BIG TOBACCO'S GUINEA PIGS:

How an Unregulated Industry Experiments on America's Kids and Consumers











Big Tobacco's Guinea Pigs:

How an Unregulated Industry Experiments on America's Kids and Consumers

Table of Contents

Executive Summary	i-vii
Introduction	1
Chapter One: The Critical Role of Product Design	2-11
Chapter Two: New Products	12-42
 Recruiting New Youth Users Creating & Sustaining Addiction Discouraging Quitting 	28-34
Chapter Three: FDA Regulation of Tobacco Products Will Protect Consumers and Save Lives	43-46
Appendix: Glossary of Terms	47

This report is available online at www.tobaccofreekids.org/productsreport

EXECUTIVE SUMMARY

Even though tobacco use is the leading cause of preventable death in the United States, killing more than 400,000 people and costing the nation nearly \$100 billion in health care expenditures each year, tobacco products are virtually unregulated to protect public health.

This lack of government regulation has allowed the tobacco industry free rein to design and market their products. Tobacco manufacturers can introduce new products, secretly modify existing products with new designs and ingredients, and make unproven health claims without regard for the impact on public health.

This combination of highly engineered products with no oversight is deadly. Flavors and product modifications not only make the product more appealing to kids, but often produce additional carcinogens. Manipulation of nicotine and other chemicals increases addictiveness and harm. Misleading claims discourage smokers from quitting and have cost countless lives.

Because of this lack of government oversight, the tobacco industry has been able to counter declining smoking rates and growing restrictions on smoking by unleashing a new generation of tobacco products. Just like in the past, product design features, fully understood only by the industry, play a huge role. Key trends include:

- Flavored products: Cigarettes, smokeless tobacco products, and so-called "little cigars" have been introduced in an array of candy, fruit, and alcohol flavors that mask the harshness of the products and make them more appealing to children.
- Novel smokeless products: Facing growing restrictions on where smoking is allowed, tobacco companies have introduced novel smokeless tobacco products that are marketed as a way for smokers to sustain their addiction in places where they cannot smoke.
- Controlling nicotine levels: Tobacco companies have been trying to maintain addiction among smokers and addict a new generation of replacement smokers by increasing nicotine levels in their products over time.
- Unproven health claims: To discourage smokers from quitting, and possibly entice former smokers or those who have never smoked, increasing numbers of products have been marketed with unproven and misleading claims that they are less harmful than traditional cigarettes.

Tobacco products once were limited to cigarettes, cigars, pipe tobacco and chewing or spit tobacco. Today, tobacco products come in more flavors, forms, shapes and sizes, and with more unproven health claims than ever before, all with the goal of facilitating the consumption of – and addiction to – nicotine.

This reports details how the companies manipulate their products to recruit new youth users, create and sustain addiction, and discourage users from quitting. It then describes the new generation of tobacco products designed to achieve these goals. Finally, it outlines how effective regulation by the U.S. Food and Drug Administration (FDA), as exemplified by legislation currently under consideration in Congress, can curtail the tobacco industry's harmful practices and save lives. Until the FDA is given such authority, the American public will continue to be human guinea pigs in the tobacco industry's deadly science experiment.

The Critical Role of Product Design

While advertising icons like the Marlboro Man and Joe Camel have rightfully been blamed for attracting and addicting millions of kids to a lifetime of smoking, they are only part of the story of tobacco industry success – and public health disaster.

Few people realize how the tobacco companies design the product itself to achieve the objectives of recruiting new youth smokers, creating and sustaining addiction, and discouraging smokers from quitting. Tobacco products are far from simple tobacco leaf rolled in paper or other packaging. They are highly engineered nicotine delivery devices, finely tuned to appeal to the taste, feel, smell, and other sensations of new and addicted smokers. For example, common methods used by the tobacco industry to optimize nicotine delivery include the addition of chemicals such as ammonia and the manipulation of smoke particle size.

With no government regulation, these design decisions are based solely on the business interests of the tobacco companies, with no regard public health. The public simply has no way of knowing what the companies are doing to their products and how that affects health. While we have learned a lot from the tobacco companies' internal documents, what is really alarming is what we do not know and will not know until tobacco products are regulated like other consumer products.

Designing Products to Recruit New Youth Smokers

Tobacco companies know that almost all new smokers begin their addiction as children. They also know that smoking is unpleasant for new smokers, so they carefully design the product, including the delivery of nicotine, for this vital market. Their internal documents describe methods of reducing harshness to overcome the problem that new smokers often don't like the taste of smoke. These methods improve the "mouth feel" by reducing negative sensations like hotness and dryness. They even address how the cigarette should be designed so that the novice smoker can light it more easily.

This approach is epitomized by the design considerations for the infamous Joe Camel campaign, which not only targeted teens in its marketing, but with the product itself. After extensive consumer testing and product analysis, R.J. Reynolds (RJR) introduced cigarettes that were less harsh and smoother tasting, making them easier to smoke.

Following these product changes, Camel's share among 18 year olds increased dramatically from 2.5 percent in 1985 to 14 percent in 1993. By 1993, Camel had been transformed into a brand for the young adult smoker (a tobacco industry euphemism for kids).¹

The use of flavors is also part of the process of attracting youth smokers to a lifetime of addiction, even though many make the product more harmful. Used to make the smoke less harsh and more flavorful for new smokers, additives like chocolate, when burned in a lit cigarette, produce additional toxins, including carcinogens.

New Flavored Tobacco Products

Continuing the long tradition of designing products that appeal explicitly to new users, tobacco companies in recent years have significantly stepped up the introduction and marketing of flavored products:

- Among cigarette manufacturers, RJR has been the most aggressive in this category. RJR's "Camel Exotic Blends" have come in more than a dozen flavors including Twista Lime, the coconut and pineapple-flavored Kauai Kolada, Warm Winter Toffee and Winter Mocha Mint. RJR has also marketed alcohol-flavored Camels with names like ScrewDriver Slots, Blackjack Gin and SnakeEyes Scotch. Colorful ads for these products appeared in magazines with large youth readerships such as Rolling Stone and Sports Illustrated.
- Smokeless tobacco manufacturers have also stepped up the introduction of new flavored products. In one magazine ad, U.S. Smokeless Tobacco Company (UST) touts that its Skoal brand comes in vanilla, apple, berry blend, mint and other flavors. A trade publication for convenience stores recently quoted one retailer stating, "In the case of smokeless tobacco, you get a new flavor once every quarter."²
- There has also been a proliferation of flavored products in the small cigar category, often with names that blatantly appeal to consumers who like sweet flavors. Swisher, Inc., offers a variety of chocolate, strawberry, peach, grape, and other flavored little cigars under the name "Swisher Sweets," while Phillies Cigarillos also come in many flavors including "Sugarillos" for "when sweet isn't sweet enough." The Altria Group, parent company of Philip Morris USA, recently expanded its business to the cigar category by acquiring John Middleton, Inc., which sells Black & Mild brand little cigars in flavors that include apple, cherry, wine and cream. With their colorful packaging and sweet flavors, these cigar products are often hard to distinguish from the candy displays near which they are frequently placed in retail outlets. These products are often sold singly rather than in packs and, in the case of so-called little cigars that resemble cigarettes, at lower excise tax rates than cigarettes, increasing their affordability and appeal to children.

Designing Products to Create and Sustain Addiction

The tobacco companies have known for decades that the key to their business is the delivery of nicotine. As one RJR document put it, "In a sense, the tobacco industry may be thought of as being a specialized, highly ritualized, and stylized segment of the pharmaceutical industry." Two product innovations were particularly critical in increasing the delivery of nicotine:

- Adding ammonia to the tobacco changed the chemistry of the smoke in a way that
 resulted in nicotine reaching the brain more efficiently. This innovation by Philip
 Morris is cited by other tobacco companies for the incredible growth in Marlboro from
 a relatively small brand to the world's best selling cigarette.⁴ Indeed, ammonia may
 play as important a role as the Marlboro Man in the brand's success.
- Engineering smoke particles to achieve a size that is optimal for delivering nicotine
 to the lungs. While larger or smaller particle sizes may well cause less harm to the
 smoker, companies do not need to consider this given the lack of regulation of their
 products.

Increased Nicotine Levels and New Products to Sustain Addiction

Reports from the Massachusetts Department of Public Health⁵ and the Harvard School of Public Health⁶ have also documented an increase in nicotine levels in cigarettes in recent years. However, because of the lack of regulation of tobacco products, no government agency can stop tobacco manufacturers from doing this.

Another major trend has been the introduction of new and more novel smokeless tobacco products marketed to help smokers through the times they cannot smoke. These products have proliferated, and now major cigarette manufacturers have entered the smokeless market as smoking rates have declined and a growing number of states and localities have enacted smoke-free laws. In many instances, these products are advertised as ways to get a nicotine fix when smokers cannot smoke, thereby providing a disincentive for smokers to quit and truly protect their health. Tobacco companies have long known that smoke-free laws often result in more smokers trying to quit and succeeding, and this is one of their answers to a declining market for cigarettes.

Underscoring the importance of the smokeless category to traditional cigarette manufacturers, Reynolds American Inc., the parent company of RJR, in 2006 purchased the Conwood Company, the second largest manufacturer of smokeless tobacco products in the United States. Wall Street analysts have speculated that Altria may also seek to acquire a smokeless tobacco company, and Philip Morris is already test-marketing Marlboro moist smokeless tobacco in Atlanta.

Traditionally, smokeless tobacco in the United States has taken the form of chewing tobacco or moist snuff, which is loose tobacco placed between the lip and gum. Both require frequent spitting. Today, smokeless tobacco has expanded to other forms,

including teabag-like pouches and even dissolvable tablets of tobacco, some of which do not require users to spit.

