Tobacco Industry Consumer Research on Smokeless Tobacco Users and Product Development

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Since 2006, RJ Reynolds (RJR) and Philip Morris have both introduced new smokeless "snus" tobacco products. We analyzed previously secret tobacco industry documents describing the history of RJR and Philip Morris's consumer research, smokeless product development, and marketing strategies. We found that RJR had invested in smokeless research, development, and marketing since 1968. RJR first targeted low-income males through sampling and sponsorship at fishing, rodeo, and baseball events, and through advertising portraying the user as "hard working." In the early 1990s, Philip Morris and RJR hoped to attract more urban, female smokeless users. The current "snus" campaigns appear to appeal to these targeted consumers and smokers in smoke-free environments. These efforts may expand the tobacco market and undermine smoking cessation. (*Am J Public Health*. 2010;100:78–87. doi:10.2105/AJPH.2008.152603)

The debate over the health community and tobacco companies promoting tobacco "harm reduction" by encouraging smokers to switch to smokeless tobacco products has primarily centered on a product resembling a Swedish smokeless tobacco called "snus," which is finely ground oral tobacco (moist snuff) packaged in small porous pouches.^{1,2} In 1982, RJ Reynolds (RJR) recognized moist snuff as the "most profitable and fastest growing segment of the non-cigarette tobacco industry,"3 and from 1982 to 2008, moist snuff remained the only growing segment of the smokeless tobacco market. Smokeless tobacco products are addictive, and their use has been linked to oral cancer,⁴ oropharyngeal cancer,⁵ heart disease, 4,6-8 and pancreatic cancer. 9-12 Dual use of cigarettes and smokeless tobacco, given that their associated health effects are different and may be additive, may increase the risk of tobacco-related diseases and mortality above single-product use.¹³ Through increased dual use and new uptake, smokeless tobacco promotion may actually lead to an increase in tobacco-related harm at the population level (A.M. Mejia, MPH; P.M. Ling, MD; and S.A. Glantz, PhD, unpublished data, 2009).

Leading cigarette companies are entering the smokeless tobacco market, perhaps because of continuing declines in US cigarette consumption^{14,15} and increases in smoke-free ordinances.¹⁶ Between 2006 and 2007, both RJR and Philip Morris leveraged their strongest

cigarette brands to promote new moist snuff products, such as Camel Snus, Marlboro Snus, and Marlboro Moist Snuff, in test markets around the United States. The new products are line extensions of well-known cigarette brands, giving them a sense of familiarity that may increase their appeal to smokers, and they may promote the dual use of both cigarettes and smokeless tobacco products that share the same brand name.

In March 2008, RJR announced plans to expand Camel Snus into 10 additional major US metropolitan areas.^{17–19} In the second quarter of 2008, the Liggett Group began test marketing Grand Prix Snus, an addition to the Grand Prix cigarette brand, in 7 of the 8 test markets where Camel Snus was available. 20,21 Most of the cities where snus was introduced have 100% smoke-free laws in workplaces, bars, or restaurants.¹⁶ Advertisements for Camel and Marlboro Snus tout it as a temporary way to deal with smoke-free policies in public places, bars, workplaces, and airplanes (Figure 1). Such messages may undermine the effectiveness of smokefree environments in motivating smoking cessation. The style and content of the advertising also appears designed to attract young people and other new users (Figure 1). There is concern that promotion of smokeless tobacco could lead to (1) previous nontobacco users becoming users of smokeless products, (2) smokeless tobacco serving as a potential gateway product to smoking,

and (3) smokers who would have quit using tobacco entirely instead becoming dual users of cigarettes and smokeless tobacco. 4.22

Understanding how tobacco companies have profiled, targeted, and marketed to smokeless tobacco users in the past provides a valuable context for understanding current marketing activities. Although tobacco industry documents may not contain direct information about marketing the newest products, many current efforts resulted from years of past research. Cigarette companies conducted consumer research on the demographic and psychological characteristics of smokeless tobacco users, what factors motivated them to use smokeless products, their beliefs about smokeless tobacco and its harms or benefits, and what product characteristics (such as flavoring or nicotine levels) or advertising messages appeared to motivate purchase or use behaviors. Industry documents also show how consumer research was applied to develop new products and marketing strategies.

We analyzed previously secret documents from Philip Morris and RJR to better understand their current marketing activities, asking the following research questions: How have tobacco companies characterized and understood smokeless tobacco users? How have target user profiles been developed and matched to advertising appeals? What have been the main "selling" messages for smokeless products over time? How do these profiles and message strategies compare with current marketing activities?

METHODS

We searched tobacco industry document archives from the University of California, San Francisco Legacy Tobacco Documents Library (http://legacy.library.ucsf.edu) between June 2007 and August 2008. Initial search terms included the following: smokeless tobacco, chewing tobacco, snus, specialty tobacco products, marketing development, smoke-free,



FIGURE 1-Examples of snus marketing: (a) advertisement from Marlboro Snus Web site promoting snus products as a way to use tobacco in a smoke-free environment such as an airplane; (b) advertisement from Camel Snus Web site promoting snus use in a workplace meeting; (c) advertisement from Camel Snus Web site highlighting snus' Swedish origins with a Swedish model; and direct mailers for Camel Snus (d) highlighting the cool, refreshing properties of the product and (e) distinguishing snus from chewing tobacco.

R&D, moist snuff, Skoal, Copenhagen, and US Tobacco. Initial searches yielded thousands of documents; we reviewed documents relevant to chewing tobacco, moist snuff, and related consumer research or marketing activities. We repeated and focused searches using standard techniques.²³ In addition, we conducted "snowball" searches for contextual information on relevant documents using names, project titles, brand names, document locations, dates, and reference (Bates) numbers.

This analysis was based on a final collection of 234 research reports, presentations, marketing development proposals, and project status reports. We reviewed the documents, organized them thematically, and wrote summary memoranda. Common themes were identified and discussed. Information found in industry documents was triangulated with data from searches of the tobacco company annual and quarterly reports and investor webcasts, online search engines, and official company

Web sites (US Smokeless Tobacco, RJ Reynolds, Conwood, and Philip Morris), brand Web sites (Camel Snus, Marlboro Snus), news stories, and promotional materials such as print and Internet advertisements.

