

MEDICINE

Hefty Vets Thrive

► CHURCHILL, Hoover and 134 Spanish-American War Veterans of Massachusetts are upsetting medical research. Instead of following the pattern of their body build and dying of coronary artery disease, they seem to be candidates for extreme old age.

Two Veterans Administration physicians, Drs. Oliver J. Harris and James F. Cummins of the Boston VA outpatient clinic, said when they began their study of the 72- to 92-year-old vets, they expected to find them looking like Abraham Lincoln might have looked at their age. Instead, they turned out to appear more like Churchill and Hoover.

"Men of this type of body build," they said, "tend to die out rapidly in their forties and fifties, especially from coronary heart disorder."

None of the 134 have developed cancer of the lungs, the researchers said, despite

the fact that 25 continue to be heavy smokers and 51 were heavy smokers in the past.

One-third reached their highest weight after they were 70 and one-half after they were past 55 years old. Twenty-three have never had a serious illness and all appear to be remarkably healthy, both physically and mentally. Nor do they seem to be accident-prone.

The physicians said they will extend their studies to include World War I, World War II and Korean conflict survivors. This means they will be studying a cross section of the male population between the ages of 29 and 70.

They are aiming the study toward revealing clues to degenerative diseases and establishing norms for various age groups, the investigators explained.

• Science News Letter, 79:164 March 18, 1961

MEDICINE

120-Year Life Seen

► AMERICANS may have a life expectancy approaching 120 years by the end of this century.

The problems posed by this probability "merit careful study," the Journal of the American Medical Association, 175:706, 1961, states editorially.

"With eradication of infection, prevention of cancer and inhibition of progression of the degenerative diseases," life expectancy in America should approach that of the fabled Hunzokuts of northern Pakistan, the medical journal said.

Physicians will read other articles on aging concerning psychiatric and medical management of elderly persons.

"After the age of 65 years," Drs. Ewald W. Busse and John B. Reckless of Duke University Medical Center, Durham, N. C., said (p. 645), "the percentage of both men

and women admitted to mental hospitals for the first time rises sharply."

The physicians called on psychiatrists to help general practitioners and internists meet the aging's emotional needs by disseminating their knowledge to all members of the profession.

Changing the habits of the elderly man or woman may do more harm than good, Dr. Wingate M. Johnson of Winston-Salem, N. C., states (p. 649). Concessions to such lifelong habits as smoking, taking laxatives or wearing long underwear may be desirable unless there is some valid objection.

More adequate nutrition as well as supportive endocrine therapy for the aged are advised by Dr. Nathan W. Shock of Baltimore (p. 654). He says "preparation for a healthy old age may well begin in the office of the pediatrician."

• Science News Letter, 79:164 March 18, 1961

PUBLIC HEALTH

Radiation Death Delayed

► THE FIRST WAVE of radiation deaths can be staved off with a nerve gas chemical known as DFP—even when given 24 hours after exposure to a deadly dose of radiation. DFP can give the victim more time, but death due to radiation cannot be put off indefinitely.

In whole body radiation, "acute" deaths, those occurring within six days after exposure, frequently are due to gastrointestinal damage. Later deaths usually result from damage to the blood-forming organs.

Dr. D. A. Willoughby of University

College Hospital Medical School in London found that DFP can cut down the acute deaths by protecting the gastrointestinal tract. DFP is used in rat poisons and insecticides. As a nerve gas, DFP can cause complete temporary collapse of the nervous systems in humans.

When he exposed untreated and DFP-treated rats to 975 roentgens of whole-body X-rays, about twice the amount required to kill a man, 60% of the untreated rats were dead within three days, while only 20% of those given DFP were dead. At the end of 28 days, however, just as many treated as

untreated rats had died, and all these later deaths, autopsies showed, were in fact due to damaged blood-forming tissues.

When these blood-forming tissues were protected from radiation by lead plate screening, only 65% of the DFP-treated rats died within a month, while 95% of the untreated rats succumbed.

Dr. Willoughby reports in *Nature*, 189:761, 1961, that the protective effect of DFP was the same whether given before, immediately after or 24 hours after irradiation, and that the treated rats could survive 2,200 roentgens, more than four times the lethal dose for man.

• Science News Letter, 79:164 March 18, 1961

SCIENCE NEWS LETTER

VOL. 79 MARCH 18, 1961 NO. 11

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is addressed. Your new address should include postal zone number if you have one.

Copyright © 1961 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (eight times a year) and THINGS of Science (monthly).

Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees Nominated by the American Association for the Advancement of Science: William W. Rubey, University of California at Los Angeles; Wallace R. Brode; Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Lee Hills, Detroit Free Press. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Frank Ford, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio.

Officers—President, Leonard Carmichael; Vice President and Chairman of Executive Committee, Charles E. Scripps; Treasurer, Wallace R. Brode; Secretary, Watson Davis.

Staff—Director: Watson Davis. Writers: Gloria Ball, Ann Ewing, Lillian Levy, Faye Marley, Jane Marye, Tove Neville, Marjorie Van de Water, Judy Viorst, Burrell Wood. Science Youth Division: Joseph H. Kraus, Shirley Moore, Dorothy Schriver, Leslie Watkins. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562.