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Colgate-Palmolive Company: The Precision Toothbrush

In August 1992, Colgate-Palmolive (CP) was poised to launch a new toothbrush in the United States, tentatively named Colgate Precision. CP's Oral Care Division had been developing this technologically superior toothbrush for over three years but now faced a highly competitive market with substantial new product activity.

Susan Steinberg, Precision product manager, had managed the entire new product development process and now had to recommend positioning, branding, and communication strategies to division general manager Nigel Burton.

Company Background

With 1991 sales of \$6.06 billion and a gross profit of \$2.76 billion, CP was a global leader in household and personal care products. Total worldwide research and development expenditures for 1991 were \$114 million, and media advertising expenditures totaled \$428 million.

CP's five-year plan for 1991 to 1995 emphasized new product launches and entry into new geographic markets, along with improved efficiencies in manufacturing and distribution and a continuing focus on core consumer products. In 1991, \$243 million was spent to upgrade 25 of CP's 91 manufacturing plants; 275 new products were introduced worldwide; several strategic acquisitions (e.g., of the Mennen men's toiletries company) were completed; and manufacturing began in China and Eastern Europe. Reuben Mark, CP's C.E.O since 1984, had been widely praised for his leadership in transforming a "sleepy and inefficient" company into a lean and profitable one. Since 1985, gross margins had climbed from 39% to 45% while annual volume growth since 1986 had averaged 5%. Although international sales remained CP's strong suit, accounting for 64% of sales and 67% of profits in 1991, the company faced tough competition in international markets from Procter & Gamble, Unilever, Nestle's L'Oreal Division, Henkel of Germany, and Kao of Japan.

Professor John Quelch and Research Associate Nathalie Laidler prepared this case. HBS cases are developed solely as the basis for class discussion. Proprietary data has been disguised. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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Colgate-Palmolive's Oral Care Business

In 1991, CP held 43% of the world toothpaste market and 16% of the world toothbrush market. Other oral care products included dental floss and mouth rinses. A team of 170 CP researchers worked on new technologies for oral care products, and in 1991, new products launched in the U.S. market included Colgate Baking Soda toothpaste and the Colgate Angle and Wild Ones toothbrushes.

In 1991, worldwide sales of CP's oral care products increased 12% to \$1.3 billion, accounting for 22% of CP's total sales. CP's U.S. toothbrush sales in 1991 reached \$77 million, with operating profits of \$9.8 million. Toothbrushes represented 19% of CP's U.S. Oral Care Division sales and profits, and CP held the number one position in the U.S. retail toothbrush market with a 23.3% volume share.

Exhibit 1 presents operating statements for CP's U.S. toothbrush business since 1989. CP offered two lines of toothbrushes in 1991—the Colgate Classic and the Colgate Plus. Colgate Classic was positioned in the “value” segment and was CP's original entry in the toothbrush market, while Colgate Plus was positioned as a higher-quality product in the “professional” segment.

The U.S. Toothbrush Market

As early as 3000 B.C., ancient Egyptians used toothbrushes fashioned from twigs. In the twentieth century, a major design advance occurred in 1938 with the launch of Dr. West's Miracle Tuft Toothbrush, the first nylon-bristle brush. In the late 1940s, Oral-B began selling a soft-bristle brush which was better for the gums, and in 1961 Broxodent launched the first electric toothbrush.¹ Until the late 1970s, toothbrushes were widely viewed by consumers as a commodity and were purchased primarily on price. More recently, new product launches had increased and performance benefits had become increasingly important purchase criteria. (**Exhibit 2** summarizes new product introductions in the category since 1980.)

In 1991, the U.S. Oral Care market was \$2.9 billion in retail sales and had grown at an annual rate of 6.1% since 1986. Toothpaste accounted for 46% of this market, mouth rinses 24%, toothbrushes 15.5% (\$453 million in retail sales), with dental floss and other products making up the remainder. Dollar sales of toothbrushes had grown at an average rate of 9.3% per annum since 1987, but, in 1992 they increased by 21% in value and 18% in volume, due to the introduction of 47 new products and line extensions during 1991-1992. In the same period, media support increased by 49% and consumer coupon circulation by 48%. Consumers took more interest in the category and increased their purchase frequency. The trade, for whom toothbrushes represented a profitable, high-margin business, responded by increasing in-store promotional support and advertising features. Dollar growth exceeded volume growth due to the emergence of a “super-premium” sub-category of toothbrushes partly offset by downward pressure on average retail prices in mass-merchandise channels and because of growth in the sales of private label toothbrushes. Unit sales growth in 1993, however, was projected to be slower due to a buildup in household inventories of toothbrushes in 1992 as a result of increased sampling of free brushes through dentists and an abnormally high number of “two-for-one” consumer promotions.

¹As of 1991, electric toothbrushes were used by only 6% of U.S. households.

Product Segments

In the 1980s, industry executives divided the toothbrush category into two segments: value and professional. Many consumers traded up to professional, higher-priced toothbrushes with a resulting erosion of the value segment despite growth in private-label sales. The late 1980s saw the emergence of super-premium brushes (priced above \$2.00). By 1992, super-premium brushes, with retail prices between \$2.29 and \$2.89, accounted for 35% of unit volume and 46% of dollar sales. Professional brushes, priced between \$1.59 and \$2.09, accounted for a corresponding 41% and 42%, and value brushes, priced on average at \$1.29, accounted for 24% and 12%.

In 1992, three players dominated the U.S. toothbrush market overall: Colgate-Palmolive and Johnson & Johnson, whose brushes were positioned in the professional segment; and Oral-B, whose brushes were positioned in the super-premium segment. New entrants in the early 1990s included Procter & Gamble and Smithkline Beecham; both had positioned their new product launches in the super-premium segment. **Table A** profiles the principal new products offered in the super-premium toothbrush segment in 1992.

Table A Major New Products in the Super-Premium Toothbrush Segment

Product/ MANUFACTURER	Feature	Benefit	Reason	Tag-line	Launch date	# SKUs
Oral-B Indicator ORAL-B (GILLETTE)	Indicator Bristles	Tells you when to change toothbrush	Blue band fades halfway. Dental heritage	The brand more dentists use	7/91	4 adult
Reach Advanced Design JOHNSON &JOHNSON	Angled neck; raised rubber ridges on handle	Cleans in even the hardest-to- reach places	Slimmed down, tapered head	Feel the difference	8/91	3 adult
Crest Complete PROCTER & GAMBLE	Rippled bristle design. Handle with rubber grip	Reaches between teeth like a dental tool	Rippled end- rounded bristles	Only Crest could make a brush this complete	8/91 (test) 9/92 (national)	10 adult
Aquafresh Flex SMITHKLINE BEECHAM	Pressure sensitive, flexible neck linking brush and handle	Prevents gum irritation	Flexes as you brush	For gentle dental care	8/91 (Flex) 9/92 (line extension)	6 adult 1 child

Toothbrushes differed by bristle type (firm, medium, soft, and extra soft) and by head size (full/adult, compact, and child/youth). Firm-bristle brushes accounted for 8% of toothbrushes sold but were declining at 13% a year. Medium-bristle brushes accounted for 39% and were declining at 4% a year. Soft-bristle brushes held a 48% market share and were growing at 7% per year. Extra-soft-bristle brushes held only a 5% share but were growing even more rapidly. Sixty-nine percent of toothbrushes were sold with adult, full-sized heads, 17% had compact heads, and 13% had child/youth-sized heads.