- In the past year, both Philip Morris and RJR have entered the smokeless tobacco market by test marketing pouch products carrying the names of their most famous cigarette brands, Marlboro Snus for Philip Morris and Camel Snus for RJR. Marketing for these products explicitly encourage using snus where people are not allowed to smoke. Marketing for Camel Snus uses the slogan "Pleasure for wherever!" while the Marlboro Snus web site mentions "flavor anytime" and pictures an airplane, where smoking is not allowed, as a "good time to snus." The Lorillard Tobacco Company, the third-ranking cigarette manufacturer in the United States, is also planning to test-market a new pouch product in conjunction with smokeless manufacturer Swedish Match, the company that created snus. In the absence of regulation, there is no way to know how or whether these new products differ from other smokeless products or, indeed, from each other.
- Other notable smokeless tobacco products introduced in recent years include Star Scientific's Ariva and Stonewall Hard Snuff, both dissolvable tablets of tobacco. These types of products pose two serious problems. First, like other smokeless products, they discourage smokers from quitting by feeding their nicotine addiction in places where they cannot smoke. Second, these products appeal to children because of their candy-like form and minty taste and because they are easy to conceal.

Designing Products to Discourage Users from Quitting

As smokers grow concerned about health risks and consider quitting, tobacco companies seek to keep them smoking by developing new products that make implicit or explicit claims of reduced harm. With no regulation of the product or of claims, there is no way for consumers to know whether the claims are true and no incentive for companies to manufacture products that actually reduce harm rather than just claiming to do so.

The public health disaster of "light" and "low-tar" cigarettes exemplifies the problem. Faced with smokers concerned about their health, the tobacco companies developed products to reassure smokers about the health effects with the full knowledge that these products conferred no health advantage. The companies knowingly developed products that produced lower tar ratings on the machine test, but that neither actually reduced consumers' exposure, nor offered any real health benefit to smokers. This resulted in untold numbers of smokers switching to "light" and "low-tar" cigarettes rather than quitting, taking an incalculable toll on public health. Even today, many smokers still consider these cigarettes to be less harmful.

New Products with Unproven Health Claims

The tobacco companies have begun introducing a variety of so-called "reduced risk" products that threaten to repeat the "low-tar" public health disaster with a new

generation of unproven, misleading and unregulated health claims. These products and their explicit and implicit health claims include:

- Test-marketed in several U.S. cities, Brown & Williamson's Advance cigarettes were advertised with the slogan, "All of the taste... Less of the toxins."
- RJR's Eclipse cigarette has been marketed with the claim that it "may present less
 risk of cancer associated with smoking." The company has also touted Eclipse as "a
 cigarette that responds to concerns about certain smoking-related illnesses,
 including cancer."
- Vector Tobacco's Omni cigarettes have been advertised with the slogan, "Reduced carcinogens. Premium taste."
- Vector also introduced Quest, which it claimed to be a "nicotine-free" cigarette and implied it could help smokers quit despite the lack of safety and efficacy review that is given to FDA-approved smoking cessation products.
- Introduced by Philip Morris and test-marketed in Atlanta, Tampa, and Salt Lake City beginning in 2005, Marlboro UltraSmooth cigarettes have been marketed with messaging such as "Filter Select" and "new carbon filter lets the flavor through" that consumers could easily interpret as indicating advances in filtration of harmful elements.

The pipeline of these new products and claims may well be growing. Philip Morris parent Altria, for example, has invested \$350 million in a Center for Research and Technology that may result in new products for which the company will seek to make health-related claims. A January 19, 2008, article in *The Wall Street Journal* detailed the many new products Philip Morris International has developed ostensibly for its overseas markets. These include Marlboro Intense, a short but strong version of the brand described as a way for smokers to get a quick nicotine hit when stepping outside smoke-free environments, and Marlboro Mix 9, a high-tar, high-nicotine product launched in Indonesia in 2007. With no government oversight in the United States, nothing prevents the introduction of these or other new products to the American market.

The Need for FDA Regulation of Tobacco Products

The ongoing product manipulation by the tobacco companies with no government oversight and without regard to health impact demonstrates just how critical it is that the FDA be given authority to regulate tobacco and its marketing, just as it has for virtually all other consumer products.

Bipartisan legislation (S.625/H.R.1108) is pending to grant the FDA authority over the manufacturing and marketing of both current and new tobacco products. This legislation addresses tobacco marketing to children, manipulation of tobacco products to make them more appealing and addictive, and use of misleading health claims by tobacco companies. Among other things, this legislation will:

- Authorize the FDA to restrict tobacco marketing to protect children and public health, and limit tobacco advertising, such as at point-of-sale and in publications with significant youth readership (as well as any remaining outdoor advertising) to blackand-white text only.
- Ban candy and fruit flavorings in cigarettes.
- Require tobacco companies to disclose detailed information about their products, including contents, changes to products, amount and form of nicotine, research on health effects, and marketing. For the first time, a public health agency will have as much information about deadly tobacco products as the tobacco companies.
- Authorize the FDA to require changes in current and future tobacco products, such
 as the reduction or elimination of harmful chemicals or the reduction of nicotine
 levels. The FDA could prohibit some of the harmful steps the tobacco companies
 have taken to make their products attractive to kids, more addictive or more harmful.
- Require larger, more informative health warnings on tobacco products and in advertising.
- Immediately prohibit terms such as "light," "mild," and "low-tar" that mislead consumers into believing that certain cigarettes are safer than others.
- Prohibit tobacco companies from making any explicit or implicit health claims, such
 as reduced risk of disease, without first scientifically proving to the FDA that both 1)
 the product, as actually used by consumers, will reduce the risk of disease and 2)
 the product as marketed will benefit the population as a whole (in other words, that it
 won't discourage current users from quitting or encourage new users to start).

The tobacco companies have proven that they design and manipulate their products to make them more appealing, more addictive, and more deadly. The resulting carnage will only continue if their special protection from government oversight is not addressed.

¹ Wayne, GF & Connolly, GN, "How Cigarette Design Can Affect Youth Initiation Into Smoking: Camel Cigarettes, 1983-1993," *Tobacco Control* 11:i32 - i39, March 2002.

² "Flavors Add New Dimension to Tobacco," *Convenience Store News*, October 1, 2007.

³Teague, C, "Research Planning Memorandum on the Nature of the Tobacco Business and the Crucial Role of Nicotine Therein," April 14, 1972, Bates No. 519198977-519198985.

⁴ Bates, C, Jarvis, M, & Connolly, GN, *Tobacco additives: Cigarette engineering and nicotine addiction*, ASH UK, July 14, 1999, http://newash.org.uk/files/documents/ASH 623.pdf.

⁵ Massachusetts Department of Public Health, *Change in Nicotine Yields, 1998-2004*, 2006, http://www.mass.gov/Eeohhs2/docs/dph/tobacco control/nicotine yields 1998 2004 report.pdf.

⁶ Connolly, GN, et al., *Trends in Smoke Nicotine Yield and Relationship to Design Characteristics Among Popular U.S. Cigarette Brands, 1997-2005*, A Report of the Tobacco Research Program Division of Public Health Practice, Harvard School of Public Health, January 2007.

⁷ O'Connell, V, "Philip Morris Readies Aggressive Global Push," *The Wall Street Journal*, January 29, 2008.

INTRODUCTION

"If our data, correlations and conclusions are valid, then what has emerged is a rather new type of cigarette, represented by Marlboro and Kool, with high nicotine 'kick', burley flavour, mildness to the mouth, and increased sensation to the throat, all largely the result of higher smoke pH. There is evidence that other brands, which are selling well also, have some of these attributes, particularly increased 'free' nicotine impact."

Claude Teague, R.J. Reynolds Tobacco Co., 14th August, 1973, Implications and Activities Arising from Correlation of Smoke pH with Nicotine Impact, Other Smoke Qualities, and Cigarette Sales. Minn Trial Exhibit 13155.

From their own internal documents, as well as from scientific study, it has become clear that the tobacco companies have for decades intentionally marketed their products to kids to recruit new smokers as replacements for those customers who quit – or die. Having addicted most of their customers as kids, the companies continue efforts to sustain that addiction and discourage quitting. Much of their success has been rightfully attributed to sophisticated marketing campaigns, including the infamous Joe Camel campaign, the Virginia Slims *You've Come a Long Way Baby* campaign, and of course the Marlboro Man, which *Advertising Age* in 1999 named the No. 1 Ad Icon of the 20th Century – even ahead of Ronald McDonald. Along with pricing strategies and massive payments to retailers to ensure that tobacco products are prominently displayed in retail outlets, these campaigns have helped to addict generations of Americans to products that take a devastating toll on public health.

What is equally clear but less understood by the public is the degree of precision with which the tobacco companies design their products to recruit new youth smokers, create and sustain addiction, and discourage smokers from quitting. The companies spend huge sums to research virtually every element of the design so their products achieve these goals. As the quote above illustrates, tobacco products are far from simple tobacco leaf rolled in paper or otherwise packaged. For many decades they have been highly engineered nicotine delivery devices, finely tuned to appeal to the taste, feel, smell and other sensations of the consumer. Every aspect of product development, from its crudest elements through its final packaging, is thoroughly researched and controlled by the tobacco companies, with no government oversight. Operating without any regulation, the companies are free to make product design decisions based solely on what will benefit their bottom lines, with no regard for the impact on health.

In recent years, the tobacco companies have introduced a number of new and novel tobacco products in their ongoing efforts to maximize their profits. Without U.S. Food and Drug Administration (FDA) regulation of these new and existing products, the companies remain free to design and alter them with no regard for public health. What is even more alarming than what we do know about how companies design their products is what we do not know, and with no regulation, we have no way of finding out.

This report details just a few of the ways the companies design products to attract new youth smokers, create and sustain addiction, and discourage smokers from quitting. It then describes many of the new products designed to achieve those same objectives. Finally, it describes why legislation giving the FDA the authority to regulate tobacco products and their marketing is critical to reducing the death and disease toll from tobacco use.