RESULTS

RIR has manufactured smokeless tobacco products since the early 1900s²⁴ and has invested in chewing tobacco consumer

research, marketing, and advertising since at least 1968.²⁵

Traditional Smokeless Tobacco Users

The 1968 National Tobacco Chewing Survey (a section of a tobacco usage survey mailed to National Family Opinion Inc panels), as reported by William Esty Company to RJR, reported that (1) the heaviest concentrations of chewers were in the lowest income groups, (2) chewing tobacco use was higher among farmers and unskilled blue-collar workers than among white-collar and professional men, and (3) chewing tobacco use was highest in rural areas and lowest in the largest cities.²⁵

In January 1970, Edward Simon, a qualitative researcher, conducted focus groups of chewers in Charleston, West Virginia, for RJR to provide "in-depth background information on consumer experience with and attitudes toward [the product]."²⁶ Simon found that most participants had taken up chewing because they worked in factories or mines that prohibited smoking, although some used chewing tobacco in dusty environments to keep their mouths and throats moist. Chewing tobacco was thought to be a calming, relaxing, and tension-reducing experience, pleasantly associated with outdoor activities ²⁶

A 1978 Philip Morris smokeless consumer profile described the typical consumer as a male farmer, athlete, or factory worker whose average age was between 40 and 50; the Philip Morris document stated that this profile was supported by a series of interviews conducted by the Department of Health, Education, and Welfare in 1970, which found that twice as many men used smokeless tobacco as did women. A 1983 Philip Morris memo stated that although traditional smokeless users were primarily older farmers and factory workers in the Midwest and Northwest, market growth throughout the early 1980s was among those aged 18 to 35 years:

Recent evidence indicates that almost 60% of consumers are below the age of 24 and...the product is used by growing numbers of women. In addition many users are first-time tobacco users. A 1981 study by Simmons Market Research Bureau indicated that...the typical user was a married 18-34 year old male, had an annual income of less than \$25,000 and had no more than a high school education. 28

Philip Morris collected data from Simmons Market Research Bureau on smokeless tobacco from 1980 to 1984; a report for J.E. Lincoln (vice president for planning at Philip Morris International) included profiles of dual users of chewing tobacco, snuff, and cigarettes. ²⁹ The 1983 Simmons data were cited in a 1984 Philip Morris memo to Hugh Cullman, vice chairman of the board of directors, for him to weigh when considering entering the smokeless market. ³⁰ The attached data described the majority of chewing tobacco users as White, from the South, non–high school graduates, and with a household income under \$25,000. ³¹

Potential New Smokeless Tobacco Users

As early as 1968, a report prepared by William Esty for RJR noted that "scrap tobacco" (loose leaf) was more popular among the highest income group and those in whitecollar occupations.²⁵ A report by David E. Rawson of Rawson Associates (a marketing firm) summarizing qualitative research for RJR emphasized the increasing popularity of moist snuff in urban settings: "[T]here seems to be a growing desire among city folks to emulate cowboys, freedom, the wild west."32 Although tobacco users participating in the research associated moist snuff with outdoor men, with rugged, individualistic people who worked in places where they could not smoke, and with farm or rural backgrounds, they did not perceive moist snuff to be as "low class" as other chewing tobacco. 32 They considered moist snuff to be the only form of tobacco that could be used discreetly, as it reportedly did not interfere with speech, hands, or other activities, and did not require spitting.³²

In late 1971, Claude E. Teague Jr, assistant chief in research and development at RJR, wrote a confidential research-planning memorandum on modified chewing tobacco—like products. Teague proposed solutions to the problems with chewing tobacco that he saw as barriers to making chewing and snuff tobacco "a potentially large, profitable market." The major problems with spit tobacco products were as follows: they required saliva flow and expectoration, they contained high amounts of nicotine (which may be "undesirable to the general public"), and they were messy and bulky in the mouth. The modified products

Teague proposed were based on controlled nicotine levels, so that "juices can be swallowed and not spit out," and would be packaged in small units that were not "messy or unsightly to dispose of." ³³

RJR's 1970 consumer research revealed that many chewers did not perceive chewing tobacco as harmful to their health.²⁶ In 1971, Teague asserted that chewing tobacco was the "most free of alleged health hazards" of all tobacco products and cited surveys indicating that chewing tobacco provided most of smoking's "physiological satisfactions." Teague also recommended that any modified smokeless tobacco be advertised as though it was an existing chewing tobacco or snuff product, which should "minimize legal or regulatory problems, and should avoid scrutiny by the Food and Drug Administration."33 By 1978, Rawson's report summarizing RIR's qualitative consumer research noted that with heightened health concerns about smoking, snuff was perceived as a good, safer alternative.32 Rawson also suggested that RJR promote the "safety and smokeless feature, but stress the less macho, more sophisticated upscale image more compatible with newer types of users for the milder versions."32

Early Product Development and Testing

In 1978, RJR established a Specialty Tobacco Products division that included little cigars, pipe tobacco, roll-your-own (loose) tobacco, wet snuff, and chewing tobacco.³⁴ In 1980, the total approved Specialty Tobacco Products budget was \$8222000 for advertising, promotion, and marketing development³⁵; in 1981, total Specialty Tobacco Products spending on marketing was \$13.5 million.³⁶ Specialty Tobacco Products marketing activities emphasized "primary product and psychological benefits" 37 and focused on consumer research and competitive product testing with other brands. New brand families were planned to compete directly with established brands in the market (Table 1).

RJR's 1982 marketing plans emphasized that the "highest Specialty Tobacco Products priority [would be] to position RJR as a major competitor in the moist snuff category, the most profitable and fastest growing segment of the non-cigarette industry." For example, RJR's consumer research with users of flavored moist

TABLE 1-RJ Reynolds Specialty Tobacco Products Projects, With Positioning Concepts and Summaries: 1985

| Project | Product Name | Key Competitor Products | Positioning Concept | Prime Prospect Demographics | Prime Prospect Psychographics |
|---|--------------|--|--|---|---|
| WSS ("Wet Snuff-Skoal" type); solo entry | High Country | Skoal (US Tobacco), Kodiak (Conwood) | "[A] new wintergreen flavor snuff that refreshes you. Whether you're working or playing, you want to get the most out of each day. This snuff provides tobacco satisfaction, with a refreshing wintergreen flavor that keeps you going all day longsatisfies the active man—a user perceived as out-going, energetic." | Males aged 18-34 y Middle income Blue-collar occupation High school education Rural residence West Central, Southwest, Southeast regions | Outgoing, fun loving, makes friends easily Susceptible to peer influence Leisure activity centers around outdoor sports |
| WSC ("Wet Snuff- Copenhagen" type); solo entry | Caliber | Copenhagen (US Tobacco) | "[A] new natural flavor snuff for the man who thinks for himself. Unlike those who follow the crowd, he is known by his friends as one who thinks things through, and then does what's right for him. Knowing he is true to himself gives him a lot of satisfaction." | Males aged 18-34 y Middle income Blue-collar occupation High school education Rural residence West Central, Southwest, Pacific regions | Confident, goal-driven, self-reliant, proud of individuality Selective at establishing close friendships Leisure time centers on outdoor sports |
| WSS and WSC Brand Family | High Country | Hawken (Conwood) Gold River (General Cigar) Skoal and Copenhagen (US Tobacco) Kodiak (Conwood) | "[H]elps keep the active man going—user perceived as outgoing, energetic and striving to get the most out of each day." | Males aged 18-34 y (particularly 18-24 y) Middle income Blue-collar occupation High school education Residence in West Central, Southeast, Southwest, and Pacific regions | Traditional family values Strong family ties Considerate of others Leisure time interests center around outdoo sporting activities |
| GC ("Good Chew") | Woodsman | Redman (Conwood) | "[U]ser to be perceived as self- confident, masculine individual who as an avid sportsman enjoys an active, participative outdoors life-style." | Males aged 18-49 y Midscale or above income and education Blue-collar occupation Residence in East Central, Southeast, and Southwest | Self-confident Leisure time interests center around sporting activities |

