Popular Drug Used To Treat Otitis Media Found Ineffective by Scientists

Decongestant and antihistamine compounds, one of the most popular drug treatments prescribed for a common childhood ear disease called otitis media with effusion (commonly known as "secretory" otitis media), are no more effective than a placebo, according to a study conducted by Dr. Charles D. Bluestone and associates at the University of Pittsburgh.

Also, the drugs cause significantly more side effects than does a placebo—primarily mild sedation and weakness. Decongestant and antihistamine compounds "should not be recommended for otitis media with effusion in infants and children," concludes Dr. Bluestone.

This research was carried out under a contract with the National Institute of Neurological and Communicative Disorders and Stroke. The 3-year study evaluated a combination of an oral decongestant (pseudoephedrine hydrochloride) and antihistamine (chlorpheniramine maleate). These drugs, either separately or in combination, are widely prescribed, as well as being available without prescription in drugstores.

Of 611 infants and children entered in the study, 553 completed a 4-week course of either decongestant-antihistamine therapy or a placebo that had no therapeutic value. (See OTITIS MEDIA, Page 5)

NEI Director Dr. Kupfer Elected To Lead International Effort Against Blindness

Dr. Carl Kupfer, Director of the National Eye Institute, has been elected president of the International Agency for the Prevention of Blindness, a multinational consortium of groups and individuals committed to reducing the worldwide toll of blinding eye disease.

Because 80 percent of all blindness occurs in developing countries, the IAPB devotes much of its effort to improving the visual health of people in these nations.

During his 4-year tenure as president of the organization, Dr. Kupfer will oversee the work of 8 regional and 56 national committees that make up the IAPB. In addition, he will help to coordinate the activities of several international voluntary organizations which participate in the agency and contribute to its support.

Among the most important of these are the National Society to Prevent Blindness (United States), Helen Keller International (United States), the International Eye Foundation (United States), Operation Eyesight

Dr. T. Franklin Williams Named NIA Director

Dr. T. Franklin Williams has been selected as Director of the National Institute on Aging, effective July 1.

Dr. Williams is professor of medicine and professor of preventive, family and rehabilitation medicine at the University of Rochester School of Medicine and Dentistry. He is also codirector of the center on aging of the university's medical center.

He was recently appointed as the J. Lowell Orbison distinguished service alumni professor of the University of Rochester Medical Center. He has served as medical director of the Monroe Community Hospital since 1968.

Well-known and highly respected in his field, Dr. Williams' extensive list of publications includes clinical care of the geriatric patient, assessment, long-term care and chronic illness, diabetes, and research and health services for the elderly.

He was elected to membership in the Institute of Medicine of the National Academy of Sciences in 1976, and served for the past 3 years as a member of the Institute Council. He is a fellow of the American College of Physicians and the American Public Health Association. He

(See DR. WILLIAMS, Page 7)
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Training Tips

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

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

R&W Discount Tickets Available For Ice Capades, Feb. 19, 21

R&W has tickets for the Ice Capades (Capital Center), on Saturday, Feb. 19, noon, and on Monday, Feb. 21, for the 1 and 5 p.m. performances. Tickets are discounted to $7.50 (plus 50 cents service charge).

Dorothy Hamill, U.S. skating queen, and the "Smurfs," cartoon characters, will be featured.

Tickets are available at the R&W Activities Desk, Bldg. 31.

Memorial Fund Established For Dr. Martin N. Epstein

In memory of Dr. Martin N. Epstein, former director of the Lister Hill medical computer science research group, his friends have established the SCAMC/Epstein Memorial Fund. SCAMC is the annual Symposium on Computer Applications in Medical Care.

The fund will be used for a "to be designated award" for a student of medical computing. Proposed ideas for the award range from an annual SCAMC student paper competition to a scholarship, depending upon the amount contributed.

Donations are tax-deductible. Contributions may be sent to: SCAMC/Epstein Memorial Fund, c/o Mrs. Martin Epstein, 3525 Davenport St., N.W., Apt. 407, Washington, DC 20008.

NIH Chamber Orchestra Presents Concert on Feb. 27

The NIH Chamber Orchestra, sponsored by the Recreation and Welfare Association, will present its second concert on Sunday, Feb. 27, at 3 p.m., in Masur Auditorium.

The orchestra, conducted by David Crane, will perform music by Bach, Mozart, Barber and Stolzel.

Soloist Featured

Soloists featured include Alice Weinreb, flutist, National Symphony Orchestra; Eric Machanic, pianist; and Louis Wolcott, concert master in the Bach Brandenburg concerto; and Wendy Shermet, soprano, in the Barber.

Admission is a $2 raffle ticket available from the R&W Activities desk (also in Westwood) and from orchestra members.

Six prizes will be announced for winners whose tickets will be drawn during the intermission.

For further information call John Wolff, 496-7070.

STEP Forum Cancelled

The NIH STEP forum on Indirect Costs, scheduled for Tuesday, Feb. 22, in Wilson Hall, Shannon Bldg., has been cancelled. (See NIH Record, Feb. 1, 1983).

Clinical Center Plans More Renovations for March

Beginning in March, work will begin to convert Bldg. 10 passenger elevators to an automated, rather than operator-controlled system to enhance efficiency.

The renovations will be completed in four separate phases—two elevators at a time. The first phase will begin Mar. 1 with the B wing elevators. Upon completion, work will proceed with the center lobby elevators (two at a time), and then finish with the D wing elevators. Each phase will last approximately 14 weeks. The two elevators involved in each phase will not be in service, but all others will remain operational.

The locations of some of the Bldg. 10 and ACRF elevators are now well-known to staff, and they are, therefore, underutilized. Employees are encouraged to use them not only during the renovation period, but regularly. These elevators, and the ones to be automated, are shown in the diagram above.
February Is National Children’s Dental Health Month—Smile!

“Smile America, Healthy Smiles Last a Lifetime”—that’s the theme of National Children’s Dental Health Month (February), as designated by the American Dental Association. The slogan was selected to stress the lifetime benefits of proper care for children’s teeth.

As awareness of children’s dental health has increased in the United States, the incidence of tooth decay has lessened. Results published in 1982 from the National Dental Caries Prevalence Survey, conducted by the National Caries Program of the National Institute of Dental Research, indicate that tooth decay among school children decreased an estimated 25 to 32 percent during the past decade.

These encouraging findings may be attributed to the more widespread use of fluorides, the most effective agent known to protect against tooth decay. Fluoride is of special benefit to children because their teeth are still developing, but recent studies have shown that adults can also benefit from its use.

About 112 million people in the United States drink water that contains the correct amount of fluoride—one part per million. In some communities the fluoride occurs in the water supply naturally, while in others, it is added to achieve the proper level.

School-based fluoride mouth-rinse and tablet programs and the use of fluoride toothpastes have also increased children’s access to the advantages of fluoride.

