INTRODUCTION

Historical perspective: the low tar lie

There’s an old adage which says, “The more things change, the more they stay the same.” There is no product to which this adage applies more than to cigarettes. Although the public may believe that the major change in terms of cigarette design over the past 40 years has been the reduction of risk posed by low tar filter cigarettes, cigarettes today are just as deadly as they were back in the 1950s, and perhaps even more so. Why is there this disparity between consumer belief and harsh reality?

When the first scientific studies were published in the early 1950s linking cigarette smoking with lung cancer, the tobacco industry introduced and widely promoted filtered cigarettes. In fact cigarette ads at that time blatantly stated that filtered cigarettes were in fact safe. Filters, they claimed, greatly reduced the toxins that made non-filtered cigarettes so harmful. In their effort to convince the public of the safety of filters, the major tobacco companies enlisted Hollywood, famous athletes, the American Medical Association, and other very prominent medical groups in this whole debate. Today 98% of all cigarettes that are smoked in this country are filtered. Clearly industry advertising and marketing practices played a major role in the growth of this segment of the market. But the government played an unwitting role as well.

When the 1964 Surgeon General’s report was released, it did not contain any information regarding the relative safety of filtered versus non-filtered cigarettes. But two years later, the US Public Health Service issued the following statement on cigarette smoke constituents: “The preponderance of the scientific evidence strongly suggests that the lower the tar and nicotine content of the cigarette smoke, the less harmful would be the effect.” Soon after, the Federal Trade Commission (FTC) began testing cigarettes on a routine basis for tar and nicotine levels. The US Public Health Service widely disseminated these findings, encouraging smokers to switch, and for a number of years ran a series of public service advertisements on both radio and television urging smokers to do so.

“Safer” cigarettes

Armed with the growing realisation that some smokers were going to smoke regardless of the health risks, the National Cancer Institute (NCI), under the direction of Dr Gio Gori, embarked on an aggressive research programme to develop even “safer” cigarettes. Throughout the 1970s, NCI worked hand in hand with the cigarette industry, producing a number of experimental cigarette designs which were lower in tar, nicotine, and carbon monoxide (CO) than conventional cigarettes, at least as measured by the FTC test method.\(^7\)\(^-\)\(^10\) In fact, Gori, in a number of public statements, strongly suggested that one could smoke up to a pack of this new generation of cigarettes and yet be exposed to less toxins than one would find in one or two pre-1960s style standards. As a result of such publicity, the proportion of the cigarette marketplace that was classified as “low tar” (15 mg tar or less by the FTC method) increased dramatically during the 1970s. By the end of that decade, 50% of the cigarette brands on the market were classified officially as “low tar” according to the FTC method.\(^11\) But by this time, however, serious questions were beginning to be raised about what these so-called “low tar” and “less hazardous” cigarettes represented—and, in particular, what the FTC test represented.

In 1978, the US Congress inserted language in what was known as the Health Services and Centers Amendments Act, asking that a study or studies be done of the relative health risks associated with smoking cigarettes of varying levels of tar, nicotine, and carbon monoxide. This resulted in the decision by the Department of Health and Human Services to devote the next Surgeon General’s report (“The Changing Cigarette”) to this topic. Based on some very limited data, the report essentially concluded that the previous 1966 Public Health Service statement was, in fact, still operable.\(^12\) But the 1981 report strongly cautioned smokers not to increase their smoking or change their behaviour in other ways and therefore negate the very reason that smokers switch to these products. The report ended with the advice that there is no safe cigarette. The only way to reduce one’s risk from smoking completely, the report said, was to quit or not to begin smoking.\(^12\) That advice is as true today as it was 20 years ago.