Note. Data are from an RJ Reynolds 1985 marketing plan review for Specialty Tobacco Products products and brand positioning statement documents. 3,37,39-43

snuff who were aged 18 to 34 years led to a highly wintergreen flavored, fine-cut prototype (internally called "Project WSH" by RJR) to compete with Hawken moist snuff. 44,45 In January 1982, WSH was introduced as Timberline to test markets; it targeted young males at "country and western night clubs, [and] sports arenas."46 Additional qualitative research conducted for RJR found that fancy packaging appealed more to new users: "the association of colorful package graphics to the newer, milder and 'candy-like' brands, suggests that new moist snuff packaging

should be basic with sharp and simple graphics if it is to appeal to experienced Skoal and Copenhagen users."47

The Assessor Testing System was a laboratory test market simulation procedure that RJR used to evaluate new brands; it included a laboratory phase (simulated shopping situation) in a shopping mall and 3 telephone callbacks. 48 Demographic data were collected along with brand preference, brand awareness, and product attributes. Advertising recall, likeability, believability, and meaningfulness were

assessed through exposure to a portfolio of television commercials.⁴⁹

In March 1982, an assessor experiment on Timberline was conducted with 445 males aged 18 years and older who used flavored moist snuff. 50,51 The main conclusions were as follows: (1) most smokeless tobacco users participating in the research were young (aged 18-24 years) single men, with at least some college education and incomes of at least \$15000 per year, and (2) participants rated product attributes (e.g., the product being "fresh," "moist," or

"satisfying") more important than how they perceived the users of smokeless products (e.g., users being "experienced" or "outdoorsmen," having a "physical job" or being "action oriented"). ⁵⁰ Positive Timberline product attributes were its moistness, wintergreen flavor, and plastic pack; repeat buyers were somewhat older and more affluent than nonrepeaters. The test predicted an 11.6% market share projection; shortly thereafter, RJR made plans for "Timberline Natural" prototype blends. ^{43,50,52,53}

Consumer Profiles, Brand Positioning, and Communications

RJR research on smokeless consumers' wants and motivations. Throughout the 1970s, RJR conducted and commissioned qualitative research on the moist snuff market. In 1978, David E. Rawson³² reviewed the results of various focus groups and one-on-one interviews among men with varying levels of chewing tobacco experience and use patterns to understand consumer segments and wants (Table 2). Although Rawson observed that some smokeless tobacco users were cigarette smokers who were trying to reduce or quit smoking, this was clearly not the only motivation to use smokeless tobacco. Those trying to substitute smokeless tobacco for cigarettes were not motivated by image and were less motivated by taste or flavor than by "satisfaction" (a common tobacco industry euphemism for the physiological effects of nicotine).54

Brand positioning. RJR defined "positioning" as the basic selling concept used to motivate consumers to select a given product over that of the competition. Es Results from qualitative studies were used to create brand positioning statements. For example, a 1985 internal strategic document stated that Work Horse would be positioned as the "loose-leaf chewing tobacco that provides longer lasting flavor for the working man." The Timberline target was males 18 to 34 years old, and positioning aimed to have the product "perceived as a wintergreen flavored smokeless tobacco ... unsurpassed in delivering consistently good taste for masculine, self-reliant moist snuff users."

Twenty consumer-oriented positioning concepts were developed and tested in focus groups for moist snuff projects WSS, WSC, and GC, which would later become the products High Country, Caliber, and Woodsman (Table

1).^{55,59} The positioning with the strongest purchase intent was "satisfaction," which promoted WSC as the snuff that "provides you with the real tobacco taste that keeps you going all day."⁵⁵

Philip Morris in-store market research. Philip Morris conducted 3 consumer research studies in collaboration with Marketing Information Systems Inc, a market research company, ^{60,61} to determine the incidence of smokeless tobacco use among males and to profile the users. ⁶² Interview questions included the length of time the interviewee had used smokeless tobacco, his regular brand of smokeless tobacco, terminology for the amount of smokeless tobacco placed in the mouth (such as "dip" or "pinch"), how the user was first introduced to smokeless tobacco, cigarette usage, and occasions when cigarettes were used in place of smokeless tobacco and vice versa. ⁶¹

Philip Morris found that fine-cut moist snuff appeared to be the most popular type of smokeless tobacco⁶³ and that "45 percent of smokeless tobacco users had never smoked, 26 percent were current smokers and 29 percent former smokers. Within the former smokers group, almost 60 percent stated that smokeless tobacco was a replacement for cigarettes."61,64,65 Philip Morris continued to request market research on smokeless tobacco over time. 66 Results of 272 interviews with male smokeless tobacco users in Atlanta, Georgia; Tallahassee, Florida; and Jacksonville, Florida, found age and regional preferences for different types of smokeless tobacco.⁶⁷ They also found significant rates of dual smokeless and cigarette use: in addition to using smokeless tobacco, more than half of the men interviewed in each market had experience with cigarettes, and among dual users in Atlanta, Georgia, a higher proportion claimed that smokeless was more enjoyable than ciga- ${\rm rettes.}^{67}$

Early Marketing Activities

The marketing activities that RJR pursued for its smokeless products appeared to target men of lower socioeconomic status, rural backgrounds, and young age; they included sampling, television commercials, and sports sponsorship. For example, in 1981 and 1982, the Work Horse brand was promoted with sampling at "opportunistic events" such as tractor pull contests, spitting contests, and fishing tournaments. ^{68,69} The 1981 RJR public

relations strategy included plans to write a feature article about supplying free chewing tobacco products to "college baseball teams" and about how there were now "a larger number of young people chewing."68 Other promotional items and contests included R.J. Gold (a brand of smokeless tobacco) banners, logo-bearing hats and shirts, and cash giveaways. 70 Sporting events provided a fun, exciting atmosphere that built positive associations with tobacco products and encouraged trial of free samples. An RJR special events document from 1989 noted that although sampling was becoming less acceptable to the general public, attendees of special events "actively seek out the samplers ... and the surroundings provide an attractive trial-inducing

In 1982, RJR advertised Work Horse and R.J. Gold on the radio and on television³⁶ and made plans for Timberline television advertising.56,58,72 A 1982 Marketing Development Department document written to J.W. Johnston, a one-time RJR president, chairman, and chief executive officer (CEO), reported that WSH [Timberline] commercials under development were tested for their "ability to attract attention to and communicate the desired user image attributes of masculinity and self-reliance."43 A 1982 weekly status report written to Johnston confirmed that R.J. Gold marketing plans included fishing tournament sponsorship and associated television coverage on ESPN.73