Greater knowledge about the importance of primary (baby) teeth is another factor in improved dental health. Primary teeth have several major functions—they enable a young child to eat solid food and speak clearly, and they reserve space for the permanent teeth that will erupt when a child is about 6 years old.

Any cavities that develop in these first teeth should be repaired. If these teeth are lost too early because of decay or injury, adjoining teeth may shift their position and cause the permanent teeth to erupt out of proper alignment. This can make the teeth crooked and the resulting “malocclusion” may require orthodontic treatment.

Tooth decay is caused when certain bacteria that normally live in the mouth convert sugar and other carbohydrate foods we eat into acids. These acids dissolve the tooth enamel causing pain and necessitating costly repair.

Teeth are susceptible to decay as soon as they appear in a baby’s mouth. “Nursing bottle mouth” is a condition in which a young child’s teeth are destroyed by tooth decay. By the time the decayed teeth are discovered, the child’s teeth may break or become impossible to repair.

Parents should take special care not to put a baby to sleep with a bottle containing milk, formula, sugar water, or fruit juice. As a baby sucks on a bottle during the day, saliva helps to wash away the harmful sugars and acids in the mouth. But at night, saliva flow is reduced.

The liquid from a bottle may not be swallowed quickly, and the sugar-containing fluids pool around the baby’s upper front teeth, bathing them in sugar for hours. Ugly and painful tooth decay can destroy your child’s smile. If your baby does require a bottle at bedtime for comfort, consider using plain water as a substitute for sugar-containing liquids.

4. Eat a balanced diet.
3. Avoid sugary snacks.
2. Drink fluoridated water.
5. Have regular dental checkups.

Smile America: Healthy Smiles Last a Lifetime!

Diagnostic Label Developed By Clinical Center Nurses

A new nursing diagnostic label developed by Clinical Center nurses Regina Carelli and Helen Mangan was one of eight approved this year for clinical testing by the 5th national Conference for Classification of Nursing Diagnoses.

Nursing diagnoses refer to health problems that can be influenced or resolved by a nurse’s care. Approval of nursing diagnoses by the national conference group provides a formal and systematic means of identifying conditions nurses are licensed to treat.

Nursing diagnoses do not encompass medical conditions. Instead, they refer to problems that may arise and interfere with the recovery of patients being treated for medical reasons. “Impairment of skin integrity,” “impaired physical mobility,” and “self-care deficit” are examples of nursing diagnoses.

Both Ms. Mangan and Ms. Carelli, clinical nurse specialists, have expertise in cancer nursing. Their new classification, “alterations in oral mucous membranes,” evolved from observations of cancer patients.

Many of these patients develop mouth ulcersations in the course of cancer chemotherapy. The resulting discomfort and difficulty eating can further compromise the nutritional status of a patient already under stress from disease and treatment. Patients with other disorders besides cancer also develop oral complications.

Ms. Mangan and Ms. Carelli submitted materials to the national conference on the possible causes of the condition, defining characteristics, and a bibliography to support their recommendations. In addition, they also developed a care plan based on the diagnosis for use by nurses in the Clinical Center.

The care plan has been incorporated into the Clinical Center’s computerized medical information system. Nurses who call up the care plan on the computer are presented with expected outcome for the condition along with possible nursing actions. These may include use of mouth rinses, dental hygiene, dietary advice, or use of creams.

Susan Simmons-Alling and Laura Ryan, clinical nurse specialists in the mental health nursing service, presented a paper at the conference on Implementation of Nursing Diagnosis Using a Computerized Medical Information System.

The Clinical Center Nursing Department's Administrative Council endorsed the concept of nursing diagnosis in 1980. New diagnostic labels like this one are gradually being developed and added to the CC’s medical information system and incorporated into day-to-day practice.

Dr. Djuricic Becomes FIC Scholar

Dr. Bogdan S. Djuricic, assistant professor of medicine in Belgrade, Yugoslavia, began a Fogarty International fellowship on Feb. 1. He will be under the preceptorship of Dr. Maria Spatz in the Laboratory of Neurocyto­biology, NINCDS.

The title of his research is Biochemistry of Brain Capillaries and Chorid Plexus.
Critical Care Medicine Consensus Conference
To Be Held in Masur Auditorium, Mar. 7-9

Critically ill patients require care of highly skilled physicians, nurses and specially trained support personnel versed in the use of the most sophisticated technology available in intensive care units.

An NIH Consensus Development Conference on Critical Care Medicine will be held in Masur Auditorium, Clinical Center, Mar. 7-9. The conference is sponsored by the Warren Grant Magnuson Clinical Center and the Office for Medical Applications for Research. The first 2 days of the meeting will begin at 8:30 a.m. Mar. 9 is a half-day session beginning at 9 a.m.

Speakers Noted
Dr. Joseph Parrillo, chief of the CC Critical Care Medicine Department and Dr. Stephen Ayres, chairman of the department of internal medicine, St. Louis University School of Medicine, organized the conference. Dr. Ayres will serve as chairman of the consensus panel.

Critical care medicine is a multidisciplinary specialty concerned with the care of patients who are suffering from life-threatening major organ systems dysfunc­tion. The hallmark of critical care is early diagnosis and immediate therapeutic inter­vention to prevent irreversible organ system damage.

A consensus panel of experts in cardiology, pulmonary medicine, surgical and medical intensive care, law, biostatistics, family practice, critical care nursing, anesthesiology, and administration will consider the scientific evidence presented. A press conference will be held Mar. 9 at 11:30 a.m.

Press Conference Scheduled
The conference will evaluate the efficacy, safety, function, structure, and future direction of critical care medicine.

The keynote address, Trends in Membrane Signaling by a Family of GTP-Binding Proteins, reflects the program’s 1983 seminar theme of New Frontiers in Pharmacology. The speaker is Dr. Henry R. Bourne, professor of medicine and head of clinical pharmacology, University of California, San Francisco.

A graduate of Harvard University, Dr. Bourne received his M.D. degree from Johns Hopkins University. From 1966 to 1968, he was a PRAT fellow in the laboratory of Dr. James R. Gillette, Laboratory of Chemical Pharmacology, NHLBI.

Following the lecture, the 22 current PRAT fellows will present informal poster sessions of the research they are doing within the intramural laboratories of the NIH and the Alcohol, Drug Abuse, and Mental Health Administration. The posters will be displayed on the mezzanine floor of the ACRP. All interested NIH staff are cordially invited.

The PRAT program offers 2 years of postdoctoral research training in pharmacology for individuals with backgrounds in clinical medicine or basic sciences. Fellows work in NIH intramural laboratories under the guidance of outstanding senior scientists.

For more information on the seminar, call Dr. James Gilliam or Mary Beth Gallagher at 496-7707.

Two NIGMS Grantees Win MacArthur Awards

Two of the 20 recipients of awards from the John D. and Catherine T. MacArthur Foundation are graduates of the medical scientist training program (MSTP) of the National Institute of General Medical Sciences.