In the late 1980s, many new toothbrushes were introduced on the basis of aesthetic rather than functional features. The children's segment in particular had seen a variety of new products. For example, in 1988 and 1989 new toothbrushes targeting children featured sparkling handles, Bugs Bunny and other characters, and glow-in-the-dark handles. By 1991, however, new product introductions were again focused on technical performance improvements, such as greater plaque removal and ease of use.

Consumer Behavior

CP's consumer research indicated that consumers of the baby boom generation (adults born in the 1940s, 1950s and early 1960s) were becoming more concerned about the health of their gums as opposed to cavity prevention and were willing to pay a premium for new products addressing this issue. CP estimated that 82% of toothbrush purchases were unplanned, and research showed that consumers were relatively unfamiliar with toothbrush prices. Although consumers were willing to experiment with new toothbrushes, they replaced their brushes on average only once every 7.5 months in 1991 (versus 8.6 months in 1990), while dental professionals recommended replacement every three months. Due to the prevalence of "two-for-one" offers, purchase frequency lagged replacement frequency, with consumers purchasing toothbrushes once every 11.6 months in 1991 (compared to 12.4 months in 1990 and an expected 9.7 months for 1992).² Unlike toothpaste, toothbrushes were not typically shared by members of the same household.

Most consumers agreed that toothbrushes were as important as toothpaste to effective oral hygiene and that the primary role of a toothbrush was to remove food particles; plaque removal and gum stimulation were considered secondary. Proper brushing was seen as key to the prevention of most dental problems. According to CP research, 45% of consumers brushed before breakfast, 57% after breakfast, 28% after lunch, 24% after dinner and 71% before bed. Forty-eight percent of consumers claimed to change their brushes at least every three months; the trigger to purchase a new brush for 70% of them was when their toothbrush-bristles became visibly worn. Eleven percent decided to switch to a new brush after seeing their dentists, and only 3% admitted to purchasing on impulse.³ Sixty-five percent of consumers had more than one toothbrush, 24% kept a toothbrush at work, and 54% had a special toothbrush for traveling.

Brand choice was based on features, comfort and professional recommendations. **Exhibit 3** summarizes the main reasons why consumers used specific brands. Consumers chose a brush to fit their individual needs: size and shape of the mouth, sensitivity of gums, and personal brushing style. The handle, bristles, and head shape were perceived to be the most important physical features of a toothbrush.

Consumers differed in the intensity of their involvement in oral hygiene. **Table B** summarizes the buying behavior of the three groups. Therapeutic brushers aimed to avoid oral care problems, while cosmetic brushers emphasized preventing bad breath and/or ensuring white teeth. Uninvolved consumers were not motivated by oral care benefits and adjusted their behavior only when confronted by oral hygiene problems.

²In 1992, consumers purchased toothbrushes more frequently than in 1991.

³Dentists played a significant role, both as a source of information on proper brushing techniques and as a distributor of toothbrushes. At any time, one in four consumers was using a toothbrush given to them by a dentist.

Table B Consumer Segmentation of Toothbrush Users

INVOLVED ORAL HEALTH CONSUMERS - THERAPEUTIC BRUSHERS (46% of adults)	INVOLVED ORAL HEALTH CONSUMERS - COSMETIC BRUSHERS (21% of adults)	UNINVOLVED ORAL HEALTH CONSUMERS (33% of adults)
Differentiate among products. Search out functionally effective products	Search for products that effectively deliver cosmetic benefits	View products as the same. Lack of interest in product category
Buy and use products for themselves	Buy and use products for themselves	Buy and use products for all family members
85% brush at least twice a day, 62% use a professional brush and 54% floss regularly	85% brush twice a day, 81% use mouthwash, 54% use breath fresheners, 69% floss, 54% use a professional brush	20% brush once a day or less, 28% use only regular toothbrushes 54% floss 66% use mouthwash
Major toothbrush brands used are Oral-B Angle and Oral-B Regular followed by Colgate Plus and Reach.	Major toothbrush brands used are Colgate Classic and Oral-B Regular followed by Colgate Plus and Oral-B Angle	Major toothbrush brands used are Colgate Classic and Oral-B Regular followed by Colgate Plus and Reach

Competition

Exhibit 4 lists the major brands and product prices for each of the three toothbrush product segments. **Exhibit 5** shows the number and type of stockkeeping units (SKUs) for each major brand, and **Exhibits 6** and **7** summarize market shares over time and by class of trade. Major competitor brands in the super-premium segment included Oral-B, Reach Advanced Design, Crest Complete, and Aquafresh Flex.

Oral-B (owned by Gillette) had been the market leader since the 1960s. In 1991, it held a 23.1% volume market share and a 30.7% value share of U.S retail sales, with 27 SKUs. *Oral-B* relied heavily on professional endorsements and was known as “the dentist’s toothbrush.” In July 1991, *Oral-B* launched the Indicator brush, priced at a 15% premium to its other brushes. The Indicator brush had a patch of blue bristles that faded to white when it was time for replacement (usually after two to three months). In 1992, consumer promotions were expected to cost \$4.5 million (5% of sales) and include \$1.00-off coupons, “buy-one-get-one-free” offers and \$2.00 mail-in refunds. Media expenditures for 1992 were estimated at \$11.2 million (12.7% of sales). Television commercials would continue to feature “Rob the dentist” using the *Oral-B* Indicator product. In 1991, *Oral-B*’s operating margin on toothbrushes, after advertising and promotion costs, was estimated to be approximately 20% of factory sales.

In 1992, *Oral-B* announced that it would restage its dental floss, roll out a new mouthwash, and possibly introduce a specialty toothpaste. *Oral-B* management stated that “to be a leader in the oral care category, we must compete in all areas of oral care.”⁴

⁴*Brandweek*, October 12, 1992.

Johnson & Johnson (J&J) entered the U.S. toothbrush market in the 1970s with the Reach brand, which, in 1991, comprised 18 SKUs. In 1988, J&J introduced a second product line under the brand name Prevent, a brush with a beveled handle to help consumers brush at a 45° angle—the recommended brushing technique. This product however, was being phased out by 1992. In 1991, J&J ranked third in the U.S. retail toothbrush market with a 19.4% volume share and a 21.8% value share. The Reach line was positioned as the toothbrush that enabled consumers to brush in even the hardest-to-reach places, thereby increasing the efficiency of brushing. New products included Glow Reach (1990) and Advanced Design Reach (1991), which offered tapered heads, angled necks, and unique non-slip handles. Reach Between, scheduled for launch in September of 1992, had an angled neck and rippled bristles that targeted the areas between the teeth. Consumer promotions in 1992 were estimated at \$4.6 million (8.6% of sales) and included 60¢ coupons, \$1.00 refunds by mail, and “buy-two-get-one-free” offers. Media expenditures were expected to reach \$17.1 million (31.7% of sales) with a heavy reliance on television commercials. Johnson & Johnson’s expected 1992 operating margin on toothbrushes, after advertising and promotion costs, was 8.4% of factory sales.

