Filters Give False Hope

Adding a filter tip to cigarettes does not necessarily reduce the tar and nicotine reaching the lungs—By Faye Marley

MORE THAN 42 million filter-tip cigarette smokers are basking in a false sense of security, a report from a leading cancer research laboratory indicates.

Not one of eight leading cigarette brands tested really protects a smoker from possible lung cancer and other diseases, Dr. George E. Moore, director of Roswell Park Memorial Institute, Buffalo, N.Y., said.

Pall Mall cigarettes were found by Roswell Park researchers to be the poorest of the brands tested for filtering out tar and nicotine. True filter cigarettes, a new brand being test marketed in the New York City area, were found the most effective.

Spokesmen for the American Tobacco Company, which manufactures Pall Malls, told SCIENCE SERVICE in a telephone interview that Roswell Park's figures were based on a "pearand-apple" comparison, and did not jibe with those at the cigarette company's laboratory.

The Ogg Cambridge filter method for testing the amount of tar and nicotine in filtered cigarette smoke, endorsed by the Federal Trade Commission, is used by the Pall Mall investigators. They use two sets of analyses. One refers to milligrams of tar and nicotine per cigarette; the other refers to milligrams per 100 milliliters of smoke. Pall Mall figures show less tar and nicotine than the Roswell Park report.

Dr. Moore said it was alarming to note that Pall Mall filter cigarettes pass more tar and nicotine on to the smoker than do the regular Pall Malls without filters. Two other brands, Chesterfields and Lucky Strikes, were found to be no more effective in reducing tar and nicotine intake when filtered than when unfiltered.

Ranking between True and Pall Mall cigarettes in the amount of tar and nicotine passed through filters were Kent, Marlboro, Winston, Lark, Salem, and Chesterfield in order of increasing amounts.

Tar makes up 40% of tobacco ingredients, and a number of reports have implicated the coal tar benzopyrene as one of the most potent of all cancercausing agents now known.

On the other hand, many scientists do not admit that tar and nicotine cause lung cancer and other ailments, such as emphysema and cardiovascular difficulties.

The Council for Tobacco Research-U.S.A., for example, is spending considerable money for research that would pinpoint exact ingredients in tobacco smoke that are harmful to health. The American Medical Association is cooperating with the tobacco industry in research to ferret out the truth about statistics on disease and death associated with smoking.

Dr. Moore said that the tobacco industry "apparently realizes that the public wants safer cigarettes. This is evident in the increase in filter-tip cigarette production from two percent of the total cigarette output in 1952 to 64.7 in 1965

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"This means that approximately 42,055,000 of the estimated 65 million cigarette smokers in this country are now smoking filter cigarettes in an effort to protect themselves."

Demand Better Filters

Dr. Moore urged all cigarette smokers to demand better filters and safer cigarettes from the tobacco industry. He said that until the industry accepts the responsibility of protecting the customers who refuse to stop smoking regardless of the health warnings, "we will continue to see a staggering and unnecessary death rate due to cigarette smoking."

The industry researchers, however, go back to the Smoking and Health Report of the Advisory Committee to the Surgeon General of the Public Health Service, made public Jan. 11, 1964, for quotations to prove how little is known about the relationship between cigarette smoking and health hazards.

One quotation states in part, "the chronic toxicity of nicotine in quantities absorbed from smoking and other methods of tobacco use is very low and probably does not represent a significant health problem."

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Paul Rand Dixon, chairman of the Federal Trade Commission, said at the Senate hearings in the spring of 1965, at which the then Surgeon General Luther L. Terry testified, that studies had never shown what is "a safe tar and nicotine content, and they have not arrived at what in smoking is the agent as such that is causing cancer."

Surgeon General Terry himself testified then:

"While it seems at least plausible that cigarettes with lower tar and nicotine content may present lesser health hazards, there is presently no proof that this is so."

At another hearing—that of the Congressional Tobacco Subcommittee



AMERICAN TOBACCO COMPAN

SMOKING MACHINE—A laboratory technician at the American Tobacco Company, Richmond, Va., tests an automatic constant volume cigarette smoking machine that was designed and constructed by the research laboratory's staff.

on Agriculture on Jan. 29, 1964, Dr. Terry testified that "we need to know more about the substances in tobacco smoke that produce the health hazards. . . . It is difficult to design a method of removing something if you don't know what it is."

Polonium 210, found in some research to be a cancer-causing element in cigarette smoke, has not been reduced by filters, although further research on experimental filters to remove this radioactive metal has been undertaken in New Zealand

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"Such a filter," said eminent New Zealand physicist Sir Ernest Marsden,
"coupled with the use of tobacco of low radioactivity could lead to a considerable reduction in the possible hazards of cigarette smoking."

Other research on polonium 210 has been controversial. Some investigators found it is the amount of "particulate" matter, or minute separate particles, in the mainstream of smoke that accounts for the differences in polonium content. The polonium is apparently attracted to the particles during the combustion process.

Scientists are continuing research, not only on filters but on what it is in tobacco and in tobacco smoke that needs to be filtered. One investigator held out little hope that cigarette filters could be made that would avoid harmful effects to the outer veins of smokers.

Dr. Grace M. Roth of the Vascular Laboratory, Lovelace Clinic, Albuquerque, N. Mex., said that to avoid the vascular effects, filters would have to be so efficient that no smoke at all would pass through the cigarette.

10 September 1966 / Vol. 90 / Science News

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