The awards, made recently to "exceptionally talented individuals," are unsolicited and carry no obligation to the foundation. The prizes range from $24,000 to $60,000 annually for 5 years.

NIGMS supported Dr. David L. Felten from 1969 through 1973, and Dr. Charles S. Peskin from 1966 to 1973.

Dr. Felten is a professor of anatomy and neurobiology at Indiana University School of Medicine.

His research interests include the class of neurotransmitters known as monoamines, as well as aspects of hypertension, diabetes, and neuroregulation of the immune response. He has received support for studies in some of these areas from several NIH Institutes.

Dr. Peskin is a professor of mathematics at the Courant Institute of Mathematical Sciences of New York University. He is currently investigating computational methods in cardiac fluid dynamics, with NHLBI support.

The MSTP supports programs of combined scientific and medical training leading to the M.D./Ph.D. degrees.

The people who get on in this world are the people who get up and look for the circumstances they want.—George Bernard Shaw

NIGMS Will Hold Pharmacology Seminar

The Pharmacology Research Associate Training (PRAT) Program of the National Institute of General Medical Sciences will sponsor a special “PRAT morning” for its fellows on Tuesday, Mar. 1, beginning at 9 a.m. in the Ambulatory Care Research Facility Amphitheater.

The keynote address, Trends in Membrane Signaling by a Family of GTP-Binding Proteins, reflects the program’s 1983 seminar theme of New Frontiers in Pharmacology. The speaker is Dr. Henry R. Bourne, professor of medicine and head of clinical pharmacology, University of California, San Francisco.

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Three NCI Publications Win Awards

Three publications of the Journal of the National Cancer Institute (JNCI) won awards from the Washington, D.C., chapter of the Society for Technical Communications (STC). They were presented at a ceremony in Rosslyn, Va., in December. The JNCI publishes research papers on all phases of cancer research.

The staff of JNCI won the STC award of excellence—the second highest award—for its July 1982 issue, which was entered in the “complete periodicals” category.

The award automatically enters the JNCI in the STC international competition, where it will compete with other regional winners for the international awards, to be presented in St. Louis in May 1983.

NCI monograph editor Florence I. Gregoric won awards of merit for two JNCI publications: Research in Aging and Cancer: International Symposium for the 1980's (Monograph 60); and Third International Symposium: Cancer Therapy by Hyperthermia, Drugs and Radiation (Monograph 61). Both monographs were entered in the “books” category.

Ms. Gregoric has won two previous STC awards, a merit award in 1980 and an award of excellence in 1979, for JNCI mono­graphs.
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OTITIS MEDIA
(Continued from Page 1)

The patients ranged in age from 7 months to 12 years.
They were reexamined at 2 and 4 weeks for evidence of middle ear fluid. Patients who had no middle ear fluid at the end of 4 weeks were examined monthly for 3 more months to determine the rate of recurrence.

Diagnosis was made by examining the middle ear for inflammation, measuring middle ear pressure and hearing, and testing the middle ear muscle reflex.

This was a double-blind study. Neither the doctors nor their patients knew which children were taking the drug and which were taking the placebo.

Of the 278 patients who took the drug, only 69—about 25 percent—had otitis media in either ear after 4 weeks of treatment. The 275 children who received the placebo had nearly identical results—67, or about 24 percent, with no otitis media in either ear.

Neither the age of the children nor the length of time they had otitis media affected the results of the trial.

Dr. Bluestone’s research team found no significant difference in hearing between the two groups of children. However, over 50 percent of the ears with otitis media still had a significant hearing loss after 4 weeks.

If these hearing findings are projected to the general population of children who have otitis media with effusion, report Dr. Bluestone and associates, “the seriousness of the disease becomes manifest. Large numbers of children may have significant hearing loss for extended periods of time during the most important period of language and linguistic development.”

An estimated two-thirds of preschoolers have at least one episode of otitis media.

For patients who are concerned about curing their children’s ear disease Dr. Bluestone points out that several alternative forms of treatment for otitis media are still considered effective, including antibodies and surgical procedures.

“But,” he said, “parents should also recognize that the disease has a natural cure rate on its own—without any surgical treatment or medication.”

Dr. Bluestone cautions that these study results pertain to infants and children only. “We cannot draw the same conclusions about adults, who have a more efficient eustachian tube than children,” he said.

In addition to differences in eustachian tube structure and function, children are more susceptible to otitis media than adults because they are more prone to colds or respiratory infections. Otitis media results when infected nasal secretions enter the middle ear, causing swelling, inflammation, and pain.

Decongestant-antihistamine medications are currently prescribed for otitis media because physicians believe they help to clear the eustachian tube of secretions.

Although the study found them ineffective for this purpose, Dr. Bluestone says people “should not throw these drugs away completely.”

“They may be beneficial for other middle ear problems such as eustachian tube dysfunction without fluid,” he suggests. The drugs may also be helpful in decongesting the nasal passages.

The study was conducted in cooperation with the Otitis Media Research Center, Children’s Hospital of Pittsburgh. Dr. Bluestone is the director of the center, which is funded by a research grant from the NINCDS.

NIAID Advisory Council Has Six New Members

Six new members were recently appointed to serve on the National Advisory Allergy and Infectious Diseases Council effective through 1986.

Dr. Ralph Bookman, an allergy specialist in private practice in Beverly Hills, Calif., is a member of the attending staff of the Hospital of the Good Samaritan and Cedars Sinai Medical Center in Los Angeles. He is also an assistant clinical professor of medicine at the University of Southern California School of Medicine. His major research interests include allergy, column fractionation of antigens, and electrophoresis of reaginic serum.

Dr. Samuel F. Conti, microbiologist, is dean of graduate studies and research at the University of Massachusetts at Amherst. Prior to joining the faculty in 1980, he served as a research associate at the Brookhaven National Laboratory on Long Island and as a faculty member at the Dartmouth Medical School.

He was also the founding director of the T.H. Morgan School of Biological Sciences at the University of Kentucky. His research interests encompass microbial predator-prey interactions and the molecular biology of predatory bacteria.

Dr. Frank B. Engley, Jr., professor of microbiology at the University of Missouri, Columbia, has been chairman of the department of microbiology for over 22 years. He also served as chairman of public health and preventive medicine and as assistant dean of the school of medicine for over 5 years.

Earlier in this career, he was on the faculties of the University of Pennsylvania and the University of Texas-Medical Branch. His research interests are antisepsis, disinfection, sterilization and hospital infection control.

Dr. John L. Fahey, an immunologist, is professor and chairman of the department of microbiology and immunology at the University of California, Los Angeles. A long-time institute grantee, he also heads NIAID’s Center for Interdisciplinary Research on Immunologic Diseases at UCLA.

Before joining the faculty in 1971, he was chief of the National Cancer Institute’s Immunology Branch. His research interests are concerned with immunology and oncology.