Procter & Gamble (P&G) was the most recent entrant in the toothbrush market with Crest Complete, an extension of the company’s toothpaste brand name, Crest. Based on successful test markets in Houston and San Antonio from August 1991 to August 1992, P&G was expected to launch Crest Complete nationally in September 1992. The brush had captured a 13% value share in test markets and was expected to reach similar total market share levels in its first year after full launch. The product had long, rippled bristles of different lengths, designed to reach between the teeth. Crest Complete claimed to have “the ability to reach between the teeth up to 37% farther than leading flat brushes.” It was expected to be introduced at a manufacturer’s list price to retailers of \$1.67 and capture a 2.0% volume share and a 2.6% value share of the U.S. retail market by the end of 1992. Consumer promotions already announced included 55 cent coupons and \$1.99 refunds on toothbrushes purchased from floor stands. Media expenditures for the last quarter of 1992 were estimated at \$6.4 million; television commercials would carry the theme “Teeth aren’t flat, so why is your brush.”

Smithkline Beecham entered the U.S. toothbrush market in August 1991 with Aquafresh Flex, an extension of the company’s toothpaste brand. Aquafresh Flex toothbrushes had flexible handles that allowed for gentle brushing. By the end of 1991, Aquafresh Flex held a 0.9% share by volume and 1.1% by value of the U.S. retail market with six SKUs. In September 1992, the line was expected to expand to include two adult compact heads and one child brush. The 1992 promotion plan, estimated at \$4.6 million (25% of sales), included \$1.99 mail refunds, “buy-two-get-one-free” offers, toothbrush on-pack with toothpaste, and a self-liquidating premium offer of towels. Media expenditures at \$10 million (almost 50% of sales) included television commercials that showed the product brushing a tomato without damaging it, to demonstrate the “flexibility and gentleness” of the brush. Smithkline Beecham was expected to make an operating loss on toothbrushes in 1992.

Other competitors included *Lever*, *Pfizer*, and *Sunstar*. In 1991, Lever offered three lines of toothbrushes: Aim; Pepsodent Professional with 5 SKUs; and Pepsodent Regular with 4 SKUs. Combined, Lever held a 7.2% volume and 6.6% value share of the U.S. retail market in 1991. Lever’s products were sold primarily in the value segment and the company did not have a track record of innovation in the category. Pfizer entered the market in June 1991 with its Plax brush, which had a special groove for the thumb; it had captured 1.8% of the retail market by year end. Sunstar, with its Butler brand, held 2% of the retail market in 1992 and 19% of the \$45 million in toothbrushes distributed through dentists.

Advertising and Promotion

In the toothpaste category, it was hard to increase primary demand, so new products tended to steal sales from existing products. In the case of toothbrushes, however, increased advertising and promotion enhanced the category's visibility which, in turn, seemed to fuel consumer demand.

As the pace of new product introductions quickened in the late 1980s, the advertising media expenditures needed to launch a new toothbrush rose: Johnson & Johnson spent \$8 million in media support to introduce its new Reach brush; Oral-B spent \$10 million to launch its Indicator brush; and Procter & Gamble was expected to support its Crest Complete brush with \$15 million in media expenditures. Total media spending for the category, primarily on television advertising, was estimated to total \$55 million in 1992 and \$70 million in 1993. **Exhibit 8** shows media expenditures and shares of voice for the main toothbrush brands. **Exhibit 9** summarizes the main message in each brand's commercials, and **Exhibit 10** summarizes the copy strategy of Colgate Plus's television commercials over time. Advertising and promotion expenditures for Colgate toothbrushes are given in **Exhibit 11**.

Growing competition also increased the frequency and value of consumer promotion events. In 1992, 8% of all brushes reached consumers either free with toothpaste (as on-pack or mail-in premiums) or free with another toothbrush (buy-one-get-one-free offers). The number of coupon events for toothbrushes increased from 10 in 1990 to 33 in 1992. In the same period, the average toothbrush coupon value increased from \$0.25 to \$0.75.

Retail advertising features and in-store displays increased toothbrush sales. A typical CP toothbrush display increased sales by 90% over a normal shelf facing. When Colgate toothbrushes were combined with Colgate toothpaste in a single display, toothbrush sales increased by 170%. The importance of point-of-purchase displays and the variety of items, bristle qualities, and handle colors in each manufacturer's line led each to develop a variety of racks and display units for different classes of trade. CP for example, had four display systems: Counter Tops, containing 24 to 36 brushes; Floor Stands, 72 brushes; Sidekicks (used by mass merchandisers), 144 to 288 brushes; and Waterfall displays, 288 to 576 brushes. **Exhibit 12** illustrates these display racks. In 1991, the percentages of special Colgate displays accounted for by each type were 10%, 50%, 25%, and 15% respectively.

The CP toothbrush line held 25% to 40% of the category shelf space in most stores. To maximize retail sales, CP salespeople tried to locate the Colgate line in the middle of the category shelf space, between the Reach and the Oral-B product lines.

Distribution

In 1987, traditional food stores sold 75% of oral care products, but by 1992 they accounted for only 43% of toothbrush sales and 47% of toothpaste sales. Mass merchandisers gained share due to increased in-store promotional support. Partly in response and partly because of the increasing number of SKUs, food stores began to expand shelf space devoted to oral care products. **Exhibit 13** summarizes toothbrush retail distribution trends by volume and value.

Though purchased too infrequently to be used as a traffic builder, toothbrushes provided retailers with an average margin between 25% and 35%, twice that for toothpaste. As a result, many retailers were more receptive to adding new toothbrush products than new varieties of toothpaste. In considering which brands to stock and feature, trade buyers evaluated advertising and promotion support and each manufacturer's track record in the category. Between October 1991 and February

1992, the average number of toothbrush SKUs had increased from 31 to 35 for mass merchandisers, from 27 to 34 for drug stores and from 30 to 35 for food outlets. In September 1992, the average number of brands carried by these three classes of trade were 10, 12, and 8 respectively. Shelf space devoted to toothbrushes had also increased. Kmart for example, had increased per-store shelf space for toothbrushes from 2 to 7.5 feet in two years. Retail sales remained fragmented, with 60% of sales derived from 40% of the SKUs.

In 1992, 22% of all toothbrushes were expected to be distributed to consumers by dentists. With a dedicated sales force, Oral-B dominated this market segment. Manufacturer margins on toothbrush sales through dentists were less than half those achieved through normal retail distribution. **Exhibit 14** summarizes competitors' shares in this segment of the market.

The Precision Marketing Mix

Product Design and Testing

The Precision toothbrush was a technical innovation. In laboratory experiments, researchers used infrared motion analysis to track consumers' brushing movements and consequent levels of plaque removal. With this knowledge and through computer aided design, CP developed a unique brush with bristles of three different lengths and orientations (see **Exhibit 15**). The longer outer bristles cleaned around the gum line, the long inner bristles cleaned between teeth, and the shorter bristles cleaned the teeth surface. The result was a triple-action brushing effect. In initial clinical tests, the brush achieved an average 35% increase in plaque removal, compared with other leading toothbrushes, specifically Reach and Oral-B. At the gum line and between the teeth, the brush was even more effective, achieving double the plaque removal scores of competitor brushes.