Despite the marketing, RJR's product test results revealed that regular users rated all of the Specialty Tobacco Products products inferior to competitors' products in terms of tobacco taste or flavor. ⁷⁴ In 1983, following a 2-year period of stagnation and decline, RJR reduced support for Work Horse and R.J. Gold. ^{75,76} RJR failed to develop a moist snuff-product that competed successfully with existing smokeless products at the time, and the Specialty Tobacco Products Brands Division was dissolved in February 1985. ⁷⁷

Renewed Interest in the Smokeless Tobacco Market

The cigarette companies' interests in expanding the smokeless tobacco market that were first expressed in the 1980s were revisited a decade later. During the 1990s, RJR assigned a task force to conduct surveys and

TABLE 2-Different Types of Smokeless Tobacco Users, as Described in a 1978 Qualitative Analysis for RJ Reynolds

| | Substitutors | Variety People | Role Players | Sensors |
|-----------------------------|---|--|--|--|
| Needs and values | Wish to reduce cigarette consumption or quit altogether | Need variety in their tobacco usage, either for the sake of variety or due to situations | Wish to fulfill or project a specific image that is associated with the use of moist snuff | Desire the unique taste, oral, or physiological experience they believe moist snuff provides |
| Possible hierarchy of wants | Freshness, satisfaction, taste or flavor, ease of control, low price | Freshness, taste or flavor, satisfaction, ease of control, low price | Freshness, image, taste or flavor, ease of control, low price | Freshness, taste or flavor, ease of control, satisfaction, low price |
| Subdivisions | Triers or beginners, occasional users, heavy users | Triers or beginners, occasional users | Triers or beginners, occasional users | Triers or beginners, occasional users, heavy users |

Note. The column headings and content in table fields are original terms from the report. Source. RJ Reynolds.3

interviews to explore the appeal of RJR's cigarette trademarks among moist snuff users who smoked and moist snuff users who did not smoke, to explore consumer expectations of a moist snuff product, and to understand the purchase behavior of current users.⁷⁸ In the early 1990s, the consumer profile of smokeless tobacco users as reported by RJR continued to center on White males with low education and low socioeconomic status.⁷⁸

Philip Morris also monitored and collected data from industry analysts' reports on the demographic profile associated with smokeless tobacco use, with an interest in acquiring new users. In 1989, a Philip Morris historical review of the US Tobacco Company asked, "Will women or professionals provide viable markets for expansion?" and "Is there room for international expansion?"64 A 1993 document written for William Campbell (Philip Morris president and CEO) stated that "the three primary groups driving current growth [of the moist snuff category] are young adult males who choose moist snuff over loose leaf, college males who choose snuff over cigarettes, and converted or dual usage smokers." 79 Although the heaviest smokeless tobacco users were adult males and blue-collar workers, a 1992 planning document written by Philip Morris manager Louis Lembo noted

[R]ecent studies cited by industry analysts indicate that smokeless tobacco is expanding its base to include active outdoor oriented adult males and more college educated white collar workers. UST [US Tobacco Company] feels the increase in smoking restrictions and the health controversy surrounding cigarettes is a major factor in improving smokeless tobacco's demographics. UST estimates that at least 25% of their customers also smoke cigarettes, and might be using moist snuff when smoking is inconvenient or prohibited.65

A 1993 smokeless tobacco industry analysis written by Lembo for Campbell stated, "UST claims its moist snuff consumers are younger, better educated, less rural and have a higher income than traditional smokeless tobacco users."79 Furthermore, Lembo cited data from a 1990 study by the National Collegiate Athletic Association (NCAA), which showed that the percentage of athletes using smokeless tobacco "rose dramatically" in all sports surveyed from 1985 to 1988, as an "indicator of smokeless tobacco's improving image among young, educated adult males."65 Throughout the 1990s, industry analysts noted that increasing "smoking restrictions in the workplace and cultural changes" worked to expand the consumer base for smokeless tobacco.80

In 2006, RJR saw the moist snuff category as representing an "increasingly acceptable alternative to cigarettes" because of perceptions of less risk, fewer regulations, and lower price than for cigarettes, and "an expanding customer base, many of whom are 'dual-users' of moist snuff and cigarettes."81

New Smokeless Tobacco Product Marketing

In May 2006, RJR began test marketing Camel Snus in Portland, Oregon, and Austin,

Texas, presenting it as a smoke-free, spit-free product in small pouches that originated in Sweden. 82 A Camel Snus fact sheet said that as part of "direct-to-consumers (one-on-one)" marketing for Camel Snus at bars and nightclubs, those who wished "to participate in the promotion and receive communications from a tobacco company, will be given two tins of Camel Snus."82 At these marketing events, participants provided proof of age (most often a driver's license), which was scanned and used to generate mailing lists for Camel promotions, coupons, and other direct mail marketing.

The Camel Snus promotions appear to have shifted in focus from the traditional rural, bluecollar target markets to a more sophisticated, urban, professional market (Figure 1). Although the basic marketing strategies employed (giveaways, free samples, promotions, free tickets, etc.) have stayed fairly constant, the venues for these strategies have changed from rodeos, sports events, and car races to concerts and urban nightclubs.

Tobacco company webcasts and conference calls for investors. In the 2007 annual analysts' day presentation for Reynolds American Inc (the parent company for RJR), Susan Ivey, chairman and CEO, stated that their strategic vision included positioning themselves as a "total tobacco company." 83 Da
an Delen, CEO of RJR Tobacco Co, stated, "Camel isn't just for smokers anymore," and explained that "consumer experience marketing"-in the form of one-on-one dialogue with consumers at retail outlets, bars, nightclubs, and Camel promotional

events-was a focus for Camel Snus.83 "Consumer experience marketing" was described as "word of mouth marketing in retail, in bars, and in night clubs," which also allowed the company to respond to consumer feedback.⁸³ Delen stated that RJR's snus product appealed mostly to smokers ("really, the adult smoker under thirty"), and that the product had some appeal to women, as about 15% of Camel Snus users in 200683 were women, whereas historically fewer than 10% of smokeless tobacco users were women.84 The 2007 presentation also included plans to improve Camel and other RJR brands' visibility at the retail level, with vertical and electronic displays, new Camel Snus packaging, and plans to use refrigerated display cases to help differentiate Camel Snus from moist snuff.83

In concluding remarks, it was also stated that "RJR feels they are best in position to deal with the migration trends around smokers switching to alternative means in the face of indoor smoking restrictions, [and] a 3.5% decline in cigarette consumption." ⁸³ In a Reynolds American Inc third-quarter-earnings conference call on October 25, 2007, it was reported that RJR was pleased with responses from Camel Snus test markets, with "good repeat business," and that RJR planned to expand test marketing. ⁸⁵

DISCUSSION

Since the 1980s, cigarette companies have spent millions of dollars annually on consumer research for smokeless tobacco product development, marketing, and advertising. RJR and Philip Morris developed profiles of the demographics, lifestyles, attitudes, behavior patterns, and preferences of smokeless tobacco consumers; produced tailored product positioning statements, advertising copy, and message tone for these audiences; and took into account the media channel preferences of each group. They found that, historically, the heaviest use of smokeless tobacco products has been concentrated among low-income, blue-collar, less-educated, White adult males, with an increase in usage among active, outdoor-oriented males occurring in the 1990s.