Dr. Rafael J. Martinez is professor of bacteriology at the University of California, Los Angeles, having joined the faculty in 1961 as assistant professor of bacteriology. Prior to that, he was a senior research associate at the laboratory of biochemical genetics at the University of Buffalo.

His major research interests include microbial physiology and biochemistry. As an NIAID grantee, he is currently conducting research on the biochemistry of host-parasite interactions as well as the mode of action and role of infection.

Dr. Sam A. Nixon, professor in the department of family practice and community medicine at the University of Texas Medical School, is also director of the division of continuing education at the University of Texas Health Science Center in Houston. His research interests center on the diagnosis and treatment of infectious diseases with a particular interest in the control of sexually transmitted diseases.

He has served as a consultant to the Centers for Disease Control as a member of the venereal disease control advisory committee.

He is currently a member of the National Council on Venereal Disease of the American Social Health Association.

Fluoride: The Smile Maker
Dr. E.K. Harris Retires;
Helped Establish DCRT

Dr. Eugene K. Harris, chief, Laboratory of Applied Studies, Division of Computer Research and Technology, recently retired ending a 30-year government career.

Dr. Harris came to NIH in 1965 and worked closely with members of the Division of Research Services, including the old Computation and Data Processing Branch, in establishing the Division of Computer Research and Technology.

He was instrumental in establishing the DCRT library, a facility today maintaining a collection of over 6,000 monographs and technical reports, and over 270 current journals. Dr. Harris was acting director of DCRT from December 1965 to August 1966, when Dr. Arnold W. Pratt was formally appointed Division Director.

Dr. Harris began his Federal career in 1952 when he joined the Environmental Health Center in Cincinnati as a field statistician, designing experiments and statistical analyses in pollution studies.

Later renamed the Robert A. Taft Sanitary Engineering Center, the agency was originally part of the PHS Bureau of State Services and considered the world center for environmental health research. It later became part of the Environmental Protection Agency.

He came to Washington in 1963 to work for the Bureau of State Services' headquarters. Six months later, he joined the HEW Division of Operations Analysis as a senior operations analyst, where he ironically prepared reports on PHS studies examining what areas of environmental research should be concentrated in PHS and in other agencies.

Dr. Harris also worked on studies determining the current status and future role of the PHS hospital system. His reports earned him the Department's Superior Service Award.

After working a year for the Department, he came to NIH. He had been chief of the Laboratory of Applied Studies since DCRT was established. This multidisciplinary laboratory is devoted to the application of mathematics and computer science to biomedical research.

During the past 17 years, Dr. Harris has concentrated on the application of statistical methodology to problems in clinical laboratory medicine. He is also very interested in the statistical analysis of laboratory data in relation to the management of hospital patients.

He described his position of lab chief as the best job he could have had at NIH.

"You're close enough to the research to have a hand in what's going on, and you're relatively free of the administrative duties of a higher position."

In retirement, he will continue his ongoing collaborative projects outside NIH, and would like to do some teaching and traveling. Dr. Harris and his family will be moving from the Washington area to their Virginia country home near Charlottesville in the Blue Ridge Mountains.

Hazel Mills Retires
After 20 Years

Some 120 friends and coworkers gathered together Jan. 7 to honor Hazel H. Mills, secretary to the director of the Division of Administrative Services, on her retirement after 20 years of Federal service.

Hazel spent most of her career with the Division which was originally established as the Office of Administrative Services.

Career Noted

During that time, she served successively as secretary to George Morse, chief of Protection and Security Management (now PSMB); Lewis D. Brown, assistant director, DAS; James B. Davis, former director, DAS; and for the past 7 years under the present director, Otis Ducker.

In her retirement, she plans to do all the things she never had time to do, including spending more time with her grandchildren, volunteer work at a hospital and enjoying life with her husband Norman, at their farm in Thurmont, Md.

Recently the Women's Organization of the National Institute of Child Health and Human Development presented a seminar on NICHD Research and Its Relationship to the Health Needs of Women and Families. Featured speakers were I to r: Dr. Duane F. Alexander, deputy director; Dr. Mortimer B. Lipsett, Director; Barbara M. Wilkin, Women's Organization chairwoman and program moderator; Dr. Arthur S. Levine, scientific director; and Dr. Gordon Guroff, deputy scientific director. The program was cosponsored by the NICHD Equal Employment Opportunity Office.

Abridged Index Medicus.

When requesting Literature Searches, please include title and number, enclose a self-addressed gummed label, and mail to: Literature Search Program, Reference Section, National Library of Medicine, Bethesda, MD 20205.
Good Neighbor Program Designed by NCI To Strengthen Local Community Ties

A pediatrician and a pharmacist from NCI volunteered to give local elementary school children a glimpse of how they spend their days on the job during a “Community Helpers Day,” held recently at Washington Grove Elementary School in Gaithersburg, Md. The event is a pilot project from the NCI Pediatric Branch and is part of a new “good neighbor program” designed to strengthen NCI’s ties with the local Montgomery County community.

Dr. Carol Janus, a pediatrician in the Pediatric Branch, and Cathie Schumaker, a pharmacist in the Clinical Center, gave a group of curious second-graders an hour-long presentation which included a physical examination of an infant and a film on drug safety.

**Performs Examination**

Both Dr. Janus and Ms. Schumaker said that their presentations were designed to show the children basic medical procedures and encourage their curiosity about careers in medicine.

As she was performing a general medical examination on her own 7-month-old son, Dr. Janus explained the importance of the pediatrician in finding developmental abnormalities in children and immunizing them against disease. She showed how to use a stethoscope to examine the chest and an otoscope to look in the ear.

Ms. Schumaker demonstrated the tools of the pharmacist: a tablet counter and a mortar and pestle. She told the children that working in the field of pharmacy is more than working in a drug store; it is a diverse profession that includes research, teaching and hospital work.

The following week, pediatric oncology nurse Ralph Forquer talked to the same group of students about the importance of handwashing in preventing the spread of disease. He gave the children Pediatric Branch “Teddy Bear” handwashing posters, surgical gowns and caps to wear, and explained why “germs” must be controlled in a hospital.

Under the auspices of the “good neighbor program,” activities are being developed to help children and their families cope with cancer. These include a “Day in Bethesda,” an educational program planned by Martha Dowd of Montgomery County Schools and the director of the NII Children’s School Program at the Clinical Center for teachers and principals who teach children who have cancer.

**Other Methods Noted**

Other programs, for classmates of children with cancer, designed by the NIH Clinical Center professionals who contribute to the Pediatric Program, use puppets, NCI colorbooks, pamphlets, “Help Yourself” tape and booklet, and posters as educational tools.

Although these programs are still in their early stages, Kay Robichaud, pediatric program specialist, Pediatric Branch, is confident that they will be active within the next year.

“We have been somewhat isolated from our own community...our neighbors frequently don’t realize that we treat children and they have been reluctant to ask about our programs,” said Ms. Robichaud.

“We're trying to participate more in community activities so that our neighboring communities will begin to better understand the partnership roles in medical research.”