Chapter 1: The Critical Role of Product Design

The characteristics of tobacco products are no accident. Everything about them is designed with an explicit purpose. While smoking any form of tobacco is deadly, virtually everything the tobacco companies do to make the product appealing, addictive and easy to use has the potential to affect the harm caused by the product. For example, making the smoke less harsh and less irritating not only makes it easier for kids to start smoking, but also produces more efficient nicotine absorption and greater addictive impact by enabling deeper lung inhalation; in turn, this can result in more severe forms of lung cancer.

There are a number of design features that can affect the impact of the product on the consumer, including flavorings, other additives, how the tobacco is treated, the filter, and even the paper, adhesive, inks, and packaging. Additionally, the act of combustion has a significant impact on the toxicity of the cigarette smoke actually inhaled by the smoker. For instance, the companies claim that many of their additives are safe for consumers because they are considered safe when used in food processing. What they fail to disclose is that inhaling these compounds after they have been lit on fire -- not an approved use in food -- changes the effect of these ingredients on health. Burning chocolate produces carcinogens not present in its uncombusted form. There is no evidence that these considerations are given any weight by tobacco companies as they strive to attract and retain customers.

The chart below illustrates how just a few of the many aspects of product design serve a unique purpose not disclosed or apparent to consumers, from enhancing nicotine delivery to making the smoke taste better or milder and easier to inhale. Of course, many of these elements also make the product more harmful.

Design feature	Intended Affect
Ammonia	Changes chemical composition of nicotine in ways that increase speed and efficiency of nicotine absorption
Acetaldehyde	Increases addiction potential by interacting with nicotine
Eugenol and Menthol	Numb throat so the smoker does not feel as much throat irritation and can inhale more smoke more deeply
Glycerin	Enables deep lung exposure
Cocoa	Allows smoke to pass more easily and deeply into the lungs
Sugars and chocolate	Make smoke seem milder and easier to inhale; Make cigarettes more appealing to children and first time users
Cigarette filter technology	Reduces certain throat burning sensations; ensures that nicotine is delivered in a form that can be inhaled deep into the lung
Ventilation holes	Increase the amount of free nicotine which increases the addictiveness of the nicotine and cheats FTC smoking machine testing for tar and nicotine ratings

Other features of the product are also highly engineered:³

> Ignition propensity and burn rate (ease of lighting a cigarette and speed at which it burns) are controlled to help control nicotine dosing and make cigarettes convenient to use.

- Smoke particle size is engineered to facilitate efficient inhalation of smoke deep into the lung.
- Smoke temperature and harshness are controlled to make it easier to take up smoking, to inhale deeply and to provide smoother smoke that misleads the smoker into assuming it not as harmful.
- > Smoke and ash color are controlled with chemicals in the tobacco and paper to make the process as neat and attractive-appearing as possible.
- Still other chemicals are added that prolong shelf life and control humidity, which, in turn, help control nicotine dosing and smoke sensations.

Tobacco Companies Design Products Specifically to Recruit New Youth Smokers

For decades, tobacco companies have recognized the importance of the youth market to their survival and have focused their research and product design efforts to meet the needs of this market. As Claude Teague, a chemist for R.J. Reynolds (RJR), noted in 1973:

"Realistically, if our Company is to survive and prosper, over the long term, we must get our share of the youth market. In my opinion this will require new brands tailored to the youth market. ... Several things will go to make up any such new "youth" brands, the most important of which will be the image and quality – which are, of course, interrelated. The questions then are: What image? And What quality? Perhaps these questions may best be approached by consideration of factors influencing **pre-smokers to try smoking, learn to smoke, and become confirmed smokers** (emphasis added)."

This 1973 RJR document (*Some Thoughts About New Brands of Cigarettes for the Youth Market*) epitomizes how tobacco companies consciously design products to attract youth smokers and teach them how to smoke until they become addicted customers. Every decision regarding product manufacture and design is made following extensive research into the impact it will have on the user's experience. The tobacco companies' own documents demonstrate that they make considerable efforts to determine what characteristics are most likely to attract new customers and to make it easier for new users to tolerate tobacco smoke.

The Teague document details a number of product features that make smoking more tolerable for beginning and learning smokers. For example, it discusses methods of reducing harshness, making the flavor bland since new smokers don't like the taste of the smoke, and improving the "mouth feel" by reducing negatives like hotness and dryness. It even addresses how the cigarette should be designed to make lighting it easy for the "learner." Some of the specific product features outlined in the memo include the following:⁵

Research Planning Memorandum on Some Thoughts About New Brands of Cigarettes for the Youth Market

- Nicotine level of 1.0-1.3 mg/cigarette
- Bland smoke to address "low tolerance for smoke irritation" of "beginning smoker[s] and inhaler[s]"
- Nicotine absorption minimized "by holding pH down"
- Suggests 100 mm "to facilitate lighting"
- Tar content of 12-14 mg/cigarette to achieve desired taste and "visible" smoke
- "Reasonably firm" rod

One of the best examples of how these design features are used to recruit new smokers is the Joe Camel campaign. While most Americans are familiar with the egregious marketing campaign targeted at kids, they are unaware that a key element of the effort to attract kids was the design of the product itself. In tandem with the marketing campaign, these efforts were a big success for RJR and a disaster for our kids.

In the early 1980s, Philip Morris' Marlboro cigarettes had become the most popular cigarette among younger smokers. After carefully examining Marlboro, RJR concluded the one reason for Marlboro's success was that Philip Morris had figured out how to deliver nicotine more effectively and more smoothly. RJR, looking to compete with Philip Morris for this market, instituted a number of design changes to Camel cigarettes in order to appeal to younger smokers. After extensive consumer testing and product analysis, RJR introduced cigarettes that were smoother and less harsh, making them easier to smoke. Nicotine levels were also increased during this time period. The introduction of Camel's "Smooth Character" advertising campaign, which focused on the smoothness of the product, coincided with these design changes.⁶

Following these product changes, Camel's share among 18 year olds increased dramatically from 2.5 percent in 1985 to 14 percent in 1993. By 1993, Camel had been transformed into a young adult smoker (a tobacco industry euphemism for kids) brand.⁷

Flavorings

As early as the 1970s, the tobacco companies were discussing the "benefits" of sweet flavors. These flavors are used to affect the taste as well as the harshness of the product. A 1974 summary of a meeting held at RJR discussed cigarettes designed for beginning smokers, noting that such a cigarette should be "low in irritation and possibly contain added flavors to make it easier for those who never smoked before to acquire the taste of it more quickly." Advisors to Brown & Williamson also reviewed new concepts for a "youth cigarette," including cola and apple flavors, and a "sweet flavor cigarette," stating, "It's a well-known fact that teenagers like sweet products. Honey might be considered."

Other industry statements reveal how flavors are used to attract smokers:

"Although each tobacco manufacturer carefully guards the secrets of his casing (and flavor) formulas, it is well known that casings for smoking products often contain sugar, liquorice, cocoa, or chocolate liquor and sometimes natural extracts. Of these,

liquorice deserves special mention. Just as sugar is used in 'casing' the tobacco to mellow and smooth the smoke, liquorice is used as an adjunct to boost the sweetness of tobacco products. The taste of liquorice to the smoker is that of a mellow sweet woody note which, at proper use levels, greatly enhances the quality of the final product."¹⁰

"Although by no means conclusive, the results now presented lend some support to the claim that treatment of tobacco with cocoa butter reduces the harshness of the smoke."

Both licorice and cocoa, when burned, produce carcinogens.

The tobacco companies' success in using menthol cigarettes to target African American kids is exemplified by the disproportionate number of young blacks who smoke menthol cigarettes. Not only does menthol numb the throat to allow deeper inhaling, the companies know menthol is attractive to their African American targets:

"Young blacks have found their thing, and it's menthol in general and Kool in particular." ¹²

It is hardly surprising then that 80 percent of 12- to 17-year-old black smokers choose Newport, the leading menthol brand, compared to just 16 percent of young white smokers. Again, these product design decisions can have a terrible impact on health. Menthol cigarettes have higher carbon monoxide concentrations than non-menthol cigarettes and may be associated with a greater absorption of nicotine. Moreover, research indicates that mentholated cigarettes may increase the risk of both lung and bronchial cancer by promoting lung permeability and diffusability of smoke particles. African Americans are more likely to develop and die from cancer than persons of any other racial or ethnic group. Lung cancer is the second most common cancer in both African American men and women and it kills more African Americans than any other type of cancer.

The cigarette companies have not been alone in their pursuit of product designs to attract new customers from the ranks of kids. Smokeless (or spit) tobacco companies, particularly the U.S. Smokeless Tobacco Company (UST), have a long history of creating new products that appeal to kids and marketing them aggressively to children. According to internal company documents, UST developed a strategy some time ago for hooking new smokeless tobacco users, which means kids. One document states:

"New users of smokeless tobacco – attracted to the product for a variety of reasons – are most likely to begin with products that are milder tasting, more flavored, and/or easier to control in the mouth. After a period of time, there is a natural progression of product switching to brands that are more full-bodied, less flavored, have more concentrated 'tobacco taste' than the entry brand." ¹⁷

Following this strategy, in 1983 to 1984, UST introduced Skoal Bandits (in pouches) and Skoal Long Cut, designed to "graduate" new users from beginner strength to stronger, more potent products. Both the pouches and the long cut tobacco made make it easier for beginning users to handle the product in the mouth. A 1985 internal UST newsletter indicated the company's desire to appeal to youth: "Skoal Bandits is the introductory

product, and then we look towards establishing a normal graduation process." In 1993, cherry flavoring was added to UST's Skoal Long Cut, another starter product (see below). 19



Tin of Cherry Skoal (2007)

A former UST sales representative revealed that, "Cherry Skoal is for somebody who likes the taste of candy, if you know what I'm saying."

