additional information on the vaccination program may be obtained from OMS (Dr. Schmitt, 496-4411). □



Ludlow McKay has been selected administrative officer for the Clinical Center and will be assigned to the Critical Care Medicine Department.

Causes and Treatment of Chronic Pain Detailed in New NINCDS Booklet

Persistent pain has troubled—and sometimes tortured—people for thousands of years. Now a new booklet for sufferers of headache, low back pain, arthritis, and other forms of chronic pain is available from the National Institute of Neurological and Communicative Disorders and Stroke.

The booklet, *Chronic Pain: Hope Through Research*, contrasts the temporary pain of toothache, stomach cramps, or childbirth with chronic or long-lasting pain that wracks the body's nervous system for weeks, months, and even years.

It notes that chronic pain assaults the spirit, causing preoccupation with pain, anger, isolation, helplessness, sleeplessness, and strained relationships with family, friends and coworkers.

Over 800 pain clinics now operate throughout the U.S. reflecting the extent of the problem. These clinics generally take a "whole-person" approach and treat both the physical and emotional effects of headaches, arthritis, and other forms of chronic pain.

Headache afflicts at least 40 million Americans, who spend \$4 billion a year to relieve recurrent tension and other symptoms. Biofeedback—a method of controlling and stabilizing the body's physical and emotional reactions—helps individuals control the compression of neck and head muscles that cause tension headaches.

Hot and cold compresses provide temporary pain relief, but drug therapy is the most common treatment. A number of drugs, taken when symptoms first occur, can relieve migraine. These include ergot alkaloids in combination with caffeine, which prevent blood vessels from expanding.

Low back pain afflicts 15 percent of Americans at some point, costing more than \$5 bil-

lion a year. The most common causes are bad posture, lack of exercise, and excessive weight. Researchers believe modern sedentary living accounts for the high incidence of this ailment.

Aspirin, weight loss and exercise are traditional treatments. A new technique for applying brief pulses of electricity to nerve endings under the skin, called transcutaneous electrical stimulation (TENS), affords effective pain control.

Arthritis afflicts 20 million Americans. The two most common forms are osteoarthritis—affecting the fingers, spine or hips—and rheumatoid arthritis—causing swelling of soft tissue around the joints.

Arthritis is best treated early with exercise and drugs, especially aspirin. Steroid and nonsteroid anti-inflammatory drugs are widely used, although they may cause serious side effects. Acupuncture and TENS have been used to treat arthritis with mixed results.

Acupuncture is most effective when the needles are placed near the painful area, instead of the traditional Chinese method of insertion at key body points.

Psychogenic pain is not associated with detectable damage to the tissues or nervous system, yet it is a major form of chronic pain. Some sufferers find relief through hypnosis, but not everybody is a successful hypnotic subject. Hypnosis imparts a sense of emotional well-being and tolerance of pain.

For a copy of *Chronic Pain: Hope Through Research*, write: "Pain/HL," National Institute of Neurological and Communicative Disorders and Stroke, Office of Scientific and Health Reports, Bldg. 31, Rm. 8A16, Bethesda, MD 20205 Telephone (301) 496-5751.—

Marcia Doniger □

Drs. S. Straus, K. Western Given Commendation Medals

Two scientists with the National Institute of Allergy and Infectious Diseases were recently awarded the Public Health Service's Commendation Medal for their "sustained high quality work performance." Drs. Stephen E. Straus and Karl Western, commissioned officers, were presented bronze medals and certificates by Institute Director Dr. Richard M. Krause.

Dr. Straus, chief of the Medical Virology Section, Laboratory of Clinical Investigation, was honored "for outstanding, original research on the natural history, biology, and treatment of human herpesvirus infections." Dr. Straus was one of the first to show the clinical usefulness of the drug acyclovir in treatment of herpes infections.

In addition, he developed new techniques for growing enteric-type adenoviruses and has shown that these viruses are important causes of gastrointestinal and respiratory diseases in infants.

Dr. Western was cited "for dedicated leadership as NIAID assistant director for international research and for innovative and creative development of the Institute's program in international health and tropical medicine."



Drs. Straus (l) and Western were honored with PHS Commendation Medals for their work on herpesvirus infections and international health and tropical medicine, respectively.

Dr. Western is project officer on a 5-year, \$6 million interagency agreement—with funds from the U.S. Agency for International Development—to study "Epidemiology and Control of Vector-Borne Diseases in the Near East."