RJR and Philip Morris also observed consumption pattern shifts in the 1990s, during changing social and legislative attitudes toward cigarettes and smokeless tobacco. Both

companies have attempted to expand beyond the traditional user groups, and are currently test marketing cigarette-branded "smokeless, spitless" snus tobacco products that employ their most popular brand names (Camel and Marlboro) and appeal more to upscale, urban, and female users. The appearance and packaging of Camel Snus are unique: the product comes in an "oblong tin" (resembling a package of pocket mints) and is sold in refrigerated cases, whereas chewing tobacco has long been sold in round cans on convenience store shelves. Camel Snus is also sold in bars and clubs in most of the largest US metropolitan areas, including New York City, New York; Los Angeles, California; Miami, Florida; Washington, District of Columbia; Chicago, Illinois; Atlanta, Georgia; and San Francisco, California.¹⁹

In general, smokeless tobacco advertising has focused either on product characteristics or on establishing the image of the user. Although the primary venues for the new cigarette-branded smokeless tobacco advertising campaigns have changed from fishing tournaments and rodeos to urban bars and nightclubs, the core promotional elements are similar: event promotions and sponsorships, colorful packaging and free samples to promote trial by new users and to "teach" people how to use the product, coupons or "buy one, get one free" promotional offers at the point of sale, and hired spokespeople to "educate" consumers about the product one-on-one.

The new Camel Snus advertising emphasizes the novelty of snus and its Swedish origins; the Web site features a Swedish model who demonstrates how to translate Swedish phrases and "how to snus" "on the plane from Miami to L.A." or how to "snus while doing the samba."86 The Marlboro Snus Web site, on the other hand, mentions that snus was "invented in Sweden, perfected in Marlboro Country."87 The Camel Snus images appear to be more unisex and upscale, with a tone of glamour and sophistication (featuring scenes from Sweden, nightclubs, business meetings, and airplanes) than Marlboro Snus advertising (Figure 1). The Marlboro Snus marketing has a more masculine edge and highlights how one can use snus on "an adventure," on a road trip, or while fishing. Both the Camel and Marlboro Snus Web sites provide educational, step-by-step guides on "how to

snus." The direct-mail piece shown in Figure 1 reads, "you can Snus virtually anywhere, from work to bars to trains to your fussy friend's party," and it emphasizes that "snus is NOT dip," suggesting that the targeted users are not already using spit tobacco.

With increasing denormalization of smoking and smoke-free policies, smokeless tobacco marketing messages have also shifted. The current focus for smokeless tobacco markets is on settings with clean indoor air laws. Throughout the 1980s, RJR's Specialty Tobacco Products advertising campaigns centered around messages that their moist snuff products provided a user with "the satisfaction that keeps you going while working hard," or "a way to enjoy outdoor activities for young energetic independent masculine men." The newest marketing messages promote new moist smokeless products as follows: as a way to enjoy indoor, social activities where one cannot smoke; as a product for smokers to use temporarily (Figure 1); as a trendy, popular, urban, sophisticated activity; and as a product for adventurous women and young men highly concerned with their image. Camel Snus is advertised as "pleasure for wherever" (Figure 1) and Marlboro Snus is advertised as "flavor anytime." Both messages center on the promotion of tobacco use without restrictions.

Tobacco companies have a long history of developing initiation or "starter" products.88 Flavored smokeless tobacco products have consistently been perceived by current smokeless tobacco users as "for beginners" or a way to recruit younger men to try the product (e.g., Wintergreen refreshment positioning). RJR focus group research showed that flavored products were not popular among older or more experienced users, who saw them as being for beginners. In 2009, Camel Snus was available in Original, Frost, and Spice varieties, while Marlboro Snus was sold in Mild, Mint, Spice, and Rich flavors. Similarly, nicotine content was tailored to the user, with lower nicotine content continuing to be typically for starters or new users. 89,90 Marlboro Snus is reported to contain very low levels of nicotine.91

Current smokeless marketing strategies may undermine effective public health practice such as taxation, smoke-free policies, and the denormalization of tobacco use. The audience

for the advertising and promotional activity of new snus products appears not to be inveterate smokers; instead, these messages are likely to encourage new users to try the products, and may lead smokers who would have quit tobacco use to defer quitting. Camel and Marlboro Snus advertisements may promote dual use of cigarettes and smokeless tobacco, with snus used as a temporary aid only where smoking is not permitted or acceptable. Dual use is a problem largely ignored by pro-snus advocates, but it leads to maintenance of smoking behavior and increased exposure to toxicants.

Cigarette advertising is associated with increased use, especially among youth. 92,93 Results from a 2008 study indicate that youths' exposure to smokeless tobacco advertisements, through popular magazines with significant adolescent readership, has increased since 1998. 94 A 1982 RJR marketing intelligence report includes quotes from articles relating to smokeless tobacco and states, "Rising popularity of smokeless tobacco can also be attributed to better advertising and new packaging,"95 both of which are a major focus of the Camel Snus campaign today. Our study suggests that marketing activities appealing to new users or encouraging dual use, including distribution of free samples, "teaching" new consumers how to use the product, messages suggesting temporary smokeless product use, new flavors and low nicotine levels, and advertising that appeals to teens, such as sports sponsorship, should be curtailed to prevent increases in overall harm from tobacco use in the population. If public health researchers can gain understanding of snus marketing strategies and identify effective countermarketing messages soon, there is an opportunity to avoid a major expansion in smokeless tobacco use and avert a potential increase in dual use. The medical and public health communities need to be proactive to prevent this next phase of the tobacco epidemic. ■

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Contributors

A.B. Mejia collected the data and led the writing P.M. Ling conceptualized and supervised the study. Both authors contributed to the analysis and interpretation of the data and to the review, revision, and approval of the final article.

