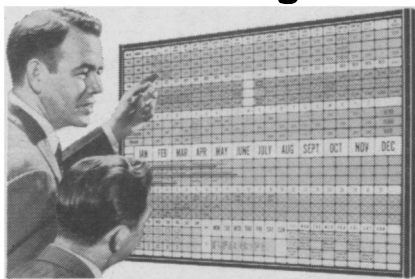


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MEDICINE

Doctors Are Reading—

Filter Cigarettes Cause Tumors

➤ **EVEN FILTER** cigarettes produce tar that causes skin tumors and eventual cancer in mice, physicians will read in the Journal of the American Medical Association, 181: 668, 1962.

Six brands of cigarettes were tested, two of them filter type. The filter cigarettes yielded only one-third the amount of tar in standard cigarette smoke, the researchers reported, however, and tumors were fewer and slower-forming among the filtered cigarette group.

Tobacco advertisements imply that some modified brands of cigarettes have resulted in lower tar levels and presumably a safer smoke, investigators from the Roswell Park Memorial Institute, New York State Department of Health, Buffalo, pointed out. They added that the ideal would be "to stop smoking altogether."

The experimental procedure consisted of condensing the smoke from machine-smoked cigarettes to obtain the tar. Each cigarette was puffed ten times at one-minute intervals at the same pressure, although an individual might puff harder on filtered cigarettes because of their increased resistance. The tar was dissolved in a solvent, acetone, and applied to the shaved skin of the mouse in amounts equivalent to 8.3 smoked cigarettes per day, they said.

Skin tumors were produced in 41 of 76 mice in the standard brand group, they said, and in 15 of 60 mice in the filter group. In both groups of mice, a total of 19 skin tumors progressed to cancers within a one-year period.

Dr. George E. Moore, Dr. John E. Dowd, with Paul C. Clark, all of Buffalo, reported

the study, in which Dr. Fred G. Bock, Springville, N. Y., also participated.

Smoking Affects Blood

Another report links cigarette smoking with increase in two blood abnormalities (p. 674). A study of 1,500 men and women in an agricultural community by four Los Angeles, Calif., medical researchers showed that both abnormalities increased with age in men and women.

C-reactive protein (CRP), an abnormal blood protein, and abnormal dispersal of chemical particles in the blood, which were the two factors studied, have been found in cancer patients as well as in those with other diseases. Further studies are in progress to determine the significance of the abnormalities. Drs. Charles L. Heiskell, James N. Miller, Herrick J. Aldrich and Charles M. Carpenter, all of the department of infectious diseases, School of Medicine, University of California, reported the research.

No Reserve Protein

There is no virtue in eating extra protein, three researchers reported, pointing out that the body does not store surplus protein in the way it stores sugars, starches and fats (p. 699).

Two studies with rats showed no advantage of high-protein diet over that of a normal protein diet, Drs. L. Emmett Holt Jr. and Elias Halac Jr. of the New York University School of Medicine reported with Charlotte N. Kajdi of the Johns Hopkins University, Baltimore.

• Science News Letter, 82:166 September 8, 1962

GENERAL SCIENCE

News From Science Clubs

➤ **ACTIVITIES** planned by science clubs affiliated with Science Clubs of America for the school year are as follow:

Members of the Bursch Science Club of the INDEPENDENT SCHOOL, Baldwin Park, Calif., will present demonstrations for service clubs and set up project exhibits at the public library.

Collecting medicine bottles for the County Free Hospital will be one of the community projects of the Irma Marsh Science Club, IRMA MARSH JUNIOR HIGH SCHOOL, Ft. Worth, Texas.

Club projects of the Science Club at G. R. P. SABNIS VIDYA MANDIR SCHOOL, Narayanan, India, include rearing silkworms, separation of chemicals from plants and constructing and repairing apparatus for the science classes.

The Field Club of CLIFTON HIGH SCHOOL FOR GIRLS, Bristol, England, will conduct lectures, museum visits, film shows, quiz programs and prepare exhibits of specimens collected on field trips.

The Biology Club of FOREST PARK HIGH SCHOOL, Baltimore, Md., makes biology related displays for showcases and secures resource speakers from fields of agriculture, medicine and technology, and wildlife conservation.

The members of the Explorers Science Club of EAST HIGH SCHOOL, Jackson, Tenn., will hold a one-day clinic on radioactivity for parents and other students.

High school science club members contribute assistance to elementary students. The Viking Discoverers of NORTHSIDE HIGH SCHOOL, Roanoke, Va., help sponsor an elementary science fair by providing ribbon awards, judges and technical advice to exhibitors. The science club members of MAPLETON HIGH SCHOOL, Mapleton, Minn., teach science to grade school children. The Atomic Bums of WHITESIDE JUNIOR HIGH SCHOOL, Whiteside, W. Va., take younger students on field trips.

• Science News Letter, 82:166 September 8, 1962