The study involves the U.S., Israel and Egypt. He has also effectively fostered collaborative research in countries such as India, Venezuela, China, and Brazil. □

DIABETICS

(Continued from Page 1)

sugar).

Dr. Bantle's study included 10 healthy subjects, 12 patients with Type I diabetes (insulin dependent), and 10 patients with Type II diabetes (noninsulin dependent). They were each served a breakfast composed of common foods on five different mornings. Each breakfast contained nearly identical amounts of carbohydrate, protein, and fat. A different test carbohydrate—glucose, fructose, sucrose, potato starch or wheat starch—accounted for 24 to 25 percent of total calories and 50 percent of total carbohydrate calories. The meals varied from 685 to 742 calories.

Findings

The findings from each of the three groups—nondiabetics, insulin-dependent and noninsulin dependent diabetics—were analyzed separately for plasma glucose increases or the difference in plasma glucose levels before and after each test meal.

In healthy subjects and Type I diabetics, the fructose meal produced the smallest (mean peak) increase in the plasma glucose level while the glucose meal produced the greatest. The increases varied significantly different in healthy subjects but not in the Type I diabetic subjects. The potato, wheat, and sucrose meals produced peak plasma glucose increases intermediate between fructose and glucose but were not significantly greater than with the fructose meal, or significantly lower than with the glucose meal.

In Type II patients, fructose also produced the smallest mean peak increment in plasma glucose levels which was a significantly lower peak than that achieved from potato, wheat, and glucose.

Summary

Overall, the data indicated that in all three groups, fructose produced the smallest increase in plasma glucose and glucose produced the largest increase in plasma glucose concentrations. Sucrose, potato and wheat were intermediate.

Thus, these data do not support the previously accepted belief that dietary sucrose aggravates high plasma glucose levels in diabetic patients. In both Type I and Type II diabetics, sucrose—when consumed in a mixed meal with protein and fat—did not produce a more rapid rise or a greater peak increase in plasma glucose level than did comparable amounts of potato or wheat starch. Fructose produced less of an increase in blood sugar after a meal than the other test carbohydrates. However, the differences observed were not statistically significant in Type I (insulin using) diabetic subjects. □

Sit down before fact as a little child, be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses nature leads, or you shall learn nothing.—Thomas Henry Huxley □

We only acknowledge small faults in order to make it appear that we are free from great ones.—La Rochefoucauld □

Risk-Taking Behavior Normal for Adolescents, Says Noted Authority on Adolescent Behavior

Risk-taking behavior is normal for adolescents and should be viewed as a necessary stage of human development from childhood to adulthood. This is the conclusion of Dr. Diana Baumrind who gave the first annual lecture at NIH commemorating National Child Health Day, Oct. 3, held each year on the first Monday in October.

The presentation, entitled "Why Adolescents Take Chances—Why They Do Not: Theory and Research," was sponsored by the National Institute of Child Health and Human Development.

A noted investigator in the areas of family relations and adolescent behavior, Dr. Baumrind, a research psychologist at the Institute of Human Development, University of California, Berkeley, believes that "a trusting parent-child relationship may prevent adolescents from seeking involvement in the more serious forms of risk-taking behavior.

"Yet," she says, "some parental practices may reduce risk-taking behavior at the cost of retarding normal adolescent development." And in some areas of risk-taking behavior, she said, peer pressures may supplant parental values and desires.

"It is inappropriate to label adolescent behavior as deviant merely because it fails to conform to adult standards," said Dr. Baumrind. "What is appropriate for adults is not appropriate for infants, toddlers or adolescents." She said diversity is an essential characteristic of any stable system—including societies.

"If we wish to encourage the qualities in our youth that lead to enterprise, excellence, achievement and creative accomplishment, we will not attack their risk-seeking proclivities or nontraditional views.

"Instead," she said, "we will talk about calculated risk-taking and responsible pleasure-seeking. Intervention efforts with youth should be directed, not against their risk-taking propensities, but against uncontrolled, impulsive, irresponsible risk-taking."

Teenagers are just as interested in health issues as adults, said Dr. Baumrind. "Adolescents respond positively to solid information that demonstrates the harmfulness of a given practice when that information is presented clearly and without ambivalence."

For example, she pointed out an antismoking campaign directed at high school youth in Berkeley. She said it was successful "because it was founded on hard facts rather than on scare tactics and exaggerated claims."

Dr. Baumrind emphasized the need for similar educational campaigns dealing with drug abuse, teenage pregnancy and venereal disease.