Dr. Janus (l) and Ms. Schumaker (r) show basic medical procedures to children at the elementary school.

**Thelma Charen Receives NLM Director’s Award**

The 1983 National Library of Medicine Director’s Award was presented Jan. 27 to Thelma Charen, senior technical advisor in the Library’s index section.

NLM Director Dr. Martin M. Cummings, in presenting the award, cited Mrs. Charen’s numerous and outstanding contributions to NLM indexing: “The success of *Index Medicus* and the NLM online systems derived from this indexing, is in great measure the result of the high standards of quality and accuracy you have set and maintained.

“An entire generation of medical indexers at NLM, through the country, and around the world has been professionally trained under your tutelage.

“The aids you have developed—indexing manuals, training tools, MeSH annotations, staff seminars, and the constant flow of technical memoranda—have set the standards for international medical indexing.”

**DR. WILLIAMS**

(Continued from Page 1)

currently is a member of the board of the American Geriatrics Society.

A native of North Carolina, Dr. Williams received his B.S. degree from the University of North Carolina, his M.A. degree from Columbia University, and his M.D. degree from Harvard Medical School in 1950. His postgraduate training included internship and a residency in internal medicine at Johns Hopkins Hospital, Baltimore.

He was senior resident physician at Boston’s Veterans Administration Hospital, and a research fellow in medicine at the University of North Carolina, prior to his appointment as an instructor there in 1956.

He served on the North Carolina faculty for 12 years and was a professor of medicine and preventive medicine prior to his move to Rochester in 1968.
Alzheimer's disease has been traced back eight generations in one family by Linda Nee of the Laboratory of Clinical Science, National Institute of Mental Health. Alzheimer's is a central nervous system disorder characterized by progressive dementia. Beginning with occasional memory loss and disorientation, the Alzheimer's victim progressively worsens, developing difficulty with well-learned activity such as walking, until he or she requires total care.

The mean length of the illness from onset until death is 6 years, said Ms. Nee, although some people die within 2 years and others have been known to live as long as 24 years. Age range for onset of the disease in the NIMH study was between 44 and 64.

Several theories have been postulated about the cause of Alzheimer's but findings are still inconclusive. One postmortem study revealed excessive concentrations of aluminum in senile brains; another found abnormalities in cholinergic neurons. NIMH scientists seeking clues to brain cell degeneration by looking at skin cells have found that in the case of Alzheimer's, the body loses its ability to repair itself. Whatever the cause, nerve cells die sooner than would be expected in the normal aging process, said Nee.

Alzheimer's occurs in families, such as the one studied by Ms. Nee and her colleagues, indicating a possible genetic factor. In other cases, it occurs sporadically; no family history can be found. Alzheimer's has become the latest diagnostic label for senility, Ms. Nee remarked. Anyone who has had insidious loss of memory lasting for over a year without an identifiable precipitating cause, such as a stroke or metabolic disorder, is now diagnosed as having Alzheimer's.

"Previously, they might have been diagnosed as having hardening of the arteries," she explained. The researcher first got involved in the Alzheimer's family study in 1977, when three sisters and a brother were referred to NIMH. Two of the sisters and their brother were diagnosed as having Alzheimer's. Eventually, as interest in the study grew, 51 relatives came to NIMH for tests.

With the help of family members "who were so cooperative, they must carry a niceness gene," commented Ms. Nee, she was able to trace the ancestry of 531 members from among several thousands who were brought to her attention by interviews or documents.

In addition to diaries and letters, Ms. Nee had access to local historical records and family interviews during her stay with the family last spring. She was able to trace the family origins to 1783 from the Northumberland section of England. She also found that other Alzheimer's victims from the local Canadian community.

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In India, eye examinations may reveal the presence of a cataract, which is much more common there than in the U.S. For this reason, NEI scientists are working with Indian researchers to identify the factors responsible for this high incidence. As chairman of the IAPB program committee responsible for planning and running the organization's second general assembly, held recently in Chevy Chase, Md. Attended by more than 300 delegates from 61 countries, this conference was the largest international gathering of experts on blindness prevention ever convened.

Among the highlights of the meeting were reports on a number of successful blindness prevention programs in developing countries.

For example, the government of India is sponsoring a program that uses temporary eye camps to deliver sight-restoring cataract surgery to hundreds of thousands of people each year at a cost of only $5 to $8 per patient.

Another effective program, in the Upper Volta region of West Africa, uses aerial spraying to control the black fly that carries the blinding disease onchocerciasis.

Mobilizing the resources needed to expand these successful programs and develop others was identified by the assembly delegates as a major goal for the IAPB.

In his role as IAPB president, Dr. Kuper will spearhead this effort. The National Eye Institute as a whole participates in worldwide efforts to save sight as a Collaborating Center of the World Health Organization's Prevention of Blindness Program.

Help the Elderly Understand Preventive Dental Care

Too often, older people—especially those who wear dentures—feel they no longer need dental checkups. And because the idea of preventive dental care dates back only to the 1950's, most people over 65 were not trained at an early age to be concerned with preventive care of the teeth.

Even with good home oral hygiene, it is important to have yearly dental checkups. Checkups not only help maintain a healthy mouth, but are necessary for the early discovery of oral cancer and other diseases. Mouth cancer often goes unnoticed in its early and curable stages.

It is essential to take care of dental problems before undergoing major surgery. The results of a complicated and successful heart operation, for example, could be endangered if certain bacteria—which are always present in the mouth—get into the bloodstream and lodge on heart valves.

For more information, write to Age Page, NIA, Bldg. 31, Rm. 5C36, Bethesda, MD 20205; (301) 496-1752.
What Causes a Normal Cell To Undergo Cancerous Change?

A greater understanding of what causes a normal cell to undergo cancerous change is emerging from recent discoveries in the field of cancer research. Through close study of genes, proteins, and viruses, scientists have begun to see what makes a cell normal, or, more important, what makes it abnormal.

Deciphering the controls of cellular change has meant looking at genes, the inherited segments of information which code for the production of proteins. Normal cells can closely control when and how much of a gene’s code is read and, subsequently, how much of its specific protein is produced.

Cancer cells seem to lose this control, making abnormal amounts of normal proteins or normal amounts of altered proteins.

Oncogenes code for the production of proteins that can induce cancerous changes in cells. Studied extensively in certain animal viruses called retroviruses, these cancer-causing genes have been found in certain human cancer cells.

Normal counterparts of these genes, called proto-oncogenes, also have been described. These proto-oncogenes are well conserved by nature’s evolutionary processes and are found in all normal, uninfected vertebrate cells including human cells. They are believed to perform important functions in normal cells.

It is thought that when these proto-oncogenes are captured by retroviruses, they can become active oncogenes.

Discovery of this similarity between viral oncogenes and those found in uninfected vertebrate cells has made the viruses useful models to study the intricacies of oncogenes.