In 1989, CP had established a task force comprising executives from R&D and Marketing, dental professionals, and outside consultants. Its mission was to "develop a superior, technical, plaque-removing device." The entire research and development process was managed from start to finish by Steinberg. The task force had five goals:

- Understanding the varying techniques consumers used when brushing their teeth. Researchers later concluded that brushing usually did a good job of removing plaque from teeth surfaces but was often ineffective at removing plaque from the gum line and between the teeth.
- Testing the between-teeth access of different toothbrush designs. The tests revealed that CP's new design was superior to both Oral-B and Reach in accessing front and back teeth, using either horizontal or vertical brushing.
- Establishing an index to score clinical plaque-removal efficacy at the gum line and between teeth. In tests, a disclosing solution was used to reveal the otherwise colorless plaque, and each tooth was divided into nine specific areas. Presence of plaque was measured on each tooth area; the percentages of tooth areas affected by plaque pre- and post-usage of different brushes were then calculated.
- Creating a bristle configuration and handle design offering maximum plaque- removing efficacy. Three similar designs evolved from the above research, all incorporating bristles of different lengths that would allow freer movement of each individual tuft of bristles and thereby enable different bristle tufts to target different areas of the mouth. Clinical trials

established that the new product removed an average 35% more plaque than other leading brushes and therefore helped to reduce the probability of gum disease.

- Determining, through clinical and consumer research, the efficacy and acceptance of the new toothbrush design. Extensive consumer research was carried out over a period of 18 months to test product design and characteristics, marketing concept, and competitive strengths. In addition, dental professional focus groups and product usage tests were conducted to determine the overall acceptance of Precision.

In July 1992, CP senior management decided to launch Precision early in 1993. It was decided that Precision would be priced within the super-premium segment and distributed through the same channels as Colgate Plus. However, the decision on how to position the product and the corresponding branding and communications strategies remained to be finalized.

Positioning

Precision was developed with the objective of creating the best brush possible and as such, becoming a top-of-the range, super-premium product. It could be positioned as a niche product to be targeted at consumers concerned about gum disease. As such, it could command a 15% price premium over Oral-B and would be expected to capture 3% of the U.S. toothbrush market by the end of the first year following its launch. Alternatively, Precision could be positioned as a mainstream brush, with the broader appeal of being the most effective brush available on the market. It was estimated that, as a mainstream product, Precision could capture 10% of the market by the end of the first year. Steinberg developed a marketing mix and financial projections for both scenarios, and this information is summarized in **Table C**. Her assumptions and calculations for the niche and mainstream positioning scenarios were as follows:

Volumes Steinberg believed that with a niche positioning, Precision retail sales would represent 3% volume share of the toothbrush market in year 1 and 5% in year 2. With a mainstream positioning, these volume shares would be 10% in year 1 and 14.7% in year 2. Total category unit volumes were estimated at 268 million in 1993 and 300 million in 1994. **Table C** outlines how these unit volumes would reach the consumer:

Table C How Unit Volumes Reach Consumer

	NICHE POSITIONING STRATEGY	MAINSTREAM POSITIONING STRATEGY
# units retail	Year 1 = 8 MM, Year 2 = 15 MM.	Year 1 = 26.8 MM, Year 2 = 44.1 MM.
# units consumer promotion sampling	Year 1 & 2 = 2 MM.	Year 1 & 2 = 7 MM.
# units through professionals	Year 1 & 2 = 3 MM.	Year 1 & 2 = 8 MM.

Capacity and Investment Costs Three types of equipment were required to manufacture the Precision brush: tufters; handle molds; and packaging machinery. **Table D** gives the cost, depreciation period, and annual capacity for each class of equipment.

Table D

	Investment Cost	Annual Capacity	Depreciation time
Tufters	\$500,000	3 MM units	15 years
Handle Molds	\$300,000	7 MM units	5 years
Packaging	\$150,000	40 MM units	5 years

Production Costs and Pricing Production was subcontracted to Anchor Brush who also manufactured CP's Plus line of toothbrushes. Production costs included warehousing and transport costs. Under a niche positioning strategy, Steinberg decided that CP would establish a factory list price to the trade of \$2.13, a premium over Oral-B regular and at parity with Oral-B Indicator. The mainstream strategy price would be \$1.85, at parity with Oral-B regular. In practice however, almost all sales to the trade were made at a discount of approximately 5%. Eighty percent of sales through dental professionals would be priced at \$0.79 per unit; the remainder would be sold at \$0.95.

Positioning Precision as a mainstream toothbrush raised concerns about the possible cannibalization of Colgate Plus and about pressure on production schedules that had been developed for a niche positioning. Production capacity increases required 10 months' lead time, and switching to a mainstream positioning could result in inadequate supply of product. Some executives argued that unsatisfied demand could create the perception of a "hot" product but others felt that the problems associated with allocating limited supplies among trade customers should be avoided if possible. They argued for an initial niche positioning, which could later be broadened to a mainstream positioning as additional capacity came on line.

The positioning decision had important implications for the appropriate shelf location of Precision. Steinberg believed that the best location for Precision on the retail shelves would be between the Colgate Plus and Oral-B product lines, with the Colgate Classic product line on the other side of Colgate Plus. She wondered however, if mainstream Precision could be located separately from the other Colgate lines, close to competitive super-premium toothbrushes such as Aquafresh Flex and Crest Complete. If Precision was positioned as a niche product, with 4 SKUs, it was unlikely that any existing SKUs would be dropped. However, positioning Precision as a mainstream product, with 7 SKUs, would probably require dropping one or more existing SKUs such as a slow-moving children's brush from the Plus line.

Steinberg also believed that the positioning decision would impact distribution and percentage of sales by class of trade. Specifically, she reasoned that Precision, positioned as a niche product, would be carried primarily by food and drug stores. Under a mainstream launch scenario, a relatively greater proportion of sales would occur through mass merchandisers and club stores. Steinberg consolidated her best estimate of the cost and price data (see **Table E**). When combined with the unit volume estimates in **Table C**, she hoped to develop a pro-forma income statement to compare the profit implications of the niche versus mainstream positioning strategies. She remained uncertain, however, about cannibalization; anywhere from 35% to 60% of the volumes indicated in **Table C** could come from Colgate Classic and Colgate Plus.

Table E Alternative Positioning Scenarios for Precision

	Precision as a Niche Product	Precision as a Mainstream Product
Planned capacity unit volume	Year 1 = 13 MM units Year 2 = 20 MM units	Year 1 = 42 MM units Year 2 = 59 MM units
Investment in capacity, where year 2 figures are for additional capacity	Year 1 = \$3.250 M Year 2 = \$1.300 M	Year 1 = \$9.100 MM Year 2 = \$3.900 MM
Depreciation costs (Derived from Table D)	Year 1 = \$316,667 Year 2 = \$450,000	Year 1 = \$ 886,667 Year 2 = \$1,270,000
Manufacturer per unit cost: Year 1 and 2	\$0.66	\$0.64
- Manufacturer price	\$2.02	\$1.76
- Suggested retail price	\$2.89	\$2.49
Advertising- Year 1	\$ 5 Million	\$15 Million
- Year 2	\$ 5 Million	\$12 Million
Consumer Promotions- Year 1	\$4.6 Million	\$13 Million
- Year 2	\$ 4 Million	\$10 Million
Trade Promotions- Year 1	\$1.6 Million	\$4.8 Million
- Year 2	\$2.7 Million	\$ 7 Million
# SKUs		
- Brushes	4 adult	6 adult/1 child
- Colors	6 colors	6 colors

Branding

At the time consumer concept tests were carried out by the task force, name tests were also conducted among those consumers positively disposed towards the concept. Alternative names tested included Colgate Precision, Colgate System III, Colgate Advantage, Colgate 1.2.3, Colgate Contour, Colgate Sensation, and Colgate Probe. The Colgate Precision name was consistently viewed more favorably—it was deemed appropriate by 49% of concept acceptors and appealing by 31%.