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References

- Hatsukami DK, Ebbert JO, Feuer RM, Stepanov I, Hecht SS. Changing smokeless tobacco products: new tobacco-delivery systems. Am J Prev Med. 2007;33(6 suppl. 1):S368–S378.
- 2. Harm Reduction in Nicotine Addiction: Helping People Who Can't Quit. A Report by the Tobacco Advisory Group of the Royal College of Physicians. London, England: Royal College of Physicians of London; 2007.
- 3. Reynolds RJ. 1983–1987 plan. November 1982. Bates no. 502480001/0220. Available at: http://legacy.library.ucsf.edu/tid/ztn61d00. Accessed November 14, 2007.
- Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Health Effects of Smokeless Tobacco Products. Brussels, Belgium: Health and Consumer Protection Directorate-General, European Commission; 2008.
- 5. Institute of Medicine. Clearing the Smoke: Assessing the Science Base for Tobacco Harm Reduction. Stratton K, Shetty P, Wallace R, Bondurant S, eds. Washington, DC: National Academies Press; 2001.
- 6. Teo KK, Ounpuu S, Hawken S, et al. Tobacco use and risk of myocardial infarction in 52 countries in the INTERHEART study: a case—control study. *Lancet.* 2006;368(9536):647–658.
- Roth HD, Roth AB, Liu X. Health risks of smoking compared to Swedish snus. *Inhal Toxicol*. 2005;17(13):741–748.
- Hergens M, Lambe M, Pershagen G, Terent A, Ye
 Smokeless tobacco and risk of stroke. *Epidemiology*. 2008;19(6):794–799.
- Alguacil J, Silverman DT. Smokeless and other noncigarette tobacco use and pancreatic cancer: a case– control study based on direct interviews. *Cancer Epide*miol Biomarkers Prev. 2004;13(1):55–58.
- Boffetta P, Aagnes B, Weiderpass E, Andersen A.
 Smokeless tobacco use and risk of cancer of the pancreas and other organs. *Int J Cancer*. 2005;114(6):992–995.
- 11. Zheng W, McLaughlin JK, Gridley G, et al. A cohort study of smoking, alcohol consumption, and dietary factors for pancreatic cancer (United States). *Cancer Causes Control*. 1993;4(5):477–482.

- 12. Luo J, Ye W, Zendehdel K, et al. Oral use of Swedish moist snuff (snus) and risk for cancer of the mouth, lung, and pancreas in male construction workers: a retrospective cohort study. *Lancet*. 2007;369(9578):2015–2020.
- 13. Wetter DW, McClure JB, de Moor C, et al. Concomitant use of cigarettes and smokeless tobacco: prevalence, correlates, and predictors of tobacco cessation. *Prev Med.* 2002;34(6):638–648.
- Tobacco Outlook Report. TBS-263/24. Washington,
 DC: US Dept of Agriculture Economic Research Service;
- 15. Alpert HR, Koh H, Connolly GN. Free nicotine content and strategic marketing of moist snuff tobacco products in the US: 2000–2006. *Tob Control.* 2008: 17(5):332–338.
- 16. American Nonsmokers' Rights Foundation. Smokefree lists, maps, and data. 2008. Available at: http://www.no-smoke.org/goingsmokefree.php?id=519. Accessed May 23, 2008.
- 17. Reynolds American Inc. RAI CEO: another year of strong earnings growth. 2008. Available at: http://www.reynoldsamerican.com/common/ViewPDFaspx?postID=1264. Accessed February 13, 2008.
- 18. Dorfman B. Reynolds expands snus test to NY, other cities. Reuters. 2008. Available at: http://www.reuters.com/article/marketsNews/idUSN1547392820080415.
 Accessed April 15, 2008.
- 19. RJ Reynolds expands snus tests. Convenience Store News. 2008. Available at: http://www.csnews.com/csn/search/article_display.jsp?vnu_content_id=1003722971. Accessed March 12, 2008.
- 20. Vector Group Ltd. Q1 2008 earnings call transcript. Seeking Alpha. 2008. Available at: http://seekingalpha.com/article/79931-vector-group-ltd-q1-2008-earnings-call-transcript?source=news_sitemap&page=4. Accessed August 26, 2008.
- 21. Craver R. Liggett follows suit with its own snus. *Winston-Salem Journal*. February 27, 2008. Available at: http://www2.journalnow.com/content/2008/feb/27/liggett-follows-suit-with-its-own-snus. Accessed February 28, 2008.
- 22. Levy DT, Mumford EA, Cummings KM, et al. The relative risks of a low-nitrosamine smokeless tobacco product compared with smoking cigarettes: estimates of a panel of experts. *Cancer Epidemiol Biomarkers Prev.* 2004:13(12):2035–2042.
- 23. Malone RE, Balbach ED. Tobacco industry documents: treasure trove or quagmire? *Tob Control.* 2000;9(3):334–338.
- 24. RJ Reynolds. Specialty tobacco products. Fact book. March 12, 1985. Bates no. 505161691/1703. Available at: http://legacy.library.ucsf.edu/tid/qfj55a00. Accessed September 14, 2007.
- 25. Esty W. 1968 (680000) National Tobacco Chewing Survey (2-015). October 1968. RJ Reynolds. Bates no. 501795659/5693. Available at: http://legacy.library.ucsf.edu/tid/sxd39d00. Accessed May 7, 2008.
- 26. Simon E. A Qualitative study of consumer experience with and attitudes toward chewing tobacco. January 29, 1970. RJ Reynolds. Bates no. 500979933/9945. Available at: http://legacy.library.ucsf.edu/tid/ice76a00. Accessed May 7, 2008.
- 27. Philip Morris USA. Smokeless tobacco business planning and analysis. February 1978. Bates no.

- 2025390507/0532. Available at: http://legacy.library.ucsf.edu/tid/tnz36e00. Accessed July 23, 2007.
- 28. Dabney CE, Nanninga C, Unterman R. United States Tobacco Company. April 6, 1983. Philip Morris. Bates no. 2076503666/3677. Available at: http://legacy. library.ucsf.edu/tid/eti85c00. Accessed June 11, 2008.
- 29. Miller K. Smokeless tobacco usage. June 26, 1984. Philip Morris. Bates no. 2045600104/0120. Available at: http://legacy.library.ucsf.edu/tid/mhi75e00. Accessed December 17, 2008.
- Nelson DH. Smokeless tobacco industry. May 9, 1984. Philip Morris. Bates no. 2043391421. Available at: http://legacy.library.ucsf.edu/tid/bqz92e00.
 Accessed August 14, 2007.
- 31. Long HP, Piskor SK. Smokeless tobacco. May 9, 1984. Philip Morris. Bates no. 2043391422/1434. Available at: http://legacy.library.ucsf.edu/tid/imx45d00. Accessed June 5, 2008.
- 32. Rawson DE. Qualitative study of the moist snuff market. April 1978. RJ Reynolds. Bates no. 501463187/3205. Available at: http://legacy.library.ucsf.edu/tid/woa49d00. Accessed May 8, 2008.
- 33. Teague C. Research planning memorandum on modified chewing tobacco-like products. November 18, 1971. RJ Reynolds. Bates no. 502987378/7382. Available at: http://legacy.library.ucsf.edu/tid/ect68d00. Accessed May 7, 2008.
- 34. Long GH, RJ Reynolds Tobacco Company 1982–1986 strategic plan presentations. Marketing/sales/R&D. May 1981. RJ Reynolds. Bates no. 504782297/2336. Available at: http://legacy.library.ucsf.edu/tid/exq55d00. Accessed October 25, 2007.
- Curry AM. STP 1980 final budget balance. January 27, 1981. RJ Reynolds. Bates no. 501150145/0147.
 Available at: http://legacy.library.ucsf.edu/tid/lsk55a00.
 Accessed August 24, 2007.
- 36. Long GH. RJRI board review of RJRT 1982. December 11, 1981. RJ Reynolds. Bates no. 503941179/1196. Available at: http://legacy. library.ucsf.edu/tid/mar75d00. Accessed October 25, 2007
- 37. RJ Reynolds. 1982 operating plans and budgets. November 1981. Bates no. 516461603/1832. Available at: http://legacy.library.ucsf.edu/tid/qyx82d00. Accessed August 23, 2007.
- 38. RJ Reynolds. STP 1985 marketing review plan. September 1984. Bates no. 502099589/9644. Available at: http://legacy.library.ucsf.edu/tid/iod29d00. Accessed May 14, 2008.
- 39. Gemma JL, Swaim MC, Rogers JD, Phillips JD. Product research proposal. Product guidance test (MDD#82–31266). December 2, 1982. RJ Reynolds. Bates no. 503491950/1951. Available at: http://legacy.library.ucsf.edu/tid/wud95d00. Accessed November 26, 2007.
- 40. Albert M. Product research report. Product guidance report: STP project SM-product guidance test.