In other oncogene work, scientists are using the tools of recombinant DNA research to compare the genetic information in normal and cancerous human cells. These efforts have stimulated the search for factors influencing cell change, a search that has yielded new understanding of oncogenes and their protein products.

Recent research has established the presence of forms of proto-oncogenes that have transforming potential (the ability to change cells from a normal to a cancer-like appearance) in many human cancer cell lines.

At present, the cell types found to contain oncogenes include bladder, lung, colon, breast cancer, and leukemia cells that have been grown in laboratory cultures for a number of years. In addition, scientists now are isolating oncogenes from cancer cells taken directly from patients.

By comparing the oncogenes found in uninfected vertebrate cells to those captured by certain viruses, scientists have been able to decipher information about the structure and origin of these genes.

Recently, investigators have identified a specific mutation in one oncogene that is responsible for its ability to change laboratory-grown cells into cancer cells. These, and other, comparisons have helped scientists conclude that these genes are active in many human cancer cell lines.

Foot Checkups Can Play Key Role in Diagnosing Illnesses

In the course of a lifetime, the feet bear a weight equal to several million tons. It is little wonder, then, that in later life feet often hurt.

Many common foot problems may result from disease, long years of wear and tear, ill-fitting or poorly designed shoes, poor circulation to the feet, or toenails that are not properly trimmed.

It is a good idea to check your feet regularly—or to have them checked by a member of the family—and to care for them properly with good hygiene. Foot checkups can play a key role in the early diagnosis of many illnesses, including diabetes.

For more information, write to Age Page, NIA, Bldg. 31, Rm. 5C36, Bethesda, MD 20205; (301) 496-1752.

Property Management Specialist Peter Stathis Retires After Working 20 Years at NIH

Peter J. Stathis, NIH property utilization specialist for the Materiel Management Personal Property Branch, recently retired after 20 years in property management.

For the past 3 years, he was responsible for the NIH furniture rehabilitation program designed to upgrade equipment in lieu of purchasing new. He promoted the full participation of NIH in the government-wide excess property utilization program with the use of the "Want List" system.

Prior to joining the Personal Property Branch, Mr. Stathis served as property management specialist for the National Institute of Dental Research for 17 years.

Born in Washington, D.C., and a resident of Maryland since 1949, he graduated from D.C. public schools, worked for the Pennsylvania Railroad for over 10 years as a brakeman before joining NIH in 1962.

He is past commander of Fort Stevens Post #32 of the American Legion, Wash., D.C., and a member of Harmony Lodge, No. 17, also of the District, and the Scottish Rite.

Mr. Stathis received a HHS Special Achievement Award in 1982, Two Quality Work Performance Awards—1975 and 1980—and a Suggestion Award in 1965.

After retirement, he plans to travel, upgrade his coin collection, and spend a lot of time boating and fishing at his home in Ocean City, Md.

Visiting Scientists Program Participants

Sponsored by Fogarty International Center

12/5 Dr. Yukiko Takaoka, Japan, Office of Biology. Sponsor: Dr. Chi-jen Lee, NCBDB, Rm. 29, Rm. 405.
12/6 Dr. Yoshiki Sakurai, Japan, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George Martin, NIR, Rm. 30, Rm. 416.
12/6 Dr. Nazma Jahan, Bangladesh, Laboratory of Molecular Oncology. Sponsor: Dr. Donald Cott, NCI, Bg. 41, Rm. D251.
12/6 Dr. Prem Kumar Seth, India, Laboratory of Molecular Biology. Sponsor: Dr. Ira Pastan, NCI Rm. 37, Rm. 4B27.
12/7 Dr. Rong Guohuang, China, Surgery. Sponsor: Dr. William Sindelar, NCI, Bg. 10, Rm. 1N206.
12/10 Dr. Yukio Kato, Japan, Developmental Pharmacology Branch. Sponsor: Dr. Masahiko Negishi, NICHD, Rm. 10, Rm. 6C212.
12/12 Dr. Hannah Gould, United States, Laboratory of Molecular Biology. Sponsor: Dr. Gary Felsenfeld, NIADDK, Bg. 2, Rm. 301.
12/13 Dr. Ellen Ngoc Yin Cheung, Hong Kong, Laboratory of Pharmacology. Sponsor: Dr. John Bend, NIEHS, Research Triangle Park, N.C.
12/14 Dr. Frederick A. Mendelsohn, Australia, Endocrinology and Reproduction Research Branch. Sponsor: Dr. Kevin J. Catt, NICHD, Rm. 10, Rm. 8C404.
12/17 Dr. Samuel Breit, Australia, Pulmonary Branch. Sponsor: Dr. Ronald Crystal, NHLBI, Rm. 10, Rm. 6D06.
12/20 Dr. Tapio Toivo Ranta, Finland, Endocrinology and Reproduction Research Branch. Sponsor: Dr. Kevin Catt, NICHD, Rm. 10, Rm. 8C404.
12/21 Dr. Itzhak Angel, Israel, Clinical Psychobiology Branch. Sponsor: Dr. Steven Paul, NIMH, Rm. 10, Rm. 4N214.
12/26 Dr. Michael Silbermann, Israel, Laboratory of Biological Structure. Sponsor: Dr. A.H. Reddi, NIR, Bg. 30, Rm. 207.
12/27 Dr. Jia Min, China, Laboratory of Developmental Neurobiology. Sponsor: Dr. Phillip Nelson, NICHD, Rm. 36, Rm. 2A21.
Benign Prostatic Hyperplasia Discussed During NIADDK Seminar

Benign prostatic hyperplasia, enlargement of the prostate gland that occurs in many men over age 40, was the topic of a recent seminar sponsored by the Division of Kidney, Urologic, and Hematologic Diseases, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases.

The seminar focused on the physiology of the prostate and new aspects in understanding and management of BPH. NIADDK granted Drs. Patrick C. Walsh and Donald S. Coffey of the James Buchanan Brody Urological Institute, Johns Hopkins University Hospital, were featured speakers.

Dr. Walsh, director of the department of urology, said BPH is probably "the most common neoplastic growth (tumor) in men," calling it "one of the major medical problems in our society."

More than half of men over age 50 suffer from BPH, he noted, and 95 percent have the disorder by the time they are in their seventies and eighties.

"There are approximately 270,000 prostatectomies performed in the United States each year for the relief of urinary obstruction caused by BPH. . . . The cost of these procedures is in excess of $640 million per year," Dr. Walsh said.

While there is no effective means for medical management of BPH, the scientists said the total cost of diagnostic procedures and treatment of the disease in the U.S. each year exceeds $1 billion.

Dr. Walsh discussed the embryological development of the prostate gland and recent research showing that the mesenchyme (primitive stromal tissue of the urogenital sinus), not the epithelium, is the target organ for androgenic hormones that trigger gland growth. This is an important concept which may provide a key to understanding how BPH develops.

He described the process of excessive prostate growth in older men that often results in obstructing the outlet of the bladder. Studies have established that development of BPH in man is associated with accumulation of the hormone dihydrotestosterone (DHT) in the prostate.