"Juiced Up: How a Tobacco Giant Doctors Snuff Brands to Boost Their 'Kick,'" *The Wall Street Journal*, October 26, 1994.

Tobacco Companies Design Products to Create and Sustain Addiction

Perhaps nothing is more important to the tobacco companies than controlling nicotine delivery, and they have engineered their products to do this effectively and efficiently. Their own documents make it clear that nicotine delivery and the resulting addiction are the key to their success.

"We are basically in the nicotine business. . . . Effective control of nicotine in our products should equate to a significant product performance and cost advantage."²⁰

"I believe the thing we sell most is nicotine." 21

"I believe that for the typical smoker nicotine satisfaction is the dominant desire, as opposed to flavor and other satisfactions." ²²

Not only do the companies recognize the importance of nicotine, we have also learned, through tobacco industry documents, just how much more the industry knows than it discloses, and how much it knows about design and ingredients to heighten addiction risk and keep smokers smoking. U.S. District Court Judge Gladys Kessler's Final Opinion from August 17, 2006, in *United States v. Philip Morris* included abundant evidence showing that tobacco companies controlled nicotine levels in cigarettes to ensure that smokers become addicted and stay addicted. From Judge Kessler's Final Opinion:

"1366. Defendants have designed their cigarettes to precisely control nicotine delivery levels and provide doses of nicotine sufficient to create and sustain addiction." ²³

"1368. Every aspect of a cigarette is precisely tailored to ensure that a cigarette smoker can pick up virtually any cigarette on the market and obtain an addictive dose of nicotine." 24

Addition of Dangerous Chemicals to Enhance Nicotine Delivery and Addiction

The addition of specific chemicals is an important example of how tobacco companies design and manufacture their products to create and sustain addiction. In particular, the tobacco companies have used chemical additives to modify the form of nicotine delivered to the smoker and enhance the speed at which it is absorbed by the body. This all works to make the nicotine more pharmacologically potent.

Through intensive research, the tobacco companies found that adding ammonia or ammonia-based compounds in the manufacturing process alters the chemical balance of the nicotine in the cigarette smoke. Put simply, adding ammonia converts the nicotine molecules into a form often referred to as a "freebase" form of nicotine.

The freebase forms of other drugs, such as freebase cocaine ("crack"), are recognized as more addictive than the non-freebase counterparts because of the speed with which they reach the brain. Similarly, this "freebase" nicotine is more readily absorbed by the smoker, offering a faster and more intense fix of nicotine.

To some, ammonia technology, not the Marlboro Man, is what turned Marlboro from a relatively marginal brand in the 1960s and early 1970s into the world's best selling cigarette. ²⁵ Philip Morris competitor Brown & Williamson acknowledged as much in a 1992 document: "Looking at all the technology employed in Marlboro on a world-wide basis, ammonia technology remains the key factor."

In her Final Opinion, Judge Kessler found that the cigarette companies were "well aware of the particular chemical characteristics and effects of free nicotine, and undertook efforts to exploit these features."²⁷

Engineering of Smoke Particle Size to Enhance Nicotine Delivery and Addiction

Another example of the tobacco companies' level of sophistication in designing their products to create and sustain addiction is the engineering of the smoke particle size. The tobacco companies produced various technologies to ensure that the smoke particles were of optimal size to facilitate efficient inhalation of the smoke deep into the lung.

Smoke particle size is critical. Indeed, particles that are too big will not be readily deposited into the lung, while smaller particles may not be transferred across the membranes of the mouth and throat (and into the bloodstream) before the smoker exhales them. With an addictive substance such as nicotine, the faster the particles are delivered, the stronger their effect. In this case, one of the fastest ways of getting the nicotine to the brain is through the lungs. ²⁹

As early as the 1950s, Philip Morris understood that particles that were too big would not be readily deposited into the lungs. An internal research document states that "increasing the size of smoke particles to get them to a size range which will go into the buccal cavity but not into the lungs [underlined words in original document]... would allow the smoker to taste the smoke but not get a large mass of smoke in the lungs."³⁰

However, by hiring specialized physicists to engineer the size of the tobacco particles, the cigarette companies made sure that a higher proportion of particles would, in fact, get deep into the lungs. The companies devised a number of ways to design the product to deliver the optimum particle size. The moisture content of the cigarette, glycerin compounds, air ventilation holes and the physical and chemical make-up of the cigarette filters could all be engineered to control the particle size of nicotine in cigarette smoke.³¹

The engineering of particle size is yet another example of how the tobacco companies purposefully design their products without regard to their devastating impact on public health. In this case, the manipulation of particle size may contribute to increased lung cancers by enabling deep lung exposure to the smoke particles.³² In the absence of regulation, tobacco companies are free to continue to design and engineer their products to maximize addictiveness without regard for public health.

Tobacco Companies Design New Products with Unproven Claims to Discourage Quitting

In addition to making changes to existing products, tobacco companies have a history of introducing new products to convince smokers that they do not need to quit to reduce their health risk.

Development of "Light" and "Low Tar" Cigarettes





"Light" and "low-tar" cigarettes can be considered a seminal example of fraudulent "harm reduction" products designed to address smokers' health concerns but to not really reduce their health risks. As the public began to understand the link between smoking and disease, cigarette companies, fearing a massive loss in sales, scrambled to develop products that would ease consumers' fears about the health effects of

smoking. This 1977 quote from the internal files of Brown & Williamson illustrates the industry's approach:

"All work in this area should be directed towards providing consumer reassurance about cigarettes and the smoking habit. This can be provided in different ways, e.g. by claimed low deliveries, by the perception of low deliveries and by the perception of 'mildness'. Furthermore, advertising for low delivery or traditional brands should be constructed in ways so as not to provoke anxiety about health, but to alleviate it, and enable the smoker to feel assured about the habit and confident in maintaining it over time." 33

To reassure consumers, the companies introduced "low-tar" and "light" cigarettes, which took their name from the fact that when measured by smoking machines, these cigarettes delivered less tar and nicotine.

A primary design feature of these cigarettes is ventilation holes – tiny holes in the filter paper. Diluting the smoke with the air reduces the tar and nicotine levels and hence the levels that are measured by the smoking machines used to determine tar levels. ³⁴ Internal tobacco industry documents show the industry deliberately designed these cigarettes to produce low yields of tar when tested by machines, knowing full well that they would be smoked differently by actual smokers seeking to maintain nicotine levels. ³⁵ Despite knowing this, the cigarette companies marketed them as safer products. The machine levels used to market the cigarettes are different (and lower) than the actual levels experienced by the smoker.

The scientific evidence has shown that, in practice, "light" cigarettes have not produced a public health benefit and have not lowered disease risk among smokers. In November 2001, the U.S. National Cancer Institute (NCI) released a landmark study on the subject. The report confirmed that while changes in cigarette design have reduced the amount of tar and nicotine measured by smoking machines, these machine measurements do not accurately show how much tar and nicotine is actually received by the smoker. Smokers smoke "low-tar" brands differently to obtain the same amount of nicotine. Smokers block ventilation holes; inhale more deeply; take larger, more rapid, or more frequent puffs; or increase the number of cigarettes smoked per day. There is in fact no meaningful difference in exposure from smoking low-tar and regular brands, and therefore no difference in disease risk.

The NCI report concluded that "Epidemiological and other scientific evidence, including patterns of mortality from smoking-caused diseases, does not indicate a benefit to public health from changes in cigarette design and manufacturing over the last fifty years." The report noted that while "many smokers switch to lower yield cigarettes out of concerns for their health believing these cigarettes to be less risky or to be a step towards quitting...current evidence does not support either claims of reduced harm or policy recommendations to switch to these products." 36

Rather than reducing harm, this public health fraud has discouraged quitting, with a negative impact on health. This public health disaster will continue if tobacco companies are allowed to produce and market the new generation of so-called "reduced risk" products the way they have in the past.

The "light" and "low-tar" fraud continues, as many smokers still believe that smoking these products is less harmful. Judge Kessler recognized this when she ordered the companies to discontinue the use of terms like "light" and "low-tar" in her order. ³⁷ The tobacco companies' desire to continue the fraud is reflected not only in the challenge to her order but in their filing of a brief to limit the order only to the products they sell in the United States. ³⁸

Product manipulation by the tobacco companies is never-ending in their quest to replace the hundreds of thousands of smokers who die or quit every year. While many of their efforts remain secret, the rash of new products described in the following chapter demonstrates their ongoing zeal for product innovation. These include new flavored products that appeal to youth, along with new so-called "reduced-risk" products – the latest attempt to discourage smokers from quitting. In addition, a January 18, 2008, article in *The Wall Street Journal* detailed the many new products Philip Morris has developed ostensibly for its overseas markets. ³⁹ These include Marlboro Intense, a short but strong version of the brand, and Marlboro Mix 9, a high tar high nicotine product launched in Indonesia in 2007. Nothing prevents tobacco companies from introducing these or other new products to the American market.

Product manipulation and innovation by the tobacco companies have caused an ongoing public health disaster. Without government regulation of tobacco, this will only continue.

¹ Bates, C, Jarvis, M, & Connolly, G, *Tobacco additives: Cigarette engineering and nicotine addiction*, ASH UK, July 14, 1999, http://newash.org.uk/files/documents/ASH_623.pdf.

² Bates, C, Jarvis, M, & Connolly, G, *Tobacco additives: Cigarette engineering and nicotine addiction*, ASH UK, July 14, 1999, http://newash.org.uk/files/documents/ASH_623.pdf.

³ Written direct examination of Jack E. Henningfield, Ph.D., United States of America v. Philip Morris USA, Inc., http://www.usdoj.gov/civil/cases/tobacco2/Henningfield%20Written%20Direct.pdf.