CP executives had not yet decided the relative prominence of the Precision and Colgate names on the package and in advertising. They debated whether the brush should be known as “Colgate Precision” or as “Precision by Colgate.” Executives who believed that the product represented “big news” in the category argued that the product could stand alone and that the Precision brand name should be emphasized. Stressing *Precision* as opposed to *Colgate* would, it was argued, limit the extent of cannibalization of Colgate Plus. It was estimated, both under the mainstream and niche positioning scenarios, that cannibalization figures for Colgate Plus would increase by 20% if the Colgate brand name was stressed but remain unchanged if the Precision brand name was stressed. On the other hand, CP’s stated corporate strategy was to build on the Colgate brand equity.

Communication and Promotion

Once the basic product design was established, four concept tests, conducted among 400 adult professional brush users (Colgate Plus, Reach, and Oral-B users) 18 to 54 years of age, were run during 1990-1991. Consumers were exposed to various product claims in prototype print advertisements and then asked about the likelihood that they would purchase the product (see **Exhibit 16** for copies of the advertisements). The results of these tests are summarized in **Exhibit 17** and indicate that a claim that the toothbrush would prevent gum disease motivated the greatest purchase intent among test consumers. Additional consumer research, including in-home usage tests, revealed that 55% of test consumers found Precision to be very different from their current toothbrushes, and 77% claimed that Precision was much more effective than their current toothbrush.

Precision's unique design could remove more plaque from teeth than the other leading toothbrushes on the market. However, the brush looked unusual and test participants sometimes had mixed first impressions. A further problem was that the benefit of reduced gum disease from extra plaque removal was difficult to translate into a message with broad consumer appeal, since few consumers acknowledged that they might have gum disease. Steinberg believed that Precision was the best brush for people who cared about what they put in their mouths but was still searching for the right superiority claim.

Consumer research revealed that the more test consumers were told about Precision and how it worked, the greater their enthusiasm for the product. Precision created such a unique feel in the mouth when used that consumers often said, "You can really feel it working." Once tried, consumer intent to purchase rose dramatically, and Steinberg therefore concluded that sampling would be critical to Precision's success.

There was considerable debate over the CP toothbrush advertising and promotion budget, which amounted to \$24.1 million in 1992, with \$9.6 million in advertising and \$14.4 million in consumer and trade promotion. Some executives thought the budget should remain level as a percentage of sales in 1993 and be allocated among Classic, Plus, and Precision. Others believed it should be increased substantially to support the Precision launch with no reduction in planned support for Classic and Plus. One proposal consistent with a niche positioning for Precision was to increase total CP category spending by \$11.2 million and to allocate this to the Precision launch. However, Steinberg believed that this was not enough to permit Precision to reach its full sales potential. She argued for an 80% increase in CP category spending in 1993, with fully 75% of all advertising dollars assigned to Precision and 25% to Plus. However, the Colgate Plus product manager, John Phillips, argued that Plus was the bread-and-butter of CP's toothbrush line and claimed that his mainstream brand should receive more rather than less support if Precision was launched. He argued that continued support of Plus was essential to defend its market position against competition.

Consumer promotions were planned to induce trial. Steinberg was considering several consumer promotions to back the launch: a free 5 oz. tube of Colgate toothpaste (retail value of \$1.89) with the purchase of a Precision brush in strong competitive markets; and a 50%-off offer on any size of Colgate toothpaste (up to a value of \$1.00) in conjunction with a 50¢ coupon on the Precision brush in strong Colgate markets. The cost of this promotion was estimated at \$4 million and Steinberg believed it should be used as part of the launch program for a mainstream positioning strategy. The Colgate Plus product manager pressed for trade deals to load the trade in advance of the Precision launch. He believed that the trade would be unlikely to support two Colgate brushes at any one time. However, Steinberg believed that the launch of Precision would enable CP to increase its overall share of trade advertising features and special displays in the toothpaste category.

Another important tactic was to use dentists to sample consumers since professional endorsements were believed important to establishing the credibility of a new toothbrush. Steinberg believed that, under the niche scenario, 3 million Precision brushes could be channeled through dental professionals in the first year after the launch, versus 8 million under the mainstream scenario.

Conclusion

Steinberg believed that Precision was more than a niche product or simple line extension and that the proven benefits to consumers represented a technological breakthrough. She wondered how Precision should be positioned, branded, and communicated to consumers, as well as what the advertising and promotion budget should be and how it should be broken down. Steinberg had to develop a marketing mix and profit-and-loss pro forma that would enable Precision to reach its full potential, yet also be acceptable to Burton and her colleagues, particularly the Colgate Plus product manager.

Exhibit 1 Income Statements for Colgate-Palmolive Toothbrushes: 1989-1992

	1989		1990		1991		1992E	
Unit sales ('000s)	55,296		63,576		70,560		78,336	
Net sales (\$'000s)	43,854	(100%)	57,248	(100%)	77,001	(100%)	91,611	(100%)
Cost of sales	23,988	(55%)	28,190	(49%)	36,827	(48%)	44,846	(49%)
Total fixed overhead	4,429	(11%)	6,304	(11%)	10,007	(13%)	11,423	(12%)
Total advertising								
Media	3,667	(8%)	6,988	(12%)	8,761	(11%)	9,623	(11%)
Consumer promotions	4,541	(10%)	5,893	(10%)	5,286	(7%)	6,978	(8%)
Trade promotions	3,458	(8%)	4,134	(7%)	6,287	(8%)	7,457	(8%)
Operating profit	3,744	(9%)	5,739	(10%)	9,833	(13%)	11,284	(12%)

Source: Company records

Exhibit 2 Chronology of Toothbrush Innovations in the U.S.

DATE	New Product Introductions	Main Feature
1950s	Oral-B Classic	Traditional square head
1977	Johnson & Johnson Reach	First angled handle
1985	Colgate Plus	First diamond-shaped head
1986	Lever Bros. Aim	Slightly longer handle
1988	Johnson & Johnson Prevent	Aids brushing at 45 angle
	Colgate Plus Sensitive Gums	Softer bristles
1989	Pepsodent	"Commodity" brush
	Oral-B Ultra	Improved handle
1990	J&J Neon Reach	Neon-colored handle
	Oral-B Art Series	Cosmetic feature
1991	Colgate Plus Angle Handle	Diamond-shaped & angled handle
	Colgate Plus Wild Ones	Cosmetic feature
	J&J Advanced Reach Design	Rubber-ridged, non-slip handle
	Oral-B Indicator	Bristles change color
	Aquafresh Flex	Flexible handle neck
	Pfizer Plax	Groove for thumb
1992	Crest Complete	Rippled bristles
	Colgate Precision	Triple action bristles

Source: Company records

Exhibit 3 Brand Decision Factors for Consumers

Main Reasons for Using a Brand	Percent of Consumers
Fits most comfortably in my mouth	63%
Best for getting at hard-to-reach places	52%
The bristles are the right softness	46%
The bristles are the right firmness	36%
Toothbrush my dentist recommends	35%
Important part of my oral care regimen	30%

Source: Company records

Note: Respondents could check multiple items.