Introducing the lecturer, Dr. Mortimer B. Lipsett, NICHD Director, said that selecting Dr. Baumrind and adolescent risk-taking as the topic to mark Child Health Day emphasizes the Institute's commitment to promoting the relatively new area of behavioral pediatrics. This field integrates the behavioral and social as well as the biological determinants of disease and health.

"One example of behavioral pediatrics—adolescent risk-taking behavior—is an



Dr. Baumrind

area of great importance," Dr. Lipsett said. "Accidents are the leading, single cause of death among young people, followed closely by homicide and suicide. Drug and alcohol abuse and inappropriate sexual behaviors are also problems in this age group.

"In addition," she said, "many health behaviors such as cigarette smoking and eating habits—which have a profound effect on adult health and well-being—have their origins during this period of life.

"Thus, research that contributes to our understanding of how childhood behavior influences adolescent and adult health behavior patterns will have far-reaching consequences."

Dr. Lipsett noted that in the President's proclamation of Child Health Day, President Reagan stressed the importance of encouraging "behavior that fosters good health."

Dr. Baumrind has written numerous scientific papers and lectured extensively. She is currently writing a book, *Family Socialization and Developmental Competence in Middle Childhood*. She is a member of the Society for Research in Child Development and a fellow in the American Psychological Association. □

NIH Golf League Wraps Up 1983 Season

The 1983 NIH Golf League season officially ended Oct. 3 with the annual awards banquet and fall outing at Bretton Woods Country Club near Seneca. The season featured 172 team matches and three outings, one held jointly with the NIH Golf Association.

At the banquet, members received trophies and awards. Winning teams were:

A Flight

Thomas Spencer
Dave Chicchirichi
Linda Weir
Frederick Ferris
Fran Paull
Charles Pruitt
Ted Munter
William Blot
Helen Krebs

B Flight

Charles Fafard
Marie Nylan
Karen Wright
Toni Dunlap
Eileen Trevisan
Kenneth Brown
Mark Sliwkowski
Blanche Lauck

C Flight

Howard Sabrin
Anne Baney
Syd Jones
Patrick Williams
Kathy Graff
Nancy Cahill
M.S. Quraishi

VASECTOMY

(Continued from Page 1)

The National Institute of Child Health and Human Development initiated this project in 1976 to find out whether the immune reaction could lead to any health problems in men with vasectomies.

The project looked at a wide range of illnesses, which included cardiovascular disease, a potential risk suggested by animal studies. "It is not only the largest, but also the most comprehensive assessment ever conducted of the possible health consequences of vasectomy," according to Ruth Crozier, the study's project officer at NICHD.

Investigators in four research centers collaborated on the study. The research teams were headed by Dr. Frank Massey, Jr., at the University of California, Los Angeles; Dr. Gerald Bernstein at the University of Southern California in Los Angeles; Dr. Leonard Schuman at the University of Minnesota in Minneapolis; and Dr. William O'Fallon at the Mayo Clinic in Rochester, Minn.

Results show that before the sterilized men had their vasectomies, there were no striking differences between them and the nonvasectomized men with whom they were paired.

In the years following vasectomy, the only condition that was markedly more common in vasectomized men was local inflammation near the site of the operation. This complication, which was previously known, happens infrequently and is unusually short-lived, occurring mostly within the first year after vasectomy.

Otherwise, the men with vasectomies had no significantly higher rates of any health problems than other men; the rates were either similar for both groups or lower for the men with vasectomies. This held true for several conditions that had been cited as possible complications of vasectomy, including hardening of the arteries, rheumatoid arthritis, blood clotting disorders, and gout.

Vasectomized men had fewer deaths from all causes except accidents and violence, which caused the same number of deaths in men with and without vasectomies. □

Former NIH Fellow Wins \$100,000 Hazen Award

Dr. Robert J. Lefkowitz, a former NIH fellow, whose work has played a major role in developing and shaping the field of drug and hormone receptor research, has been named 1983 recipient of the \$100,000 Lita Annenberg Hazen Award for Excellence in Clinical Research.

An investigator at the Howard Hughes Medical Institute and James B. Duke professor of medicine at Duke University Medical Center, Dr. Lefkowitz began his research career at NIH as a fellow working with Dr. Jesse Roth, now director of the Division of Intramural Research, NIADDK, and himself recipient of the 1979 Hazen Award.