⁴ Teague, CE, "Research Planning Memorandum on Some Thoughts About New Brands of Cigarettes for the Youth Market," R.J. Reynolds memo, February 2, 1973, Bates No. 502987357-7368.

⁵ Teague, CE, "Research Planning Memorandum on Some Thoughts About New Brands of Cigarettes for the Youth Market," R.J. Reynolds memo, February 2, 1973, Bates No. 502987357-7368.

⁶ Wayne, GF, & Connolly, GN, "How Cigarette Design Can Affect Youth Initiation into Smoking: Camel Cigarettes, 1983-1993," *Tobacco Control* 11:i32 - i39, March 2002.

⁷ Wayne, GF, & Connolly, GN, "How Cigarette Design Can Affect Youth Initiation into Smoking: Camel Cigarettes, 1983-1993," *Tobacco Control* 11:i32 - i39, March 2002.

⁸ R.J. Reynolds Tobacco Company, "Conference report #23," June 5, 1974, Bates No. 500254578-4580.

⁹ Marketing Innovations, "Youth Cigarette - New Concepts," Memo to Brown & Williamson, September 1972, Bates No. 170042014.

¹⁰ British American Tobacco, *Tobacco Flavoring For Smoking Products*, Bates No. 104805407, FN F1500.

¹¹ British American Tobacco, Cocoa Butter As A Tobacco Additive, October 1967, Bates No. 105534584, FN B4263.

¹² The Roper Organization Inc., *A Study of Smoking Habits Among Young Smokers, Prepared for Philip Morris Incorporated*, July 1974, Bates No. 2040544158-4189.

¹³ Substance Abuse and Mental Health Services Administration, *Detailed Tables from the 2006 National Survey on Drug Use and Health: National Findings*, Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293, Rockville, MD, 2007, http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/2k6tabs.pdf.

¹⁴ Clark, P, et al., "Effect of menthol cigarettes on biochemical markers of smoke exposure among black and white smokers," *Chest* 110(5):1194-8, November 1996.

¹⁵ Jarvik, ME, et al., "Mentholated cigarettes decrease puff volume of smoke and increase carbon monoxide absorption," *Physiology and Behavior* 56(3):563-70, September 1994; McCarthy, WJ, et al., "Menthol v. Nonmenthol Cigarettes: Effects on Smoking Behavior," *American Journal of Public Health (AJPH)* 85(1):67-72, January 1995; Stoddard, JL, et al., "Target Tobacco Markets: Outdoor Advertising in Los Angeles Minority Neighborhoods," *AJPH* 87:1232-3, July 1997.

¹⁶ American Cancer Society, 2007. Cancer Facts & Figures for African-Americans 2007-2008, Atlanta, GA.

¹⁷ Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.

¹⁸ Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.

¹⁹ "How a Tobacco Giant Doctors Snuff Brands to Boost Their Kick," The Wall Street Journal, October 26, 1994.

²⁰ R.J. Reynolds, *REST Product Review*, May 3, 1991, Bates No. 509479574-9587.

²¹ Osdene, TS, "Evaluation of Major R&D Programs," Philip Morris Memo, August 12, 1980, Bates No. 2077864197.

²² Teague, CE, "A Gap in Present Cigarette Product Lines and an Opportunity to Market a New Type of Product," RJR Confidential Memo, March 28, 1972, Bates No. 500254536-4544.

²³ U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Final Opinion, pg. 515, August 17, 2006, http://www.tobaccofreekids.org/reports/doj/FinalOpinion.pdf.

²⁴ U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Final Opinion, pg. 515-516, August 17, 2006, http://www.tobaccofreekids.org/reports/doj/FinalOpinion.pdf.

²⁵ Bates, C, Jarvis, M, & Connolly, G, *Tobacco additives: Cigarette engineering and nicotine addiction*, ASH UK, July 14, 1999, http://newash.org.uk/files/documents/ASH_623.pdf.

²⁶ Gordon, DL, "PM's Global Strategy: Marlboro Product Technology," Brown & Williamson Tobacco Corporation Research & Development R&D-B000-92, August 26, 1992, Bates No. 620943165-3216.

²⁷ U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Final Opinion, pg. 601, August 17, 2006, http://www.tobaccofreekids.org/reports/doj/FinalOpinion.pdf.

²⁸ Written direct examination of Jack E. Henningfield, Ph.D., United States of America v. Philip Morris USA, Inc., http://www.usdoj.gov/civil/cases/tobacco2/Henningfield%20Written%20Direct.pdf.

²⁹ Written direct examination of Jack E. Henningfield, Ph.D., United States of America v. Philip Morris USA, Inc., http://www.usdoj.gov/civil/cases/tobacco2/Henningfield%20Written%20Direct.pdf.

³⁰ Henningfield, JE, et al., "Reducing tobacco addiction through tobacco product regulation," *Tobacco Control* 13:132-135, June 2004.

³¹ Written direct examination of Jack E. Henningfield, Ph.D., United States of America v. Philip Morris USA, Inc., http://www.usdoj.gov/civil/cases/tobacco2/Henningfield%20Written%20Direct.pdf.

³² Henningfield, JE, et al., "Reducing tobacco addiction through tobacco product regulation," *Tobacco Control* 13:132-135. June 2004.

³³ Short, P, "Smoking & Health Item 7: The Effect on Marketing," Brown & Williamson, 1977, Bates No. 170041126.

³⁴ Written direct examination of Jack E. Henningfield, Ph.D., United States of America v. Philip Morris USA, Inc., http://www.usdoj.gov/civil/cases/tobacco2/Henningfield%20Written%20Direct.pdf.

³⁵ National Institutes of Health, *Risks Associated with Smoking Cigarettes with Low Machine-Yields of Tar and Nicotine; Report of the NCI Expert Committee*, National Cancer Institute, Smoking and Tobacco Control Monograph 13, October 2001.

³⁶ National Institutes of Health, *Risks Associated with Smoking Cigarettes with Low Machine-Yields of Tar and Nicotine; Report of the NCI Expert Committee*, National Cancer Institute, Smoking and Tobacco Control Monograph 13, October 2001.

³⁷ U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Final Opinion, pg. 1628-1632, August 17, 2006, http://www.tobaccofreekids.org/reports/doj/FinalOpinion.pdf.

³⁸ U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Certain Defendants' memorandum of law in support of motion for clarification or in the alternative for relief under rules 52, 59, and 60 with respect to the Court's August 17, 2006 Order, August 31, 2006.

³⁹ O'Connell, V, "Philip Morris Readies Aggressive Global Push," *The Wall Street Journal*, January 29, 2008.

Chapter 2: New Products

- Recruiting New Youth Users
- Creating & Sustaining Addiction
- Discouraging Quitting

Recruiting New Youth Users

Tobacco companies have carefully designed their products to attract new users, almost all of whom are children. Their internal documents discuss various ways of reducing the harshness of their products and how to make them more appealing to new users, especially with the use of flavorings.

In recent years, tobacco companies have introduced an array of candy, fruit, and alcohol-flavored cigarettes, smokeless tobacco products, and little cigars. They have also introduced products and marketing campaigns aimed at women and girls, and other specific populations.









In recent years, R.J. Reynolds introduced **Camel Exotic Blends**, which came in flavors such as Twista Lime, Kauai Kolada, Margarita Mixer, Beach Breezer, Warm Winter Toffee, Winter Mocha Mint, Midnight Madness, and Bayou Blast, among others.

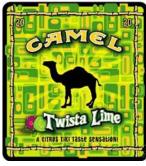
The packaging and advertisements for Camel Exotic Blends ads were bright, colorful, and alluring. The ads pictured were found in magazines popular with youth, including *Rolling Stone*, *Cosmopolitan*, and *Sports Illustrated*.

R.J. Reynolds continued marketing flavored cigarettes until 2006, when it signed a settlement with 39 state attorneys general to stop marketing specific flavors of cigarettes.













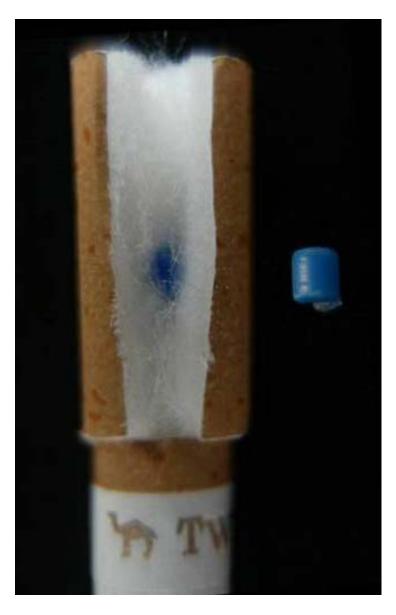
The 2006 agreement specified that R.J. Reynolds could not use specific terms such as "sweet" and "creamy" to market any future flavored cigarettes in media accessible to the general public. The company released **Camel Signature Blends** in mid-2007, describing these cigarettes using words such as "sweet apple-like flavor," "toasted honey," "creamy finish," and "cocoa," on its agerestricted website and in direct mail to consumers.



close

Another disturbing aspect of **Camel Exotic Blends** was the inclusion of a secret blue pellet hidden within the filter of these cigarettes. No public health agency – and no consumers – knew the pellet was present, the chemicals it contained, its toxicity, or how the flavorings involved might contribute to youth initiation. The pictured pellet from Camel Twist released dangerous chemicals when tested.