In studies in dogs, the only other species besides man that develops BPH, the prostate has been shown to become more sensitive to androgens as the gland enlarges, and as levels of testosterone decline.

Low levels of DHT have been found in the normal prostate and very high in BPH, according to Dr. Walsh. He said research indicates that accumulation of DHT in BPH is the result of an alteration in the metabolism of androgens within the prostate. In studies in dogs, for instance, the disease can be induced only by treatment with androgens that are rapidly metabolized to DHT, resulting in elevated DHT concentrations in the prostate. Studies suggest that in man, as in the dog, the increase in DHT concentrations results from reduced metabolism of DHT to inactive metabolites.

In studies in dogs, for instance, the disease can be induced only by treatment with androgens that are rapidly metabolized to DHT, resulting in elevated DHT concentrations in the prostate. Studies suggest that in man, as in the dog, the increase in DHT concentrations results from reduced metabolism of DHT to inactive metabolites.

The scientists indicate there may also be a mechanism in which estrogens function synergistically to increase the prostate's ability to accumulate DHT, thereby inducing BPH. Dr. Walsh stated that the hypothesis of estrogen-androgen synergism provides an attractive mechanism to explain BPH in man, but said so far, evidence of this is lacking.

Advances in understanding the role of DHT in prostate metabolism are expected to yield important insights into regulation of gland growth, and eventually may result in a means for controlling BPH.

"It is possible that this alteration in metabolism occurs in many tissues throughout the body with aging. However, because the prostate is sensitive to the accumulation of this potent androgen, abnormal growth occurs," Dr. Walsh said.

"Based on what we know now," he said, "it is reasonable to speculate that a reduction in DHT concentrations in the prostate may reverse the disease. It appears that circulating testosterone levels, which are unaffected, are sufficient to avoid an adverse effect on libido.

This approach is potentially the most exciting possibility for the medical management of benign prostatic hyperplasia."

Dr. Coffey, professor of oncology, pharmacology, and urology at Johns Hopkins, discussed hormonal changes within the prostate gland; alterations in systemic hormone levels; interactions between stromal cells (connective tissue), basement membrane, and epithelial cells of the prostate, and the functions of stem cells.

He described methods developed to separate stromal and epithelial tissue of the prostate and described studies indicating that BPH in many may result from growth potential present in the stroma.

Dr. Coffey described changes occurring in the stem cells, which tend to renew the epithelial cells. He said it is possible that the BPH problem may result from neonatal imprinting of stem cells that produces reduced androgen sensitivity in later life.

Dr. Coffey and his colleagues have used special stains to make the various cells of the prostate visible, helping define the organization of the gland. Through observation of these elements, the scientists have been able to construct an index for correlating the metabolism of these enzymes to prostate size and pathology.

His studies suggest the prostate is somehow being marked not to grow, and described BPH as "a disorder that seems to result from aging, timing, and hormone marking events."

U.S. Cancer Death Trends Summarized in Monograph

Trends for cancer deaths in the United States were summarized in a recent Journal of the National Cancer Institute monograph. Monograph 59: Cancer Mortality in the United States: 1950-1977 reports data for 40 types of cancer by sex, race, and age. Data are presented in tables and illustrated by graphs that assist the reader in observing variations in death rates among age groups over time.

A unique feature is a series of three-dimensional graphs that show annual variations in cancer deaths by age. The age of patients, year, and data on deaths are plotted on three axes of computer-generated graphs.

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His studies suggest the prostate is somehow being marked not to grow, and described BPH as "a disorder that seems to result from aging, timing, and hormone marking events."
Dr. Bernice Grafstein, a neurophysiologist; Dr. William Maxwell Cowan, a neuroanatomist; and Dr. James B. Snow, Jr., an otolaryngologist, have been named to the National Advisory Neurological and Communicative Disorders and Stroke Council. Their appointments, which begin immediately, extend through 1986.

Dr. Grafstein is professor of physiology at Cornell University Medical College. Her research has contributed extensively to recent progress in understanding the central nervous system, particularly the role of axonal transport in the maintenance of function in nerve cells.

**Background Noted**

A trustee of the Grass Foundation since 1965, she formerly served as chairman of the committee on brain science, National Research Council, National Academy of Science.

In 1982, she was named an Outstanding Woman Scientist by the New York Chapter of American Women in Science. Dr. Grafstein received her Ph.D. from McGill University in Montreal in 1954.

Dr. Cowan, professor and vice president of the Salk Institute, is known for his studies of the dying off of nerve cells in the developing nervous system, work that may lead to an improved understanding of dementing disorders.

He is editor-in-chief of the *Journal of Neuroscience* and served as managing editor of the *Journal of Comparative Neurology* from 1969 to 1980. He holds a Ph.D. in neuroanatomy, an M.D. degree, and an honorary M.A. degree, all from Oxford University. He is a member of the National Academy of Science and a fellow of the Royal Society.

Dr. Snow is professor and chairman, department of otorhinolaryngology and human communication, University of Pennsylvania, and a clinician, teacher, and investigator in his specialty.

This is his second term as a member of the council. He has also served the Institute in the past as a member of its communicative disorders research training committee.

**Headed Department**

Prior to assuming his present position in 1972, he was head of the department of otorhinolaryngology at the University of Oklahoma Medical Center, where he received the Regents Award for Superior Teaching.

Dr. Snow is a director of the American Board of Otolaryngology, and editor of the *American Journal of Otolaryngology*. He received his M.D. degree from Harvard Medical School in 1956.

Leonard T. Fitzwater, supervisory biological laboratory technician in production unit B of the small animal section, Veterinary Resources Branch (VRB), Division of Research Services, retired Jan. 14 after more than 30 years of service in the branch. Most of his service was in the barrier area, which he helped establish in the 1960's. There VRB develops and produces genetically and microbiologically defined rodents for special research uses.

After working 11 years in conventional animal colonies as an animal caretaker and then foreman, Mr. Fitzwater began work with specific-pathogen-free rodents in 1963 as lead foreman and promoted to supervisory biological laboratory technician in 1973.

Working with rodents that either were born by means of hysterectomy in a germfree isolator or are descended from animals born in that way, he supervised a team of biological laboratory technicians in following a rigorous work pattern designed to preserve the microbiologic and genetic integrity of the colonies.

The barrier area is a physically isolated section of Bldg. 14G with many features—special pathology and microbiology laboratories, a microcomputer, a microautoclave, an animal care facility, an inbred colony, and a barrier area laboratory. The VRB has many of the features that others have been developing for many years.

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The barrier area is a physically isolated section of Bldg. 14G with many features—including filtered air—to prevent the introduction of microorganisms.

Personnel in the VRB specific-pathogen-free units enter the barrier area only after showering and donning sterile clothing, gloves, and masks; they perform their work with sterilized equipment, feed, and supplies.