Exhibit 4 Toothbrush Brand Prices: 1992

	Manufacturer List Price	Manufacturer Net Price	Average Retail Selling Price (Food channel)
Super-premium			
Oral-B Indicator	\$2.13	\$1.92	\$2.65
Oral-B Regular	\$1.85	\$1.78	\$2.51
Crest Complete	\$1.67	\$1.67	\$2.40
Reach Advanced	\$1.75	\$1.66	\$2.38
Aquafresh Flex	\$1.85	\$1.61	\$2.32
Professional			
Colgate Plus	\$1.42	\$1.35	\$2.00
Reach Regular	\$1.37	\$1.30	\$2.01
Pepsodent Prof.	\$1.20	\$1.08	\$1.88
Value			
Colgate Classic	\$0.69	\$0.69	\$1.22
Pepsodent Regular	\$0.91	\$0.48	\$1.25

Source: Company records

Note: Net price was the effective manufacturer's price to retailers after a variety of discounts.

Exhibit 5 Principal Toothbrush Brand Product Lines : August 1992

BRAND	Number of Stockkeeping Units	
	Adult	Child/Teen
Colgate	28	8
Oral-B	16	5
Reach	14	4
Crest Complete	10	0
Aquafresh Flex	6	1
Lever	7	2
Plax	2	1
Total	83	21

Source: Company records

Exhibit 6 Principal Toothbrush Brand Unit and Dollar Market Shares: 1989-1992E

BRAND	1989		1990		1991		1992E	
	Vol (%)	\$ (%)	Vol (%)	\$ (%)	Vol (%)	\$ (%)	Vol (%)	\$ (%)
COLGATE								
Plus	12.0	12.6	13.7	15.2	16.9	18.5	17.3	18.5
Classic	8.5	6.6	8.1	6.2	6.4	4.9	4.9	2.9
TOTAL	20.5	19.2	21.8	21.4	23.3	23.4	22.2	21.4
ORAL-B								
Oral-B Indicator	0.0	0.0	0.0	0.0	1.0	1.3	3.7	4.9
TOTAL	24.0	31.7	24.5	32.6	23.1	30.7	19.8	26.2
J & J								
Reach	18.1	20.5	18.2	20.0	17.8	20.0	15.2	15.8
Reach Advanced Design	0.0	0.0	0.0	0.0	0.7	0.9	4.0	5.2
Prevent	2.5	2.7	1.6	1.9	0.7	1.1	0.2	0.1
TOTAL	20.6	23.2	19.8	21.9	19.2	22.0	19.4	21.1
LEVER	10.5	10.4	9.8	9.0	7.2	6.6	5.0	4.0
CREST	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.6
AQUA-FRESH	0.0	0.0	0.0	0.0	0.9	1.1	4.6	5.7
BUTLER	N/A	N/A	N/A	N/A	2.0	2.4	2.0	2.2
PRIVATE LABEL	N/A	N/A	N/A	N/A	11.2	5.9	11.5	6.1

Source: Company records

Note: N/A = not available.

Exhibit 7 Principal Toothbrush Brand Unit and Dollar Market Shares by Class of Trade: 1991

	FOOD		DRUG		MASS	
	Vol (%)	\$ (%)	Vol (%)	\$ (%)	Vol (%)	\$ (%)
COLGATE						
Plus	18.9	21.3	9.6	11.4	29.3	31.4
Classic	7.0	4.8	4.5	3.7	3.9	3.2
TOTAL	25.9	26.1	14.1	15.1	33.2	34.6
ORAL-B						
Oral-B Indicator	0.9	1.1	1.0	1.5	0.7	0.9
TOTAL	20.5	28.2	25.1	34.1	22.4	27.6
J & J						
Reach	22.3	23.8	14.3	16.6	18.3	20.7
Reach Advanced Design	1.2	N/A	0.3	0.4	0.3	0.4
Prevent	0.8	1.2	0.8	0.9	0.5	0.6
TOTAL	23.2	25.0	15.1	17.5	18.8	21.4
LEVER	9.1	8.9	5.8	5.6	6.3	7.4
CREST (TX test market)	5.1	6.5	0.0	0.0	0.0	N/A
AQUA-FRESH	4.9	N/A	0.4	0.5	0.3	0.5
BUTLER	1.3	2.0	3.5	6.6	0.5	0.9
PRIVATE LABEL	10.7	5.5	17.4	10.6	4.4	2.4

Source: Company records

Exhibit 8 Principal Toothbrush Media Advertising Expenditures and Shares of Voice: 1991-1992E

	1991		1992E	
	Media \$MM	Share Voice(%)	Media \$MM	Share Voice(%)
Colgate Plus	7.0	19	8	15
Reach	15.5	42	17.1	31
Oral-B	10.2	27	11.2	20
Crest Complete	0.4	1	6.4	12
Aquafresh Flex	0.4	1	10	18
Pfizer Plax	2.3	6	2.2	4

Source: Company records

Exhibit 9 Television and Advertising Copy Strategies and Executions for Competitor Toothbrush Brands: 1991

PRODUCT	MESSAGE	TAG-LINE	EXECUTION
Crest Complete	Has rippled bristles to reach between teeth (37% further than a flat bristled brush).	"Only Crest could make a brush this complete."	Visual comparison of Crest Complete versus a dental tool.
Aquafresh Flex	Has a flexible neck that is gentle on the gums.	"For gentle dental care"	Spokesperson / demonstration
Advanced Design Reach	Features a new head/handle design.	"Advanced Design Reach"	Visual demonstration of product design with cartoon character.
Oral-B Indicator.	Will tell you when to change your toothbrush.	"The brand more dentists use"	Testimonial with demonstration.
Plax	Is especially designed to remove plaque.	"The new Plax, plaque removing toothbrush"	Computer graphic display of product design.

Source: Company records

Exhibit 10 Colgate Plus Television Advertising; Copy Strategies and Execution: 1985-1992.

Date	Marketing Situation	Colgate Copy Platform	Execution	Tag-line
1985-1986	First toothbrush with diamond-shaped head. First professional toothbrush from a leading oral care company.	Unique head. Scientific / technical tone. Comfort and efficacy.	Product depicted as a hero.	"Shaped to keep your whole mouth in shape"
1987-1990	Aim enters market, spurring increased competition. Colgate Plus market share suffers.	Diamond-shaped head. Evolution of comfort/efficacy Lighter contemporary tone Implied superiority Emphasizes visual differences	"Odd looking" toothbrush character introduced in bathroom setting.	"Odd looking, super-cleaning, comfy feeling toothbrush."
1991	Need to re-energize Colgate advertising copy given long duration of "Odd Looking" campaign.	Diamond shape fits mouth and removes plaque from hard-to-reach places.	The "Odd looking" character in a dental chair. Implied dental recommendation.	"Because your smile was meant to last a lifetime"
1992	Increased competitive activity and consequent need for harder-hitting copy.	Plaque focus Efficacy message	"Armed to the Teeth" execution where the bristles are soldiers.	"In the fight against plaque, it's a Plus"

Source: Company records.