 January 6, 1983. RJ Reynolds. Bates no. 503492028/
 2033. Available at: http://legacy.library.ucsf.edu/tid/
 gjd95d00. Accessed May 5, 2008.
- 41. Rogers JD. R&D plant. R&D program outline. May 16, 1983. RJ Reynolds. Bates no. 511241155/1169. Available at: http://legacy.library.ucsf.edu/tid/izd53d00. Accessed November 26, 2007.

- 42. Rogers JD. R&D project outline. Development of Red Man competitor. STP brands. May 16, 1983. RJ Reynolds. Bates no. 506047999/8000. Available at: http://legacy.library.ucsf.edu/tid/cdc05d00. Accessed November 26, 2007.
- 43. Osmon HE. MDD weekly status—week of May 17—21. May 21, 1982. RJ Reynolds. Bates no. 501741634/1645. Available at: http://legacy.library.ucsf.edu/tid/vai39d00. Accessed November 30, 2007.
- 44. Fackelman E, Long GH, Stuart J, et al. Marketing development proposal (MDD# 80-1053). Hawken A & U. May 15, 1980. RJ Reynolds. Bates no. 501079950/9951. Available at: http://legacy.library.ucsf.edu/tid/efg59d00. Accessed December 17, 2007.
- 45. Long GH, Osmon H. MDD weekly status—October 19–23. October 23, 1981. RJ Reynolds. Bates no. 501438204/8211. Available at: http://legacy.library.ucsf.edu/tid/zmc49d00. Accessed October 25, 2007.
- 46. Haynes CL. Timberline incremental 30-sheet program. April 14, 1982. RJ Reynolds. Bates no. 506053554/3555. Available at: http://legacy.library.ucsf.edu/tid/xjx18c00. Accessed November 30, 2007.
- 47. Fackelman EJ. MDD new brands weekly status. April 5–8. April 7, 1983. RJ Reynolds. Bates no. 502751262/1265. Available at: http://legacy.library.ucsf.edu/tid/yhj78d00. Accessed May 10, 2008.
- 48. Fackelman EJ. Marketing development proposal (MD#81-2054). Total proposition testing experiment—assessor evaluation of WSH. March 19, 1981. RJ Reynolds. Bates no. 501272481/2483. Available at: http://legacy.library.ucsf.edu/tid/bur49d00. Accessed May 9, 2008.
- MDD Information Center. Project status report.
 November 5, 1991. RJ Reynolds. Bates no. 513876279/6295. Available at: http://legacy.library.ucsf.edu/tid/qdp56a00. Accessed May 9, 2008.
- 50. Timberline assessor experiment presentation of results March 1982. RJ Reynolds. Bates no. 503546216/6255. Available at: http://legacy.library.ucsf.edu/tid/ovy85d00. Accessed August 31, 2007.
- 51. Totterdale GJ. New business research and development report. August 3, 1983. RJ Reynolds. Bates no. 503095748/5767. Available at: http://legacy.library.ucsf.edu/tid/rwl68d00. Accessed July 18, 2007.
- 52. Totterdale GJ. MDD—new brands/strategic research weekly status—May 2–6. May 1983. RJ Reynolds. Bates no. 502751247/1252. Available at: http://legacy.library.ucsf.edu/tid/vhj78d00. Accessed July 23, 2007.
- 53. Fackelman E. New brands and strategic research weekly status—August 8–12. August 12, 1983. RJ Reynolds. Bates no. 502751196/1198. Available at: http://legacy.library.ucsf.edu/tid/ihj78d00. Accessed November 14, 2007.
- Glantz SA, Slade J, Bero LA, Hanauer P, Barnes D. The Cigarette Papers. Berkeley: University of California Press; 1996.
- 55. WSC and WSS positioning, name and copy strategy development. RJ Reynolds. January 1, 1983. Bates no. 501752197/2235. Available at: http://legacy.library.ucsf.edu/tid/qvg39d00. Accessed December 3, 2007.
- RJ Reynolds. Work horse. Strategic summary.
 Marketing plans. Specialty tobacco products. April 8, 1983. RJ Reynolds. Bates no. 504070089/0098.

- Available at: http://legacy.library.ucsf.edu/tid/xwa68d00. Accessed September 21, 2007.
- 57. Haynes CL. Timberline out-of-home test market. April 14, 1982. RJ Reynolds. Bates no. 506053563/3564. Available at: http://legacy.library.ucsf.edu/tid/vjx18c00. Accessed July 18, 2007.
- 58. RJ Reynolds. New Timberline Smokeless Tobacco. December 17, 1981. Bates no. 503941198. Available at: http://legacy.library.ucsf.edu/tid/oar75d00. Accessed November 30, 2007.
- STP 1985 marketing plan review. September 1984.
 RJ Reynolds. Bates no. 503613726/3781. Available at: http://legacy.library.ucsf.edu/tid/sjt85d00. Accessed June 5, 2008.
- Marketing Information Systems International Inc. Available at: http://www.misi-intl.com. Accessed May 20, 2008.
- 61. Marketing Information Systems Inc. Smokeless tobacco in-store test. May 1984. Philip Morris. Bates no. 2041095274/5416. Available at: http://legacy.library.ucsf.edu/tid/plp81f00. Accessed August 29, 2007.
- 62. Miller K. Smokeless tobacco. November 14, 1990. Philip Morris. Bates no. 2045064636. Available at: http://legacy.library.ucsf.edu/tid/imk03e00. Accessed May 22, 2008.
- 63. Eisen K. Marketing research department report. June 7, 1984. Philip Morris. Bates no. 2041143129/3130. Available at: http://legacy.library.ucsf.edu/tid/qec72e00. Accessed May 20, 2008.
- 64. Teitelbaum S. Tobacco historical review. August 1, 1989. Philip Morris. Bates no. 2072005108/5121. Available at: http://legacy.library.ucsf.edu/tid/htg08d00. Accessed June 9, 2008.
- Lembo L. Smokeless tobacco industry analysis. July 31, 1992. Philip Morris. Bates no. 2046710510/0521.
 Available at: http://legacy.library.ucsf.edu/tid/ wpt92e00. Accessed August 27, 2007.
- 66. Mowrer JF. Smokeless tobacco. June 20, 1984. Philip Morris. Bates no. 2040272630. Available at: http://legacy.library.ucsf.edu/tid/kfd05e00. Accessed August 10, 2007.
- 67. Miller K. Marketing research department report smokeless tobacco study—Atlanta/Florida. August 27, 1984. Philip Morris. Bates no. 2045600026/0045. Available at: http://legacy.library.ucsf.edu/tid/qcg75e00. Accessed October 21, 2009.
- 68. 1981 brand public relations plans. 1981. RJ Reynolds. Bates no. 500625939/5958. Available at: http://legacy.library.ucsf.edu/tid/kgu69d00. Accessed July 22, 2008.
- 69. 1982 marketing plans. Specialty tobacco products. September 15, 1981. RJ Reynolds. Bates no. 503717953/7963. Available at: http://legacy.library.ucsf.edu/tid/zvj55a00. Accessed July 23, 2008.
- 70. Lees HJ. Weekly status report—new brands and STP. October 7, 1983. RJ Reynolds. Bates no. 503690089/0096. Available at: http://legacy.library.ucsf.edu/tid/gdn85d00. Accessed August 20, 2007.
- In the early 1970's, special events was not noted for its sophistication. 1989. RJ Reynolds. Bates no. 507270078/0094. Available at: http://legacy.library. ucsf.edu/tid/vtg54d00. Accessed December 17, 2008.
- Long GH. Weekly brief, week ending January 17,
 January 20, 1982. RJ Reynolds. Bates no.

