

SMOKING

AND

TOBACCO

CONTROL

MONOGRAPH

13

Risks Associated with Smoking Cigarettes with Low Machine- Measured Yields of Tar and Nicotine

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES
Public Health Service
National Institutes of Health
National Cancer Institute

Preface

This monograph, *Risks Associated with Smoking Cigarettes with Low Machine-Measured Yields of Tar and Nicotine*, is the 13th report published in the National Cancer Institute's (NCI) Smoking and Tobacco Control Program Monograph Series. The concept for this series was formed by the late Dr. Joseph W. Cullen, former Deputy Director of the Division of Cancer Prevention and Control. On the inside front cover of this volume, appears a list of previously published monographs. In addition to the current monograph, there are two more under development. One will be entitled *Changing Adolescent Smoking Behavior: Where It Is and Why*. The other will be called *Is the Target Hardening?* The "target" refers to those long-term smokers who, in many cases, have tried to stop smoking and been unable to do so. Future monographs will address important and timely issues on tobacco control, and will reflect our continuing mission to reduce cancer risk, incidence, morbidity, and mortality caused by tobacco use, as well as enhance the quality of life of current and former users of tobacco.

The initial meeting of the authors for the Low Tar Monograph took place in November of 1999. At that meeting, each author presented a preliminary paper or outline. The group discussed each presentation and made suggestions as to which subtopics might be removed from or added to each chapter and determined the boundaries of the various chapters.

One feature of this monograph is that it blends the old with the new. Monograph 7, *The FTC Cigarette Test Method for Determining Tar, Nicotine, and Carbon Monoxide Yields of U.S. Cigarettes*, covered the history of that protocol and recommended changes in its procedures. Chapter 2 of this publication cites this earlier monograph, brings us up to date on the FTC method, and provides additional suggestions as to what can be done to help alert the public to the dangers of smoking.

The examination of the scientific literature on low-tar and low-nicotine cigarettes is not unique to this monograph. Several of the earlier volumes devoted one or more chapters to discussions of the various health aspects of tar and nicotine levels. However, this monograph includes more than just the study of amounts of tar and nicotine. Chapter 5 includes a discussion on the continued health risks to smokers, even those who smoke a low-tar/low-nicotine cigarette, while Chapter 2 describes how changes in the cigarette design affect an individual's smoking habit. Chapter 7 points out how the tobacco companies' advertisements have changed to match the emerging public preference for low-tar/low-nicotine cigarettes.

This monograph is unique in another important aspect. For the first time, the authors who prepared the various chapters have had extensive access to the information gleaned from the internal documents of the tobacco companies. The tobacco industry files now open to the public and

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available on the Internet constitute some 33 million pages of formal and informal memos, meeting notes, research papers, and similar corporate documents. Included are marketing strategies that express the growing concern among the various tobacco companies of the potential loss of new recruits. This concern over the potential loss of market was due to the evolving public opinion that smoking is harmful to health and that it is related to many of the illnesses that smokers experience over the course of their lives.

The singular message that has been delivered to the public—smoking causes cancer—is gradually being accepted by more and more people of all ages. This message has been reported in many scientific papers over the last 50 years. In a historical context, however, the bellwether publication that galvanized the public opinion was the original 1964 Surgeon General Report, *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*. The fact that the public has slowly realized and, more importantly, accepted the danger of smoking undoubtedly concerned the tobacco companies.

Access to internal industry papers allowed monograph authors to cite a number of tobacco company documents that show a long-term trend altering the tar and nicotine content of cigarettes by various chemical and mechanical procedures. The documents further reveal the industry's efforts to produce cigarettes that could be marketed as acceptable to health-conscious consumers. Ultimately, these low-tar/low-nicotine cigarettes were part of the industry's plan to maintain and expand its consumer base.

The monograph authors show that the tobacco companies set out to develop cigarette designs that markedly lowered the tar and nicotine yield results as measured by the Federal Trade Commission (FTC) testing method. Yet, these cigarettes can be manipulated by the smoker to increase the intake of tar and nicotine. The use of these "decreased risk" cigarettes have not significantly decreased the disease risk. In fact, the use of these cigarettes may be partly responsible for the increase in lung cancer for long-term smokers who have switched to the low-tar/low-nicotine brands. Finally, switching to these cigarettes may provide smokers with a false sense of reduced risk, when the actual amount of tar and nicotine consumed may be the same as, or more than, the previously used higher yield brand.

This monograph compliments the recently released Institute of Medicine report entitled *Clearing the Smoke: Assessing the Science Base for Tobacco Harm Reduction*. Together, the documents reflect a growing body of research that has explored the impact of products intended to reduce harm in an environment where there is near universal recognition of tobacco's harmful effects. Both documents reflect the need for more research to better understand the feasibility and desirability of developing and marketing products intended to reduce risk, but both also conclude that there is currently no safe tobacco product.

We hope that this evidence-based review will inform any potential recommendations that the Department of Health and Human Services (DHHS) might make to the FTC regarding the cigarette testing method.