Point | Counterpoint: Would a Switch from Cigarettes to Smokeless Tobacco Benefit Public Health?
Yes
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Smokeless Tobacco Is A Lifesaver. This message of hope for millions of smokers is based on three facts. First, smokeless tobacco use is 98 percent safer than cigarette smoking. Thus, it can save the lives of smokers and of those persons who breathe second-hand smoke. Second, smokeless tobacco effectively provides the nicotine kick smokers crave. That is why one third of smokeless users in the U.S. today are former smokers, according to the Centers for Disease Control and Prevention (CDC). Third — and this may be surprising to most readers — modern smokeless tobacco products can be used invisibly, much like a breath mint, in any social situation. This is important because old-fashioned "chewing" or "spitting" tobacco is outdated and irrelevant to this discussion. These facts are the foundation of a simple and practical harm reduction strategy for inveterate smokers: switch to smokeless tobacco.

This "switch-to-smokeless" strategy has major implications for public health efforts regarding tobacco use and thus several issues arise. Does the proposal have a sound scientific rationale? Is it practical enough for widespread implementation? Will smokers who switch to smokeless tobacco remain addicted to nicotine, instead of quitting altogether? Is it appropriate to recommend a preventive strategy that carries some risk? Will nonusers of tobacco, especially teenagers, infer that smokeless tobacco use is safe? Discussion of these issues will provide a new framework for the examination of cigarette smoking, America's single most avoidable cause of death.

The Scientific Rationale

According to the CDC 46 million Americans smoke, and 419,000 of them die annually from smoking-related illnesses such as heart and circulatory diseases, lung cancer and emphysema. The price smokers pay in terms of reduced life expectancy is staggering. We reported in a 1994 paper published

in Nature that lifelong smokers live an average of eight years less than do nonusers of tobacco.

Contrary to a popular misperception, all forms of tobacco are not equally risky. Smokeless tobacco causes neither lung cancer nor other diseases of the lung, and users have no excess risk for heart attacks. In fact, the only consequential — but infrequent — adverse health effect of smokeless tobacco use is oral cancer. In 1981, writing in *The New England Journal of Medicine*, Dr. Deborah Winn and colleagues established that smokeless tobacco users are four times more likely to develop oral cancer than are nonusers of tobacco. However, this relative risk is only about one half the relative risk of oral cancer from smoking.

In Table 1 we compare directly the annual mortality of 46 million smokers and an equal number of smokeless tobacco users. The number of deaths from smoking is almost 70 times higher than the number from smokeless tobacco use. In terms of life expectancy, the smokeless-tobacco user loses only about 15 days on average, compared with the eight years lost by the smoker.

Another major health benefit: smokers who switch to smokeless tobacco produce no passive smoke to harm others. The American Heart Association estimates that 40,000 Americans die annually from diseases related to second-hand smoke. No one dies from the secondary effects of smokeless tobacco use. Thus, this proposal could be recommended solely on the basis of lives saved through the elimination of the effects of passive smoking.

These published facts are, insofar as we are aware, unrefuted. But a transition to smokeless tobacco is not merely a scientifically based strategy of smoking cessation; it is already a practical reality.

From Science to Practice

Statistics from the CDC indicate that more than 1.5 million smokers have used smokeless tobacco to quit smoking. The transition is possible because the spike of nicotine that addicted smokers seek is effectively delivered by smokeless tobacco. Furthermore, newer smokeless tobacco products are essentially invisible in use, as they occupy no more space than a breath mint or a piece of chewing gum. A small, pre-packaged pouch of tobacco is tucked discreetly between the cheek and gum, where it delivers nicotine across the lining of the mouth. Spitting, once the stigma of outmoded and bulky "chewing" tobacco, is minimal or nonexistent. We recently published the first profiles of a group of "switchers." They came from all walks of life and switched to smokeless tobacco after smoking many years (25 years on average). Some switched to smokeless after months or years of abstinence and continuous craving. The transition proved stable in this group, as the average duration of smokeless tobacco use after quitting smoking was nine years.

What do switchers accomplish? Our research shows that they will live, on average, as long as those smokers who quit nicotine altogether. They reduce their risks for smoking-related illness and death, which is the goal of all existing smoking cessation efforts. There is, of course, no debate about the ideal way to achieve this goal: complete tobacco abstinence. But that ideal is not always attainable since many smokers are unable to give up nicotine. Switching to smokeless tobacco is a small compromise with the ideal which reaps large individual and public health gains.