- •α-linalool
- •p-menth-1-en-8-ol
- Dodecane
- Decanal
- •α-citronellol
- •citral
- •1-Decanol
- •p-Mentha-1(7),8(10)-dien-9-ol
- Tridecane
- •Undecanal
- •α-Cubebene
- Limonenediol
- diacetin
- •Copaene
- •β-elemen
- Tetradecanal
- •Dodecanoic acid, 1-methylethyl ester
- Heptadecane
- Nonadecane
- •Heptadecane, 2,3-dimethyl- 11
- Tetradecane
- Caryophyllene
- Dodecanal
- •β-Cubebene
- •ç-Elemene
- •α-Caryophyllene
- •y-Muurolene
- Valencene
- •α-Candinene
- •Pentadecane
- •β-Candinene
- Hedycaryol
- Caryophyllene oxide
- Hexadecane
- •1,4-Methanobenzocyclodecene,
- 1,2,3,4,4a,5,8,9,12,12a-decahydro-
- Octadecane
- •3,7,11,15-Tetramethyl-2-hexadecen-1-ol
- •Eicosane
- *Based on high MS response of peak in chromatogram



R.J. Reynolds also recently offered a variety of alcohol-flavored cigarettes, such as SnakeEyes Scotch, ScrewDriver Slots, and BlackJack Gin. The direct mail marketing campaign included coasters with drink recipes and messages that encouraged irresponsible drinking.









Liquid Zoo cigarettes, manufactured by Kretek International, Inc., have been even more blatant in their appeal to children.

With flavors like strawberry and vanilla, packs decorated with cartoon-like images, and a name like a trendy new candy, these products clearly appealed to youth.

The company that made Liquid Zoo cigarettes still sells the **Dreams** line of cigarettes, which come in flavors ranging from chocolate to strawberry to cherry to "California Dreams."



Even cigarillos and little cigars, which are smaller in size than traditional large cigars, use sweet flavors to attract new users.

In addition to **Phillies Cigarillos**' many flavors, an extension of this brand, called **Sugarillos**, offers the new option "when sweet isn't sweet enough."

Phillies Blunts also have many flavors such as chocolate, peach, berry, and sour apple.

Swisher, Inc. offers a variety of fruit-flavored small cigars under the name, **Swisher Sweets**.

White Owl cigarillos and blunts also come in a large variety of flavors, including grape, peach, pineapple, watermelon, strawberry, and wild apple.

















With their colorful packaging, various flavors, and frequent placement near candy displays in retail outlets, cigars can easily be mistaken for candy by adults and children alike.



Colorful White Owl flavored cigar display near Easter candy at a Mobil gas station counter in Washington, DC in April 2006.

The Altria Group recently acquired John Middleton, Inc., the company that makes **Black & Mild** cigars. These cigars come in flavors such as apple, cherry, wine, and cream. They are often sold at low prices, singly or in small packs, making them even more appealing to youth.

Recent research from the Johns Hopkins Bloomberg School of Public Health (JHSPH) and the Baltimore City Health Department found that Black & Milds are popular with young African Americans. The report notes, "Black and Milds are seen as different than cigarettes: to some young adults, they are cleaner, more culturally tied to hip hop and are felt to represent status" and the lead JHSPH researcher in the study, Frances Stillman, Ed.D., stated, "They're making them hip and cool, and the price is right and they can get them."





Smokeless tobacco products also have been introduced in a variety of candy shop flavors, such as grape, apple, vanilla, and berry blend.



















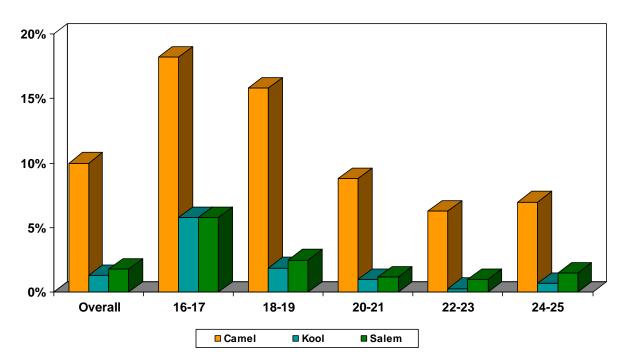






And awareness of the flavored products translates into high rates of use among young smokers.

Young Smokers* Use of Camel, Kool, or Salem Flavored Cigarettes During the Previous 30 Days, by Age – United States, 2004

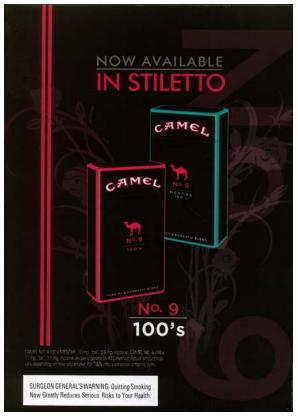


Source: Roswell Park Cancer Institute, National Youth Smoking Cessation 12-Month Follow-up Survey * Ages 16-25 years old; n = 1,603

R.J. Reynolds spent tens of millions of dollars on the research, development, launch, and marketing of **Camel No. 9**, a new brand extension targeting women and girls that was introduced in early 2007. With glossy and expensive magazine advertisements, R.J. Reynolds spared no expense to attract new users.









As part of its elaborate campaign launching Camel No. 9, R.J. Reynolds sponsored "ladies only" events at bars and clubs around the country. These parties featured free massages and manicures, the "Divine 9" pink martini and giveaway bags filled with free cigarettes and goodies such as cosmetics, jewelry and cell phone "bling."





In 2004, Brown & Williamson launched the **Kool** Mixx campaign that clearly appealed to youth, especially African-American and urban youth. The Kool Mixx campaign featured images of young rappers, disc jockeys and dancers on cigarette packs and in advertising. It also included radio giveaways with cigarette purchases and sponsored a Hip-Hop disc jockey competition in major cities around the country.

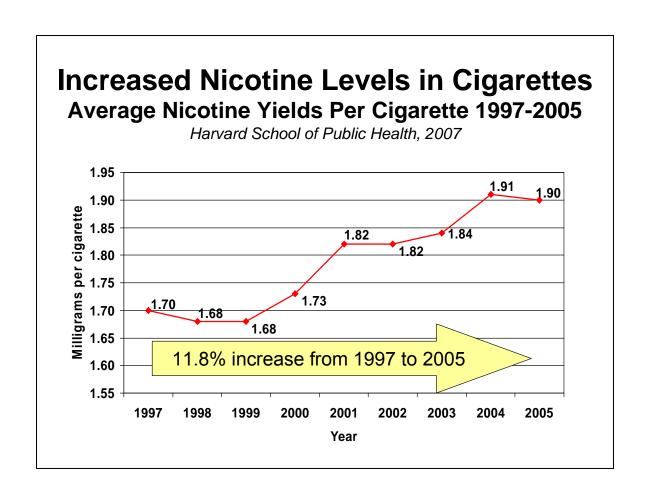




Creating & Sustaining Addiction

Studies from the Harvard School of Public Health and the Massachusetts Department of Public Health provide evidence that as smoking rates continue to decline, and more smokers try to quit, tobacco companies are actively trying to maintain addiction among smokers and addict a new generation of replacement smokers by increasing nicotine levels in their products.

The Harvard study released in 2007 expands on and confirms an August 2006 study released by the Massachusetts Department of Public Health which found that tobacco companies have deliberately increased the levels of nicotine in cigarette smoke since 1998. Both studies found that nicotine levels in the three cigarette brands that are most popular among youth smokers – Marlboro, Newport and Camel – have increased significantly.



Within the last few years, several cigarette companies have expanded their product lines to include other tobacco products, in some cases by buying smokeless tobacco and cigar companies. Notably, some of those companies have extended their most popular brand names to their new smokeless products to take advantage of name recognition and reputation. By applying well-known cigarette brand names to smokeless tobacco products and in some cases displaying them side-by-side at retail stores or even attaching the two products, cigarette companies imply that these smokeless products can be used in addition to smoking – both sustaining smokers' addiction and undermining public health policies.

The production and marketing of new smokeless products that do not require spitting serve to keep smokers addicted to the nicotine in situations where they cannot smoke. This increase in smokeless, spitless tobacco products advertised "for when you can't smoke," tell smokers that they don't need to quit smoking because they can use their products when smoking is not allowed.

A marketing strategy by Philip Morris for its **Taboka**, which has been in test market since July 2006, clearly shows that the company wants smokers to associate the product with smoking. By placing a sample directly on a pack of Marlboro Lights, Philip Morris has made it easy for smokers to transition back and forth between smokeless, spitless products and cigarettes. In other words, Taboka and other similar products can give smokers their nicotine fix – and sustain their addiction – when they cannot smoke. In January 2008, the company announced that it would end its test marketing of Taboka, instead expanding the number of test market cities of a similar new product, Marlboro Snus.





Snus is the newest smokeless, spitless tobacco product on the market. R.J. Reynolds and Philip Morris already have **Camel Snus** and **Marlboro Snus** in test markets around the U.S., and Lorillard is expected to soon release a similar product in partnership with Swedish Match.

Snus are teabag-like packets containing tobacco and other flavorings that users place between the upper gum and the lip. Not having to spit enables "snusers" to get their nicotine fix when they otherwise can't. One high school student admitted using Camel Snus during class, saying, "It's easy, it's superdiscreet ... and none of the teachers will ever know what I'm doing."*







^{*} Nelson, L, "If you think Snus is a safe alternative to smoking, think again," *Kansas City Star*, October 31, 2007.

Snapshots from product websites show that tobacco companies readily encourage substituting these new smokeless, spitless tobacco products for cigarettes in places where smoking is not allowed.



With claims such as, "Pleasure for Whenever," the **Camel Snus** website explicitly encourages using snus where smoke-free laws prevent people from smoking, like airplanes, clubs, and bars or restaurants. Similarly, the **Marlboro Snus**' website mentions "flavor anytime" and pictures an airplane, where smoking is not allowed, as a "good time to snus."

Again, the concern is that these products are not a substitute for smoking but are an addition – sustaining smokers' addiction.



