

MEDICINE

How Fats Clog Arteries

► **NEW EVIDENCE** on the way fats contribute to hardening of the arteries gives hope for finding methods of lessening fat absorption.

The first direct evidence that fats carried to the arteries, and not those manufactured by the arteries themselves, play the dominant role in hardening of the arteries in humans was reported in Cleveland.

Dr. Abel Lazzarini-Robertson Jr. of the New York University School of Medicine grew in test tubes tissue from human arteries, both normal and in early atherosclerotic states.

Using his new technique, Dr. Lazzarini-Robertson found that when he "bathed" the test-tube tissues with various concentrations of radioactively tagged fats normally carried in the blood stream, necessary local production was blocked after the tissues had absorbed significant amounts of the externally supplied fat.

Moreover, the cells from the hardened, or atherosclerotic, arteries absorbed far more fat, at a faster rate, than the normal cells. As

more fat is acquired the cells degenerate, becoming "just bags of fat," Dr. Lazzarini-Robertson said. These fat droplets eventually break open, releasing more fat to extra-cellular deposits, which in turn swamp nearby cells of the inner lining of the arterial wall.

The fact, however, that fats carried to the cells and not fats made by them play such a fundamental role led the pathologist to hold out hope for ways to block the transfer of extra-cellular fats to the atherosclerotic tissue.

One experimental step, previously reported by Dr. Lazzarini-Robertson, halts the transfer by treating the arterial cells with various negative-charged active agents. A cell coated by such a substance can be immersed in fats for short periods without any significant absorption of fat occurring.

The findings were reported to the American Society for the Study of Arteriosclerosis held in conjunction with the American Heart Association's annual meeting.

• Science News Letter, 82:284 November 3, 1962

GENERAL SCIENCE

News From Science Clubs

► **THESE** activities of science clubs and suggestions for activities have been reported to Science Clubs of America.

The **CENTRALITES** of Central Catholic High School, Allentown, Pa., reports that its most popular programs are experiments and demonstrations.

The members of the **FAULKATOMS SCIENCE CLUB**, Faulk Junior High School, Brownsville, Texas, give talks at P.T.A. meetings.

The **ST. JOSEPH'S SCIENCE CLUB**, St. Joseph's High School, Metuchen, N. J., uses funds from dues to subscribe to scientific magazines.

The **SCIENTISTS OF TOMORROW** from the Intermediate School, E. Bridgewater, Mass., sponsor the annual science fair at their school and take an average of 12 field trips a year to industrial plants and museums.

Members of the **TIGER SCIENCE CLUB** of Ontario High School, Ontario, Oregon, are preparing science demonstrations for National Education week in November.

FUTURE SCIENTISTS from Osawatomie High School, Osawatomie, Kansas, hold meetings on Saturday mornings at the school and use the science laboratories for their experiments and projects.

The most successful activity of the **BRYAN ADAMS SCIENCE CLUB**, Bryan Adams High School, Dallas, Texas, is conducting a city-wide science seminar.

The Woman's College of Georgia, Milledgeville, Ga., held a High School Conference for Science Teachers and the most promising Science Students of that district. The conference was sponsored by the Geor-

gia Academy of Science.

The popular student educational tour program which provides science students an opportunity to tour atomic energy facilities in Oak Ridge on Saturday has resumed for the current school year.

Requests for tours should be made by a teacher or a school official. Student groups must be accompanied by faculty members. Since the tours are limited, requests should be made at least three weeks in advance.

Direct requests for tours or further information to: Student Educational Tours, American Museum of Atomic Energy, Box 117, Oak Ridge, Tenn.

Science clubs may secure a slide set with text on *Chemical and Biological Weapons in a World of Conflict* for use in club programs by contacting the Scientific and Information Liaison Office, CBR Agency, Fort Detrick, Frederick, Md.

The Brooklyn Children's Museum has developed an after-school program for junior and senior high school students designed to stimulate and interest students toward scientific careers. Contact the museum for further information.

The National Aeronautics and Space Administration film, "The Mastery of Space," hour-long color account of the U. S. manned space flight program, is available to science clubs on free-loan basis from Association Films: Broad at Elm, Ridgefield, N. J.; 561 Hillgrove Ave., La Grange, Ill.; 799 Stevenson St., San Francisco, Calif.; and 1108 Jackson St., Dallas, Texas.

Affiliate your club with SCA and report club activities to Science Clubs of America, 1719 N Street, N.W., Washington 6, D. C.

• Science News Letter, 82:284 November 3, 1962

Questions

AGRICULTURE—What would result in a world without pesticides? p. 290.

ANTHROPOLOGY—How old is man believed to be? p. 285.

BIOPHYSICS—What is Project Argus? p. 286.

MEDICINE—How many eggs does each human ovary discharge in its natural career? p. 287.

PSYCHIATRY—To what is attributed the anxiety shown by children during a crisis? p. 286.

TECHNOLOGY—How does the "Cat Eye" enable airmen to see in the dark? p. 283.

SCIENCE NEWS LETTER

VOL. 82 NOVEMBER 3, 1962 NO. 18

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: SCIENSERVIC.

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. Please state exactly how magazine is addressed. Include postal zone number.

Copyright © 1962 by Science Service, Inc. Republication 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 produces and distributes THINGS of science (monthly), produces and publishes books, and conducts the National Science Youth Program.

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 of 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, Washington, D. C. (Treasurer); 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 (President); John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalism Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Ralph B. Curry, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Ludwell Denny, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio (Vice President and Chairman of Executive Committee).

Staff—Director: Watson Davis. Assistant Director: Dorothy Schriver. Writers: Ann Ewing, Lillian Levy, Faye Marley, Judy Viorst, Ruby Yoshioka. Science Youth Division: Joseph H. Kraus, Leslie Watkins. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Conferences: Jane Marye. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamery 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562, Washington, D. C.