The Hazen Award, established in 1979, is presented each year to a physician whose research has changed the medical profession's knowledge and consequent treatment of disease. □

NLM's Toxicology Information Program Helps In Nationwide Cleanup of Hazardous Waste

Early last summer, the National Library of Medicine's Toxicology Information Program began providing information support for a very costly and difficult undertaking—the cleanup of America's many abandoned hazardous waste sites and accidental chemical spills.

Love Canal, N.Y., and Times Beach, Mo., are two of over 16,000 known sites where chemical wastes have been abandoned. Chemicals have been placed in open pits and landfills, often with little concern for environmental pollution.

In about 75 percent of the dumps, the chemicals have leaked into the ground water, posing hazards to surrounding communities.

Strict precautions often must be taken to assure worker protection during remedial activities. A massive cleanup effort is now under way as a result of the "Superfund Act."

The Superfund Act, the common name for the Comprehensive Environmental Response, Compensation and Liability Act of 1980, established a \$1.6 billion program administered by the Environmental Protection Agency, with state governments and 13 other Federal agencies sharing responsibility.

The Public Health Service is responsible for health aspects, including assessment of community health problems, protection of workers in cleanup activities, and development of literature and databases on health hazards of chemical substances.

The Centers for Disease Control, National Toxicology Program, National Institute for Occupational Safety and Health, and NLM have significant roles in this program. NLM was assigned responsibility for information databases.

Expanded Databases

NLM will expand, where possible, certain existing online databases, mainly TOXLINE, CHEMLINE, and the Toxicology Data Bank (TDB), with information relevant to chemicals likely to be found in waste dumps or in chemical accidents. The major effort is to expand the TDB.

By fall 1984, a greatly enhanced TDB will contain about 5,000 chemicals with 140 types of data. This compares with the present TDB of 4,000 chemicals with 60 types of data.

Areas to be expanded include safety and handling, environmental data and exposure potential, exposure standards and recommendations, and monitoring and analysis methods. Improvements will also be made in the ability to search and retrieve data from the TDB.

The Lister Hill Center is working on this with NLM's Toxicology Information Program to develop microcomputer-based workstations for retrieving data in field operations.

Authoritative Sources

A readily available and authoritative source of health and environmental information has been identified as an urgent need. In emergency situations, managers of cleanup operations can rarely rely on libraries or literature searches due to inadequate facilities, time, or trained personnel.



Workers inactivate a chemical at a hazardous waste site.

The NLM TDB was considered the best foundation on which to build a comprehensive and authoritative source of information. It is already quite comprehensive on the number of chemicals covered and certain types of data such as toxicologic data and physical/chemical properties.

A major strength of the TDB is the high quality of its data. This is assured by the TDB Peer Review Committee, a panel of expert toxicologists convened under the aegis of the NIH Toxicology Study Section. The committee helps select data sources to be used and reviews all data records before allowing them to enter the public file.

Developing Concepts

Two interagency advisory committees have assisted NLM in developing concepts for Superfund activities: the HHS Committee to Coordinate Environmental and Related Programs and the Information Workgroup of the HHS Superfund implementation group.

The \$1.6 billion currently in the Superfund will be sufficient to clean up only 400 to 500 of approximately 16,000 presently identified waste sites. □

Dr. Herschel Horowitz Receives Schlack Award

Dr. Herschel S. Horowitz, a scientist with the National Caries Program, NIDR, is the 1983 recipient of the Carl A. Schlack Award.

The award was presented to Dr. Horowitz on Oct. 31, during the 90th annual meeting of the Association of Military Surgeons of the United States (AMSUS), held in San Antonio, Texas.

The award is given each year in memory of Captain Carl A. Schlack, DC USN Ret., whose accomplishments initiated and firmly established dental research as a full-time program in the Navy.

Awardees must be dentists in one of five Federal services who have made outstanding contributions in either dental education or dental research.

Dr. Horowitz, a captain in the USPHS, received the award for his excellence in research as well as in education. He is a leading national and international authority on fluorides and dental caries.

The oral health of many populations has been improved through the application of his research findings on school water fluoridation, self-applied fluorides and pit and fissure sealants.

Dr. Horowitz joined NIDR in 1971 and is currently chief of the Institute's Community Programs Section. He holds D.D.S. and M.P.H. degrees from the University of Michigan and his professional interests span all aspects of preventive dentistry.