Exhibit 11 Advertising and Promotion Expenditures for Colgate-Palmolive Toothbrushes:
1989-1992E (\$ in thousands)

	1989		1990		1991		1992E	
Media ^a	\$3,667	(31%)	\$6,988	(41%)	\$8,761	(43%)	\$9,623	(40%)
Consumer Promotions	4,541	(39%)	5,893	(35%)	5,286	(26%)	6,978	(29%)
Trade Promotions	3,485	(30%)	4,134	(24%)	6,287	(31%)	7,457	(31%)
Total Advertising and Promotion	\$11,693	(100%)	\$17,015	(100%)	\$20,334	(100%)	\$24,058	(100%)

Source: Company records

^a Includes: working media expenditures; production and operating costs; and dental professional advertising.

Exhibit 12 Colgate Toothbrush Point-of-Sales Display Racks

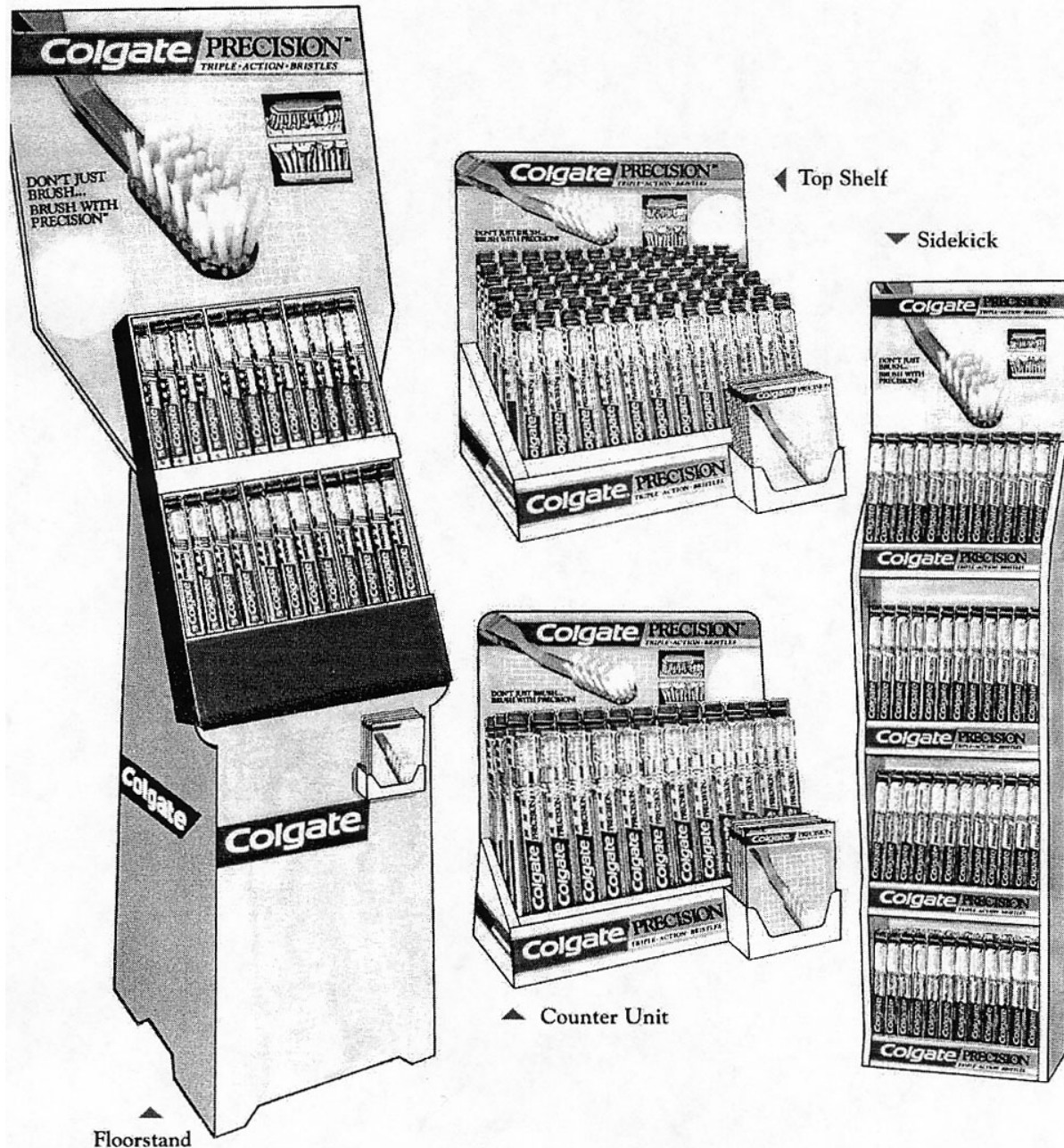


Exhibit 13 Retail Toothbrush Sales: 1989-1992E

	1989			1990			1991			1992E						
	Units MM	\$ MM		Units MM	\$ MM		Units MM	\$ MM		Units MM	\$ MM					
Food stores	110	(45%)	175	(47%)	107	(44%)	175	(44%)	110	(42%)	192	(42%)	128	(42%)	236	(43%)
Drugstores	77	(32%)	123	(33%)	74	(31%)	131	(33%)	77	(29%)	148	(33%)	88	(29%)	168	(31%)
Mass merchandisers	46	(19%)	61	(17%)	44	(18%)	69	(18%)	54	(21%)	89	(20%)	68	(21%)	114	(21%)
Military	4	(2%)	5	(1%)	5	(2%)	5	(1%)	5	(2%)	5	(1%)	5	(2%)	6	(1%)
Club stores	3	(1%)	4	(1%)	9	(4%)	11	(3%)	12	(5%)	15	(3%)	15	(5%)	19	(3%)
Other	3	(1%)	4	(1%)	3	(1%)	4	(1%)	3	(1%)	4	(1%)	3	(1%)	4	(1%)

Source: Company records

Exhibit 14 U.S. Professional Dental Market for Toothbrushes: Competitor Market Shares: 1991-1992E

Brand (Parent Co)	1991		1992E	
	\$ millions	Market Share (%)	\$ millions	Market Share (%)
Oral-B (Gillette)	14.3	34.0	14.3	31.8
Butler (Sunstar)	8.5	20.2	8.5	18.9
Colgate (CP)	6.7	16.1	8.3	18.4
Reach (J&J)	4.0	9.5	4.0	8.9
Pycopy (Block)	3.4	8.1	3.4	7.6
Aquafresh Flex (Beecham)	0.0	0.0	0.4	0.9
Crest Complete (P&G)	0.0	0.0	0.8	1.7
Other	5.1	12.1	5.4	11.9
TOTAL	42.0		45.0	

Source: Company records

Note: Aquafresh Flex and Crest Complete were not launched until 1992.