Judging Nicotine

Smokeless tobacco provides the former smoker with nicotine. This seems to pose a problem only to staunch anti-tobacco activists who are committed to total tobacco abstinence. It is true that some persons who switch might otherwise quit tobacco entirely. But there are millions of smokers who cannot quit, for existing quit-smoking methods are minimally successful. Let's face reality: each year 419,000 nicotine addicts do not quit soon enough to avoid a premature death. Why compel nicotine-seeking smokers to choose only between inhaling tobacco smoke and abstinence? Smokers who switch to smokeless tobacco can still strive for nicotine abstinence after the delivery system has been changed.

We emphasize that nicotine is the reason people smoke but not the reason that smokers die. In the fall of 1995 a Food and Drug Administration (FDA) advisory panel echoed our sentiment when it recommended that nicotine gum be released from prescription status in order to make it more widely available. With this action the panel supports our position: that quitting smoking — without necessarily quitting nicotine — is the key to reducing health risks. Smokeless tobacco, which is already available without prescription, is another acceptable alternative.

Advising the Smoker

Health professionals often recommend prevention strategies that carry small risks. For example, the National Cancer Institute (NCI) is evaluating the drug tamoxifen as a preventive agent for women with a high risk for breast cancer. However, although tamoxifen may reduce breast cancer risk, it increases the risk of cancer of the uterus. The NCI believes that the benefits from tamoxifen may outweigh the risks. Substituting smokeless tobacco for smoking is a wise risk-reduction strategy because it reduces *all* smoking-related risks and introduces *no* new risks.

It has been suggested that it is not appropriate for health professionals to recommend smokeless tobacco for smokers because the patient-switcher might develop mouth cancer. But concerned physicians and dentists understand that it is their moral and ethical obligation to help patients make informed lifestyle choices, all of which involve benefits and risks. One example is the recommendation to substitute oral methadone for

intravenous heroin, a practice approved by the FDA in 1973 and now an accepted harm-reduction alternative for heroin users. Providing information about an alternative to smoking that is 98 percent safer is not only consistent with the highest standards of medical ethics, it is mandated by them.

For Smokers Only

Will nonusers of tobacco, especially teenagers, misinterpret our message and begin smokeless tobacco use? It is possible, so we have directed our message carefully and specifically to adult smokers. We are opposed to tobacco initiation by anyone. But we recognize that tobacco initiation is a complicated matter, more influenced by peer pressure and parental usage than by a scientific discussion of tobacco risks. History tells us that in spite of society's best efforts, some portion of the population has always been addicted to tobacco. In its concern over tobacco initiation, society cannot deny adult smokers medical information permitting them to lead longer and healthier lives. Our message does not represent tobacco promotion, but tobacco pragmatism.

Rethinking Tobacco Control

The past 30 years have brought ever more assertive public health campaigns against cigarette smoking. A coalition of well-funded public and private agencies has as its goal a reduction in the prevalence of cigarette smoking. The coalition's influence has resulted in pervasive health warnings, ever more intensive quit-smoking programs, and recently the social ostracism of smokers and the industry that supplies them. Yet many Americans continue to smoke, and far too many die from smoking-related diseases.

In this article we have presented the scientific foundation and practical rationale for a thorough rethinking of tobacco control policies and their premises. Our proposal empowers smokers to gain control over the consequences of their nicotine addiction. It also empowers society to avoid burdensome and intrusive tobacco control measures — those involving unnecessary legislation, regulation and litigation — that have become popular recently. Since our proposal is entirely unintrusive and solely educational, it has a strong fundamental, moral rationale and so should be welcomed both by smokers and the health care professionals who take care of them.

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Table 1: Annual Tobacco-Related Mortality in 46 Million Smokers vs. Smokeless Tobacco Users

	Smokers	Smokeless Tobacco Users
From cancer	151,000	6,000
(mouth cancer)	(11,500)	(6,000)
From heart and circulatory disease	180,000	0
From respiratory disease	85,000	0
Miscellaneous	3,000	0
	419,000	6,000
Years of Life Lost (Average)	7.8	0.04

Adapted from:

1. Centers for Disease Control. Cigarette smoking-attributable mortality and years of potential life lost — United States, 1990. *Morbidity and Mortality Weekly* Report 42:645-649, 1993.
2. Rodu, B. An alternative approach to smoking control. *The American Journal of the Medical Sciences* 308:32-34, 1994.
3. Rodu, B., Cole, P. Tobacco-related mortality. *Nature* 370:184, 1994.

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