He is a diplomate and immediate past-president of the American Board of Dental Public Health. He is presently a consultant to the World Health Organization, the American Dental Association's Council on Dental Therapeutics, and the Food and Drug Administration. □



Dr. Horowitz



The National Institute on Aging and Pfizer Pharmaceuticals Inc. have joined together to produce and distribute self-help information for the elderly at 20 regional shopping malls across the country. Shown at the dedication ceremony at Tyson's Corner shopping mall in Virginia are: Mary Jean Frye, information office, NIA; Cy Brickfield (c), executive director of the American Association of Retired Persons, one of the sponsoring organizations; and John Denning, national vice-president of the American Association of Retired Persons.

Can Strict Blood Sugar Control in Diabetes Avert or Lessen Blood Vessel Damage?

Physicians have long believed that people with diabetes mellitus should keep their blood glucose (sugar) levels under control. However, physicians have not known exactly what that range of control should be.

Thus, a major study of diabetes—which may take about 10 years to complete—has recently begun at 21 medical centers throughout the country.

The study, known as the Diabetes Control and Complications Trial, is sponsored by the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK). Cosponsors of the study include the National Institute of Neurological and Communicative Disorders and Stroke, the National Heart, Lung, and Blood Institute, and various other Federal agencies and commercial organizations that have donated supplies, equipment and services.

Physicians conducting the study want to learn whether strict blood glucose control achieved through intensive administration of insulin—a hormone taken by more than one million American diabetics to control their blood glucose levels—can prevent, delay or lessen the early complications of diabetes that affect small blood vessels, often leading to major disability or death.

Recent development of new technologies and laboratory tests set the stage for the multicenter clinical trial. Among these are insulin infusion pumps (portable devices which automatically regulate insulin delivery and, in turn, blood glucose levels); devices for self-monitoring of blood glucose, other methods to assess blood glucose control, and very sensitive procedures to monitor the progress of various complications of diabetes.

Diabetes is a complex, chronic disease for which there is no present cure. Affecting an estimated 11 million people in the U.S., diabetes prevents the body from changing dietary sugars and starches into the energy needed for daily activity. Normally, the body's digestive juices turn sugars and starches into glucose, a simple sugar, which circulates in the blood. The hormone insulin, produced in the pancreas gland, allows the body to convert glucose into immediate energy or to store it for later use.

In someone with diabetes, however, either the pancreas does not produce enough insulin (Type I diabetes), or the body does not properly use the insulin that is produced (Type II diabetes). As a result, excess glucose collects in the blood and tissues and overflows into the urine.

For years, research scientists have suspected that the blood glucose level and the development of certain chronic complications associated with diabetes are somehow linked. Physicians are concerned about these four major complications in particular:

- **Damage to the retina**, caused by bleeding from the small blood vessels in the light-sensing lining at the back of the eye, which blinds 5,000 diabetics a year and causes 15 percent of all reported cases of blindness in the U.S.

- **Damage to nerves** throughout the body which can cause pain, loss of feeling, and

loss of muscle control.

- **Problems with blood circulation** resulting from diabetes-related blood vessel damage which can lead to deformed or infected feet and, frequently, to amputation.

- **Kidney problems** which lead to about 4,000 cases of kidney failure among diabetics each year.

Using changes in the retina as the primary outcome of the study, the Diabetes Control and Complications Trial is designed to determine whether there is a relationship between blood glucose concentrations and early complications and, if so, what degree of blood glucose control can prevent their occurrence or lessen the damage.

The trial will begin with a 2-year feasibility study involving 252 volunteers with Type I diabetes between ages 13 and 39, who have had Type I diabetes for 15 years or less.

The study will compare "standard" with "experimental" treatment. The standard treatment will include one or two injections of insulin a day, urine testing, and a routine checkup every 3 months.

The experimental or "tight control" treatment will include either insulin injections three or four times daily or insulin given continuously with an insulin pump, self-monitoring of blood glucose levels, an initial hospital stay, and checkups once a month.

Both treatments will include a specialized meal plan and education program. Volunteers will have no choice of treatment group: They will be assigned to one group or the other on a random basis. Assessment of the results of this phase of the study will determine if a full-scale trial should be undertaken.

A flyer about the Diabetes Control and Complications Trial is available by writing to "Diabetes/HL," National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, Bldg. 31, Rm. 9A04, Bethesda, MD 20205, or by calling (301) 496-3583. □



Dr. Edward N. Brandt Jr., Assistant Secretary for Health, HHS, congratulates Suzanne Rosenthal, president of the Coalition of Digestive Disease Organizations, at the kickoff luncheon of the National Digestive Diseases Education Program. The goal of the program is to mobilize and coordinate activities of government, professional and lay organizations concerned about digestive health and disease education.

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