Stonewall Hard Snuff Tobacco and **Ariva** are both dissolvable tablets of tobacco meant to replace cigarettes in situations where smokers cannot smoke. Star Scientific, Inc., states, "Star Scientific believes Ariva(TM) smokeless cigalett(TM) pieces provide adult smokers, for the first time, with the opportunity to choose a convenient, taste-acceptable alternative to use in all those environments where smoking is prohibited either by law or social custom."

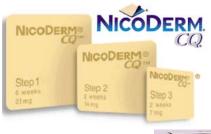
The packaging and the flavors (i.e., wintergreen) closely resemble blister packs of mints or candies.





Here are FDA-approved nicotine replacement therapies that have been tested for safety and clinically proven to help smokers quit. For comparison, below them are the non-FDA approved products made by tobacco companies that suggest these products can help people reduce their health risks, but there is no evidence that these products help people quit and serve instead to discourage smokers from quitting.

FDA-Approved Nicotine Products







Non-FDA-Approved Nicotine Products



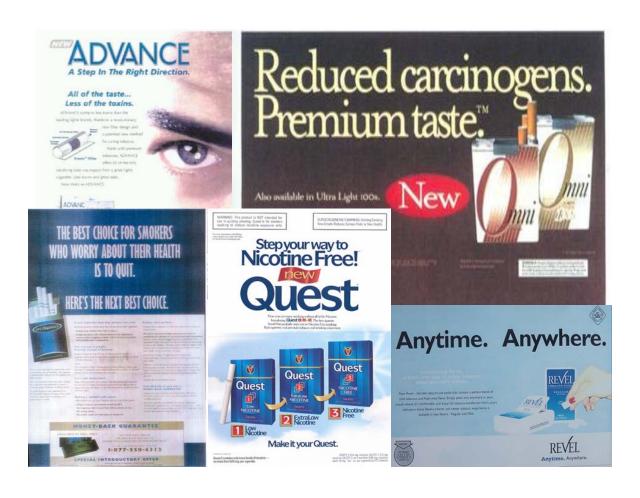






Discouraging Smokers from Quitting

Over the past several years, a number of new tobacco products have been introduced to consumers with unproven claims of reduced risk. These products have included cigarettes like Omni and Advance, or tobacco lozenges like Stonewall and Ariva. These products are only the beginning of a series of new products being unveiled by the tobacco companies in an effort to address the health concerns of current tobacco users and to provide an alternative product to individuals seriously considering quitting tobacco use altogether.



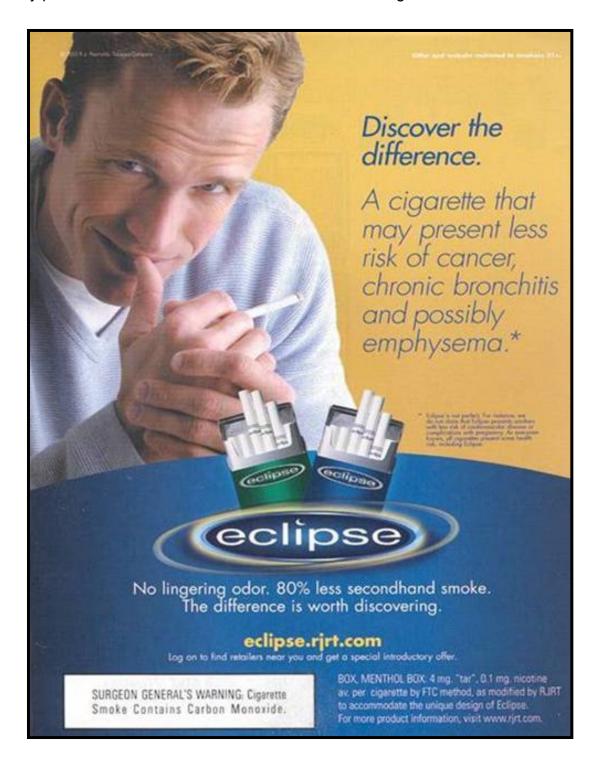
Omni was produced and marketed by Vector Tobacco, Ltd, with the statement, "Omni has significantly reduced those carcinogens that are the major causes of lung cancer in smokers. Compared to any other cigarette currently on the market, Omni delivers less carcinogens to the smoker. While Omni has not been proven to reduce the health risks of smoking, Omni's reduced carcinogen levels are a logical and important first step. If you smoke, Omni is clearly the best alternative."

The magazine ad claims, "Introducing the first cigarette to significantly reduce carcinogenic PAH's, nitrosamines, and catechols, which are major causes of lung cancer in smokers."

There has been no evidence supporting any of Vector's claims for Omni.

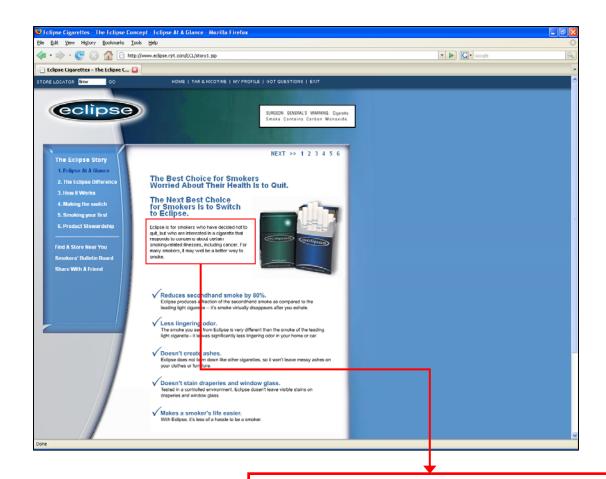


Advertising for **Eclipse** cigarettes states that using this cigarette can reduce smokers' risk for tobacco-related diseases. When R.J. Reynolds launched the product, the company stated, "Compared to other cigarettes, Eclipse cigarettes: May present less risk of cancer associated with smoking."



The **Eclipse** product website includes statements that tout Eclipse as a reasonable option for smokers who are worried about their health. Essentially, Eclipse provides smokers with an excuse not to quit smoking by claiming that the product reduces a smoker's risk of tobacco-related diseases.

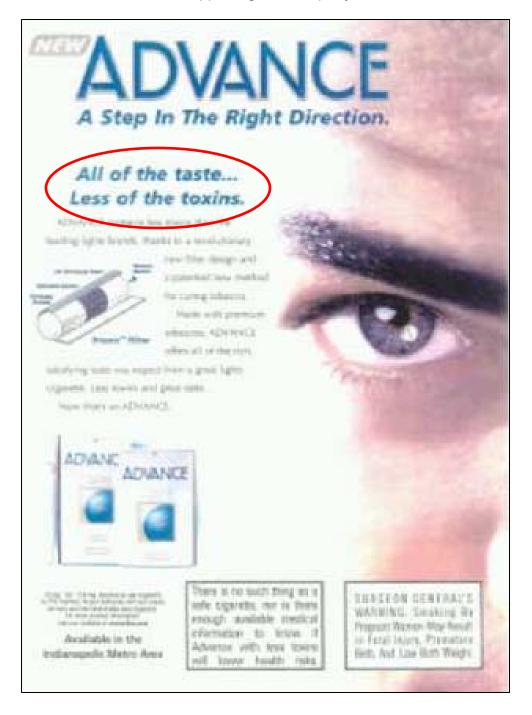
No evidence exists that Eclipse is better for smokers, but studies have found increased levels of carbon monoxide in Eclipse smokers.



Eclipse is for smokers who have decided not to quit, but who are interested in a cigarette that responds to concerns about certain smoking-related illnesses, including cancer. For many smokers, it may well be a better way to smoke.

When Brown & Williamson test marketed **Advance** in Indianapolis (2001) and Phoenix (2004), it stated, "The new cigarette brand has significantly less of many toxins than the leading Lights brand styles."

There has been no evidence supporting the company's claims.



Marlboro UltraSmooth was released to test market in 2005 in Atlanta, Tampa, and Salt Lake City. According to Philip Morris, "*Marlboro* UltraSmooth products contain new carbon filters which let the flavor through for a new, filtered smooth taste." This product appears to be the next iteration of the "light" cigarette.

As with previously mentioned products, there is no evidence that this "FilterSelect" product is any less harmful than regular cigarettes.





The inside of a pamphlet attached to Marlboro UltraSmooth packs.

Color Coding

Facing a potential ban on the misleading "light" and "low-tar" terms, tobacco companies have recently made provisions to perpetuate this fraud by color-coding their cigarette packs. Evidence from the European Union, where this ban has already taken effect, shows that tobacco companies have successfully replaced the terms with color designations, such as Lucky Strike Silver instead of Lucky Strike Lights.*

R.J. Reynold's new magazine ads for **Pall Mall** highlight the new color of the light and ultra light packs to help smokers identify their brands.



Similarly, compared to older direct mail pieces, Philip Morris' recent promotional materials for **Marlboro Lights** have glaringly highlighted the gold pack color.



^{*} Milliken, D, "EU stubs out 'light' and 'mild' cigarettes," Reuters, October 1, 2003.

Chapter 3: FDA Regulation of Tobacco Products Will Protect Consumers and Save Lives

Tobacco products are unique. Even though tobacco use is the leading preventable cause of death in this country, tobacco products are not regulated by any public health agency. Tobacco companies, unlike the manufacturers of food, drugs, cosmetics and many other products, remain free to market and manipulate their products to attract children, make them even more dangerous and addictive, and mislead consumers who are concerned about their health. Their powerful addictive agent nicotine is regulated in every form except the one that kills people – tobacco products.

Pending bipartisan legislation, S.625/H.R.1108, would give the U.S. Food and Drug Administration (FDA) broad authority over tobacco products and their marketing, and would empower the FDA to take actions that no other federal agency has the expertise to undertake.