Over the next dozen years or so, numerous studies were published in the scientific literature which conclusively documented that smokers who switched from higher tar and nicotine products to lower yield brands experienced exposure levels that were totally inconsistent with the published FTC determined tar and nicotine values.\(^13\) Smokers simply smoked these products more intensively in order to get their required fix of nicotine. And we now know that previously secret industry research reached exactly the same parallel results as we were finding in the peer reviewed published literature.\(^14\)\(^\)\(^15\)

In June of 1994, the chairman of the House Subcommittee on Health and the Environment wrote to the director of the NCI asking
that a meeting of experts be convened to review and make recommendations on the accuracy and appropriateness of the FTC test method. The FTC, concerned about the obvious weaknesses in the system that bears its name, made a similar request. On the 5th and 6th December of that year, NCI convened an ad hoc expert committee under the aegis of the president’s cancer panel. After hearing from experts both within and outside government, including documents and testimony provided by the tobacco industry, the panel concluded that the current FTC method was indeed “broke”. The panel noted that actual human smoking behaviour is characterised by wide variations in smoking patterns, which result in wide variations in tar and nicotine exposure. In other words, a test which only provides a single exposure estimate cannot be considered accurate.

Changes to the test method
After only consulting with the tobacco industry, the FTC subsequently issued proposed changes to the test method; but during the period of public comment, these changes were heavily criticised by researchers and public health officials. Eventually the FTC turned to the Department of Health and Human Services (DHHS) for assistance in developing a new test method. However, DHHS secretary Donna Shalala, after consulting with the NCI and other Public Health Service agencies, instead asked the FTC to withdraw their new cigarette testing proposal until a major, unanswered question could be addressed: “Does switching from a higher tar and nicotine product to a lower one really reduce one’s health risk?”

The NCI is now finalising a report that will provide new insight to these and other important public health questions. Among other findings, the NCI report will likely conclude that while cigarette design changes have substantially lowered machine measured tar and nicotine yields over the last 50 years, they have not contributed importantly to any meaningful reduction in the disease burden caused by cigarette smoking. Equally important, the medical and public health community should no longer recommend that smokers switch to lower yield cigarette brands as a means of reducing their future disease risks.

Additional information relating to this topic is reported by others in this supplement.

Dr Michael Thun published previously on this topic and provides convincing evidence that the relative risks among smokers for all the major smoking related diseases are higher today than they were in the 1950s and 1960s. Quite remarkable when one considers that tar and nicotine levels are supposedly 60% lower today compared to 40 years ago. Other articles within this issue will provide evidence, based on two national surveys of smokers, about what smokers think and believe about low tar and nicotine brands and how they use them.

A word of caution in conclusion: if a better test method can be developed, there remain several important questions that need to be addressed. For example, how best should a product such as cigarettes that is still largely unregulated, especially in light of the ability of this industry to constantly reinvent itself? Several times in the last 50 years, the industry has developed a new cigarette, which it then has widely promoted as being safe or safer than the product it was designed to replace. Each time, large proportions of the smoking population responded to these pronouncements by switching to these products in the mistaken belief that they were reducing their health risk, and each time the public has been deliberately deceived. The second issue is what good is a reliable test if, in the end, the industry is still permitted to use brand descriptors such as “Light”, “Mild”, and “Ultra Light” as a means of brand promotion. There are good data to suggest that people do not pay attention to tar and nicotine ratings but primarily choose brands based on imagery, advertising, and perception of risk. Neither of these questions can be completely answered, but the articles in this supplement to Tobacco Control can serve to start the process of responding to this challenge, as well as others yet unknown, that the tobacco industry is sure to raise.

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This supplement to Tobacco Control reports novel findings and policy and advocacy implications on a complex and important topic in this field: the marketing of “Light” cigarettes and strategies to counter misperceptions about these products and promote quitting behaviour. These articles are derived from some of the presentations and discussions from a meeting convened in Washington DC on 27 June 2000, by the American Cancer Society, American Heart Association, and the Campaign for Tobacco Free Kids. This “summit” sought to address fundamental questions around the health consequences of these cigarettes, the themes and impacts of their advertising, novel evidence based strategies to counter their marketing messages, and policy and advocacy options. The meeting and this supplement were sponsored by unrestricted support from GlaxoSmithKline Consumer Healthcare, a marketer of treatments for tobacco dependence.

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