- 507222048/2051. Available at: http://legacy.library.ucsf.edu/tid/byk54d00. Accessed October 25, 2007.
- 73. Lees HJ. Weekly status report—new brands and STP. October 22, 1982. RJ Reynolds. Bates no. 506212980/2984. Available at: http://legacy.library.ucsf.edu/tid/fpd84d00. Accessed December 17, 2008.
- 1985 marketing plans secret. 1985. RJ Reynolds. Bates no. 504073831/3925. Available at: http://legacy. library.ucsf.edu/tid/mpa68d00. Accessed September 17, 2007.
- 75. 1984–1988 plan. Issues, objectives, strategies and action programs. November 1983. RJ Reynolds. Bates no. 502125016/5129. Available at: http://legacy. library.ucsf.edu/tid/ukb29d00. Accessed December 3, 2007.
- 76. Fackelman EJ. New brands and strategic research weekly status—week of February 20–24. February 24, 1984. RJ Reynolds. Bates no. 502751096/1100. Available at: http://legacy.library.ucsf.edu/tid/ksj78d00. Accessed May 14, 2008.
- 77. Reynolds Tobacco Company annual performance plan review 1985. October 29, 1985. RJ Reynolds. Bates no. 505348354/8378. Available at: http://legacy. library.ucsf.edu/tid/rvg25d00. Accessed May 14, 2008.
- 78. Hunter CS, Landry EC, Reynolds JL, Roper WJ. Special task force presentation. February 17, 1994. RJ Reynolds. Bates no. 514850152/0166. Available at: http://legacy.library.ucsf.edu/tid/llc11d00. Accessed October 19, 2007.
- 79. Lembo L. Smokeless tobacco industry analysis. June 25, 1993. Philip Morris. Bates no. 2040175207/5227. Available at: http://legacy.library.ucsf.edu/tid/jsj92e00. Accessed August 15, 2007.
- 80. Webber P. UST Inc financial analysis and forecast. June 22, 1994. Philip Morris. Bates no. 2031758348/8363. Available at: http://legacy.library.ucsf.edu/tid/irz57e00. Accessed August 9, 2007.
- 81. Reynolds American Inc rating agency review. February 3, 2006. RJ Reynolds. Bates no. 534250152/0206. Available at: http://legacy.library.ucsf.edu/tid/kks27a00. Accessed July 10, 2007.
- 82. Fact sheet. RJ Reynolds test markets innovative smokeless tobacco product: Camel snus. May 1, 2006. RJ Reynolds. Bates no. 525006622. Available at: http://legacy.library.ucsf.edu/tid/xrv27a00. Accessed July 3, 2007.
- 83. Reynolds American Inc. Analysts day presentation webcast November 19, 2007. available at: http://www.reynoldsamerican.com/Newsroom/.%5Ccommon% 5CViewPDF.aspx?postID=1254. Accessed November 19, 2008.
- 84. Results From the 2005 National Survey on Drug Use and Health: Detailed Tables (2.37a to 2.41b). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2006.
- 85. Reynolds American Inc. 3rd quarter earnings conference call. 2007. Available at: http://www.reynoldsamerican.com/Newsroom/.%5Ccommon% 5CViewPDF.aspx?postID=1252. Accessed October 25, 2007.
- 86. RJ Reynolds Tobacco Company. Official Web site for Camel snus. 2008. Available at: http://www.snuscamel.com/CSN/dtclogin.jsp?brand=CSN. Accessed June 28, 2008.

- 87. Philip Morris USA. Official Web site for Marlboro Snus. 2008. Available at: https://www.marlborosnus.com/snus/secure/login_input.action. Accessed June 28, 2008.
- 88. Connolly G. Sport and smokeless tobacco advertising. October 27, 1988. American Tobacco. Bates no. 980171348/1373. Available at: http://legacy.library.ucsf.edu/tid/ssw84f00. Accessed June 13, 2008.
- 89. Connolly GN, Winn DM, Hecht SS, Henningfield JE, Walker B Jr, Hoffmann D. The reemergence of smokeless tobacco. *N Engl J Med.* 1986;314(16):1020–1027.
- 90. Connolly GN, Orleans CT, Blum A. Snuffing tobacco out of sport. *Am J Public Health.* 1992;82(3):351–353.
- 91. Foulds J, Furberg H. Is low-nicotine Marlboro snus really snus? *Harm Reduct J.* 2008;5:9.
- 92. Wellman RJ, Sugarman DB, DiFranza JR, Winickoff JP. The extent to which tobacco marketing and tobacco use in films contribute to children's use of tobacco: a meta-analysis. *Arch Pediatr Adolesc Med.* 2006; 160(12):1285–1296.
- 93. DiFranza JR, Wellman RJ, Sargent JD, Weitzman M, Hipple BJ, Winickoff JP. Tobacco promotion and the initiation of tobacco use: assessing the evidence for causality. *Pediatrics*. 2006;117(6):e1237–e1248.
- 94. Morrison MA, Krugman DM, Park P. Under the radar: smokeless tobacco advertising in magazines with substantial youth readership. *Am J Public Health*. 2008;98(3):543–548.
- 95. Miller TE, Marketing Development Department. Marketing intelligence report. Competitive activities. September 8, 1982. RJ Reynolds. Bates no. 504777212/7259. Available at: http://legacy.library.ucsf.edu/tid/its55d00. Accessed September 5, 2007.