In choosing breeders, keeping records, and handling the animals, they are careful to prevent any undesired breeding that would lead to genetic contamination of the many inbred, congenic, and mutant strains produced in the colony for NIH research.

The strains and stocks maintained in the VRB specific-pathogen-free colonies have quadrupled since the system began, and now number more than 200.

Mr. Fitzwater is proud that the barrier has had only one major microbiologic contamination since the system was formally established in 1969. "I can't speak highly enough about my coworkers," he said. "Everyone in the unit is dedicated to preserving the integrity of the barrier, and many of them have had long service there. They understand perfectly well how important it is to research."

"People from many other institutions have come to VRB through the years for advice on starting and maintaining a barrier system for laboratory animals, but when Dr. Charles McPherson was starting ours, it all had to be thought up from scratch," he added.

Mr. Fitzwater has shared in several group awards given to his team of biological laboratory technicians for their performance in the specific-pathogen-free subunit of production unit B. He received an individual award for designing a type of cage which enables technicians to transfer cotton rats from cage to cage without handling them; this aggressive species has a bent for biting and escaping.

Having an artificial leg, he has met the sterile clothing requirements of his work with the help of a plastic leg cover designed and made for him by instrument workers in the Biomedical Engineering and Instrumentation Branch, DRS.

Ill health during the past year has forced Mr. Fitzwater to take disability retirement. "If it weren't for that, I'd still be in the unit," he said.

**A Healthy Diet After 65 Is Important**

Most people gain weight more easily as they grow older, but they need the same amounts of most nutrients (vitamins, minerals, and protein) as younger people. This means that the elderly in particular should eat nutritious food and cut down on sweets, salty snack foods, high-calorie drinks, and alcohol.

Exercise is also important in keeping off extra pounds. A person who exercises regularly can eat more without gaining weight than a person who sits most of the day.

Eating too little can be harmful as well. People who do not eat enough may have less energy; they may become lonely and depressed. In addition, a diet containing too few calories is also likely to be lacking in vitamins and minerals.

Other people should talk with their doctors about eating habits, especially if they have any illnesses that might require changes in what or how much they eat.

This is important because some drugs can interact with certain foods and change the effects of the medications, and other drugs can alter nutritional needs.

For more information, write to Age Page NIA, Bldg. 31, Rm. 5c36, Bethesda, MD 20205; (301) 496-1752.

* Dost thou love life? Then do not squander time, for that is the stuff that life is made of.—*Benjamin Franklin*

* If most of us weren't well pleased with ourselves, we'd do something about it.—*William Feather*

* Pleasure not known beforehand is half wasted; to anticipate is to double it.—*Thomas Hardy*
Dr. Choh-Luh Li Retires From Research Career
Spanning 29 Years in Neurology

After 29 years with the NINCDS Surgical Neurology Branch, Dr. Choh-Luh Li is retiring, hanging up hats in neurosurgery and neurophysiology.

Dr. Li’s career at NINCDS combined clinical research on patients who had epilepsy, brain tumors, and Parkinson’s disease with basic laboratory studies on pain and epilepsy.

“Dr. Li is a truly remarkable scientist,” said Dr. Thomas G. Smith, a longtime colleague and chief of the sensory physiology section of the Laboratory of Neurophysiology. “He is one of the very few to have successful careers in both the clinical and the basic neurosciences.”

Dr. Li’s major research interest has been the study of the mechanisms of pain and epilepsy. His most recent study involves analyzing the effect of electrically induced pain on nerve cell activity and evaluating the influence of different neurotransmitters on the nerve cells’ response to pain.

“We developed a method to stimulate by electricity only those nerve fibers—called ‘C’ fibers—which conduct the sensation of slow pain,” says Dr. Li.

“Slow pain” is a delayed sensation felt a short time after a pain-provoking incident. “C” fibers make up 80 percent of the fibers in the vagus nerve, which transmits pain signals from the heart, gut, and lungs through the autonomic nervous system to the brain.

Dr. Li’s clinical research on epilepsy began in the early 1950’s when he trained as a senior resident in neurosurgery under noted epilepsy authority Dr. Wilder G. Penfield at the Montreal Neurological Institute.

In his early years at NINCDS, Dr. Li performed surgery on many epilepsy patients to remove the brain cells causing seizures. According to Dr. Li, about 70 percent of these patients had no further seizures.

His research also led him to develop three theories on the mechanism of epilepsy:

• A spontaneous and uncontrollable electrical discharge of brain cells occurs when scar tissue interrupts normal cell communication.
• An increase in the positive charge of brain cell membranes over a long period results in repeated firing of these cells which in turn causes an epileptic seizure.
• A periodic increase in nerve cell activity in the central part of the brain causes an electrical discharge by other nerve cells in the epileptic “focus”—the part of the brain where epilepsy originates.

Dr. Li’s study of another neurological disorder—Parkinson’s disease—resulted in the development of an important diagnostic tool. He and his associates designed recording electrodes which they used to find the part of the brain responsible for the tremor characteristic of parkinsonism.

In the early days of Dr. Li’s work, surgical treatment eliminated these patients’ shaking. Today, most patients with Parkinson’s disease or epilepsy are treated successfully with drugs.

From 1970 to 1973, Dr. Li was an NIH project officer for a study of neurotransmitters conducted by the Institute “Ruder Boskovic” in Zagreb, Yugoslavia.

He then returned briefly to China, his homeland, for a study of acupuncture as an anesthetic. He visited 36 hospitals which used the ancient technique to anesthetize patients undergoing various procedures.

“I found acupuncture to be a very effective anesthetic,” he says. “However, only 15 to 20 percent of the surgery candidates at these hospitals elected to have this procedure.”

When he returned to the United States, Dr. Li studied at the National Academy of Acupuncture in New York City. The courses he took there prepared him to conduct a study which compared the technique to hypnosis.

According to Dr. Li, the results of this study were inconclusive.

His retirement plans include consulting with the NINCDS Laboratory of Neurophysiology as a guest worker. He is also considering several research and teaching offers.

In addition, Dr. Li plans to continue lecturing at the George Washington University School of Medicine where he has been a clinical professor in the department of neurosurgery since 1974.

Born in Kwangchow, China, he received his M.D. from the National Medical College of Shanghai. He received an M.S. in neuroanatomy and a Ph.D. in neurophysiology from McGill University.

Dr. Li has received numerous awards and honors throughout his career, including in 1978 an Award for Distinguished Scientific Achievement from the American Center of Chinese Medical Sciences.

Actors and Actresses Needed

Five actors and 11 actresses are needed for the R&W Association Theatre Group’s spring production of The Whole Town Is Talking, by John Emerson and Anita Loos. Auditions will be held on Tuesday and Wednesday, Mar. 1-2, from 7:30 to 10:30 p.m., in Masur Auditorium, Bldg. 10.

For more information call 496-4600 (daytime), and Alice Smyth, 428-3471, or Adele Weeks, 942-7117, after 5 p.m.