The marketing restrictions and provisions in the pending FDA legislation to help prevent tobacco sales to kids have received considerable attention, but just as important are the provisions in the bill regarding FDA authority over the products themselves. Key provisions allow the FDA to:

- require companies to disclose ingredients and other information about their products;
- require changes to both new and existing products;
- prohibit misleading claims such as "light" and "low-tar"; and
- review new products and prohibit even more dangerous products from being sold.

These provisions will allow the FDA to limit the industry's ability to use product design to recruit youth, create and sustain addiction, and discourage smokers from quitting, and are outlined in more detail below.

Authority to Require Information about Every Aspect of Products

Currently, only the tobacco companies know the true details of their products, including product features that appear deliberately designed to enhance the addictive nature of cigarettes. S.625/H.R.1108 would give the FDA access to current and future tobacco industry information and research on its products. For the first time a public health agency would have as much information about deadly tobacco products as the tobacco companies. This information would allow the FDA, researchers and the public to gain a more complete picture of past and current industry behavior. But perhaps most importantly, this knowledge will inform the FDA about what changes should be required in existing products and how to prevent product changes that make them more enticing to the young and more deadly and addictive.

While millions of tobacco company documents have already been made public as a result of lawsuits, much of this information is often dated and incomplete. The pending legislation specifically requires tobacco companies to give the FDA a listing of all ingredients for each brand including compounds added to the tobacco, paper, filter or other parts of the product, the level and form of nicotine, and a listing of constituents in cigarette smoke, as well as all future research, including marketing research. This is consistent with what is required for food and drugs, and no less should be expected for tobacco products. In addition, the FDA will have the authority to require information in a format that is most usable in order to prevent the companies from dumping millions of documents with the hope that the sheer volume will prevent the agency from finding useful information – a tactic that the industry has often employed in litigation.

Authority to Require Changes to Both Current and Future Products Including Changes in Flavoring and Other Features that Attract Kids, Make Products More Addictive, and Harder to Quit

Currently, profit is the only factor considered in tobacco product design decisions. For the first time ever, the pending FDA legislation would allow a public health agency to oversee changes to tobacco products so that decisions would not be driven solely by tobacco company profits. To date, all decisions regarding every aspect of tobacco products have been made by the tobacco companies, and as this report makes clear, the motivation for those decisions is to make their products more appealing to children, more addictive, and harder to quit.

As has been previously described, the tobacco companies have made their products more attractive to kids by adding candy flavorings and sugars, and more addictive and harder to quit, and possibly even more toxic, by adding ammonia, glycerin and other ingredients. Under this legislation, the FDA would have the authority to establish product standards that would put an end to these harmful practices.

The pending legislation would give the FDA broad authority to establish standards regarding nicotine yields, constituents, construction, ingredients, additives, and all other properties of the tobacco product including the form and content of the labeling. The agency would also have authority to establish standards to restrict the sale and distribution of the product.

Under the proposed legislation, product standards would apply to products already on the market as well as to new products. For example, if the FDA were to determine that adding ammonia to cigarettes is harmful because it is a carcinogen when burned and enhances the absorption of nicotine, the agency could issue a standard prohibiting the addition of ammonia to any cigarette. Other possible standards could include a requirement to eliminate the use of menthol and eugenol, which numb the throat and make smoking easier.

The legislation also includes a specific standard regarding flavorings in cigarettes. Three months after enactment, it would prohibit the use of a variety of candy-like flavorings as the characterizing flavors. This would put an immediate end to outrageous products that have appeared in recent years such as strawberry, vanilla, lime and mint flavored cigarettes. The bill would give the FDA authority to adopt product standards in the future regarding menthol and other artificial or natural flavors, herbs or spices. The FDA could also extend the standard regarding specific flavorings in cigarettes to other products including smokeless tobacco, cigars, and cigarillos.

Authority to Prohibit Misleading Health Claims and an Immediate End to Claims such as "Light" and "Low-Tar"

Right now, tobacco companies can make implied and explicit claims about reduced risk with little, if any, regard to their truth. The proposed FDA bill gives the agency broad authority to prohibit any claim by a tobacco company that a product poses less risk or harm than other tobacco products on the market unless that claim is supported by sufficient evidence and the product is determined to be appropriate for the protection of public health.

Tobacco companies have made misleading claims for decades about the relative risks of their products. The marketing of "light" and "low-tar" cigarettes as less harmful has led many smokers to switch to these products because they believe they are reducing their risk of disease. However, a National Cancer Institute Monograph (No. 13) made clear that rather than reducing harm, these products have had a negative impact on the public's health. In recent years, tobacco companies have made a host of additional claims of reduced harm or risk such as "fewer toxins" or "reduced carcinogens," which continue to mislead consumers.

A cornerstone of the pending legislation is the requirement that any explicit or implicit health claim must be evaluated by the FDA on a pre-market basis. This principle applies to all other products that the FDA regulates and should be applied to tobacco products. The bill prohibits such claims unless it can be proven that the product, as actually used by consumers, will significantly reduce harm and the risk of disease, and that the product, as marketed, will benefit the public health. The FDA bill would put an immediate end to the use of "light," "mild," and "low" and similar descriptors in the label or advertising of cigarettes. The goal of the legislation is to put an end to misleading claims and create a regulatory mechanism for the review and approval of those claims that provide meaningful and truthful information to consumers about the relative risks of various products.

Authority to Review New Products and Modifications to Existing Products

At present, tobacco companies can add or increase any ingredient or additive, change filter design, change the size of particles contained in the smoke, or make any other

changes to their products with no oversight or restrictions, even when the changes make the products more addictive and possibly even more deadly.

The pending legislation would put an end to secret changes in tobacco products and give the FDA authority to review all new products and evaluate modifications to existing products to determine the impact on public health. It requires manufacturers to disclose any new additive or increases in existing additives 90 days prior to implementing the change. In addition, not only would the companies have to inform the agency of any changes to the product, the onus would be on the companies to prove that a product change would not have a negative impact on the public health.

Under the legislation, in order to introduce a new product that is not similar to other products currently on the market, a manufacturer must demonstrate to the FDA that the new product would protect the public health. In reviewing the product, the FDA would consider the risks and benefits to the population as a whole, including to both current users and nonusers of tobacco products. The FDA would examine whether existing users will guit or others will start using tobacco products as a result of the new product's introduction. For example, if R.J. Reynolds (RJR) were to try to introduce a new product such as Eclipse, a product that heated rather than burned tobacco, RJR would have to file an application for review before introducing such a product and demonstrate to the FDA that the marketing of such a product is appropriate for the protection of public health.

In recent years, state and local governments have taken a host of actions to reduce tobacco use including raising tobacco taxes, investing in tobacco prevention programs and enacting laws that require all workplaces to be smoke-free. However, the Institute of Medicine and the President's Cancer Panel have noted that state efforts alone cannot solve the tobacco problem and have concluded that Congress, long absent from the fight to reduce tobacco use, should enact legislation granting the FDA authority over tobacco products.²

Without FDA regulation, tobacco companies will continue to take advantage of the lack of government oversight and continue to design and market products that recruit new youth users, create and sustain addiction to nicotine, and discourage current users from quitting. Without FDA regulation, America's kids and consumers will continue to be Big Tobacco's guinea pigs.

¹ National Institutes of Health, Risks Associated with Smoking Cigarettes with Low Machine-Yields of Tar and Nicotine; Report of the NCI Expert Committee, National Cancer Institute, Smoking and Tobacco Control Monograph 13, October 2001.

² Institute of Medicine (IOM), Ending the Tobacco Problem: A Blueprint for the Nation, Washington, DC: National Academies Press, May 2007, http://www.nap.edu/catalog.php?record_id=11795#toc; President's Cancer Panel, Promoting Healthy Lifestyles: Policy, Program, and Personal Recommendations for Reducing Cancer Risk, August 2007, http://deainfo.nci.nih.gov/advisory/pcp/pcp07rpt/pcp07rpt.pdf.

Appendix

Glossary of Terms

Large Cigar: Any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco and weighing more than three pounds per thousand. [Source: U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB)]

Small (Little) Cigar: Any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco and weighing less than three pounds per thousand. [Source: TTB] Can include products that look and are packaged exactly like cigarettes (including having cigarette filters), but are categorized as little cigars since the paper contains some tobacco.

Cigarillo: Categorized (and taxed) as little cigars, and can include a filter tip, but does not have to. Examples of this product include Phillies Cigarillo Sugarillos, Swisher Sweets Grape Cigarillos, and White Owl Watermelon Cigarillos.

Blunt: Wider than small cigars but smaller than large cigars. Often contains two layers of tobacco – an inner part made of tobacco leaves, pipe tobacco, or pulp, and an outer wrapping of tobacco leaf layers. This term also refers to makeshift products in which commercial cigars that have had their inner tobacco replaced with marijuana. Examples of this product include Phillies Blunt Chocolate, Peach Flavored Swisher Sweets Blunt XL, and White Owl Strawberry Blunts Xtra.

Moist Snuff: Ground or cut tobacco that is placed between the cheek and gum where it releases nicotine, which is absorbed by the membranes of the mouth. Comes in fine and long cut versions, and in pouches. Examples include Copenhagen Long Cut, Skoal Bandits (small pouches), Marlboro Fine Cut Wintergreen, and Kayak Long Cut Grape.

Snus: Teabag-like packets containing moist ground tobacco and other flavorings that users place between the upper gum and the lip. Does not require spitting. Examples include Swedish Match General Snus, Camel Snus Frost, and Marlboro Snus Spice.

Looseleaf Chewing Tobacco: Stripped and processed cigar-type tobacco leaves, loosely packed to form small strips. It is often sold in a foil-lined pouch and usually treated with sugar or licorice.

Plug Chewing Tobacco: Small, oblong blocks of semi-soft chewing tobacco that often contain sweeteners and other flavoring agents.

Hard Snuff: Dissolvable tablets of tobacco that users put between their cheek and gum, and should not chew or swallow. Examples include Ariva and Stonewall.