Exhibit 15 Reproductions of the Colgate Precision Toothbrush

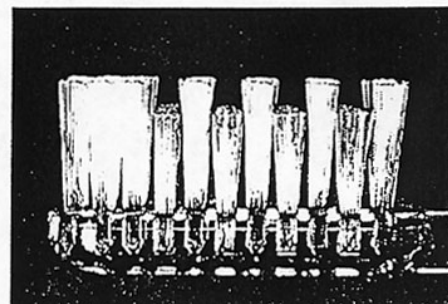
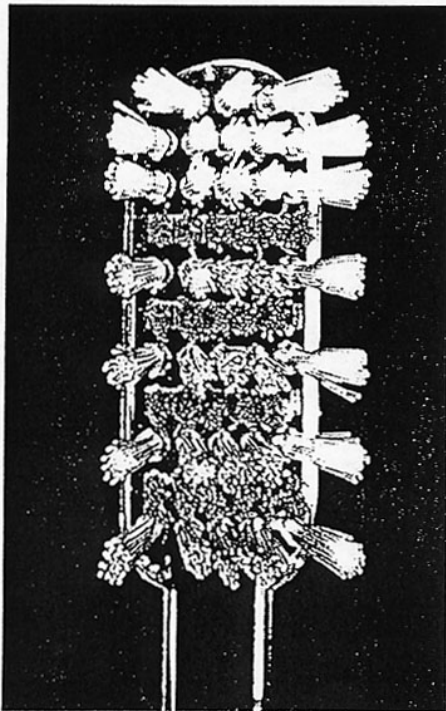
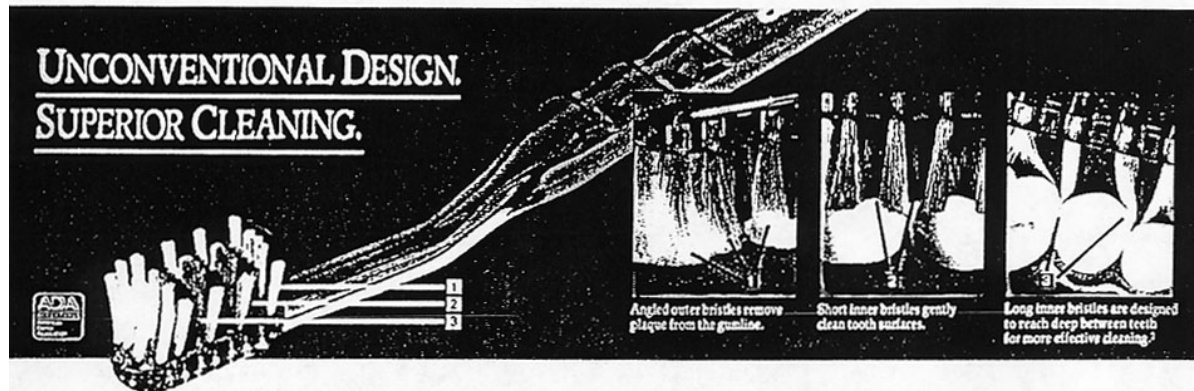



Exhibit 16 Copies of the Advertisements used in the Consumer Concept Tests

PLAQUE REMOVER

Introducing a New Toothbrush from Colgate

This New Toothbrush Removes More Plaque Than The Leading Toothbrushes



Your current toothbrush may not be removing enough sticky bacterial plaque that is harmful to your teeth. This new toothbrush is clinically proven to remove more plaque than the leading toothbrushes because it's designed to clean plaque from those hard-to-reach trouble spots.

It's the unique brush design that allows this toothbrush to remove so much plaque. Short, tightly packed bristles sweep away plaque from the surfaces of your teeth. At the same time, long angled bristles search out and remove plaque between teeth, in crevices, and at the gum line. No other toothbrush is designed to remove plaque like this.

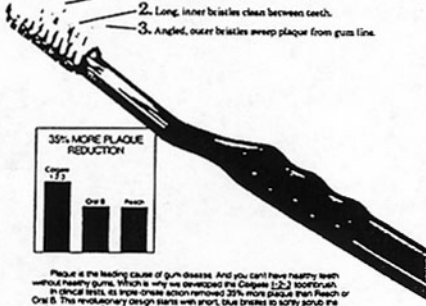

So you can remove more plaque than ever before.

INTRODUCING Colgate 1-2-3
DESIGNED TO BE THE BEST TOOTHBRUSH FOR PREVENTING GUM DISEASE BECAUSE IT REMOVES MORE PLAQUE—35% MORE THAN REACH OR ORAL B.

"35% More Plaque/Prevent Gum Disease"

TRIPLE-BRISTLE ACTION

1. Short, blue bristles scrub surfaces of teeth.
2. Long, inner bristles clean between teeth.
3. Angled, outer bristles sweep plaque from gum line.

Plaque is the leading cause of gum disease. And you can't have healthy teeth without healthy gums. Which is why we developed the Colgate 1-2-3 toothbrush. In clinical tests, its triple-bristle action removed 35% more plaque than Reach or Oral B. This revolutionary design starts with short, blue bristles to scrub the surfaces of teeth. Between those are long, inner bristles, scientifically spaced to gently remove plaque between teeth. And then to make this the most comprehensive brush for fighting plaque, we added angled, outer bristles to sweep plaque from the gum line. So it works gently and thoroughly to get to the plaque spots your dentist is so concerned about.

Colgate 1-2-3. The most effective toothbrush for removing the leading cause of gum disease—plaque.

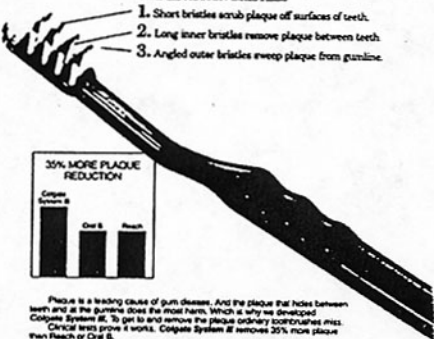

Colgate 1-2-3
 Available with softening, salt, or medium bristles.

INTRODUCING THE Colgate SYSTEM III TOOTHBRUSH.
DESIGNED TO HELP STOP GUM DISEASE BEFORE IT STARTS BECAUSE IT REMOVES MORE PLAQUE—35% MORE THAN REACH OR ORAL B.

"GUM DISEASE ONLY"

TRIPLE-ACTION BRISTLES

1. Short bristles scrub plaque off surfaces of teeth.
2. Long inner bristles remove plaque between teeth.
3. Angled outer bristles sweep plaque from gumline.

Plaque is a leading cause of gum disease. And the plaque that hides between teeth and at the gumline does the most harm. Which is why we developed Colgate System III. To get to and remove the plaque ordinary toothbrushes miss. Clinical tests prove it works. Colgate System III removes 35% more plaque than Reach or Oral B.



Only Colgate System III has patented triple-action bristles which more effectively remove plaque from surfaces of teeth, between teeth and especially at the gumline. The bristles are uniquely spaced and angled to ensure maximum effectiveness, no matter which way you brush.

Colgate System III. To remove more plaque and help stop gum disease before it starts.

Colgate SYSTEM III
 Available with softening, salt, or medium bristles.

Brush with PRECISION
A Better Way to Avoid Gum Disease... Because it Removes More Plaque

COLGATE PRECISION **PRECISION Removes 35% More Plaque**

1 Angled Outer Bristles
2 Long Inner Bristles
3 Short Blue Bristles

The new COLGATE PRECISION toothbrush is scientifically designed to remove more disease-causing plaque. Ordinary toothbrushes concentrate on the surface of your teeth, but don't do a thorough job of removing plaque where it hides and can do the most harm—at the gumline and between your teeth. PRECISION is different. It has patented Triple Action Bristles for better cleaning. Angled outer bristles gently sweep plaque from the gumline. Long inner bristles reach deep to clean between teeth. Shorter, densely-packed blue bristles scrub tooth surfaces.

And PRECISION is very gentle on your gums. Independent clinical tests prove that PRECISION removes 35% more plaque than Reach or Oral B. With results this good, it's no wonder the American Dental Association gave PRECISION their honored seal.

Colgate PRECISION

Exhibit 17 Summary of Consumer Concept Test Results

CONCEPT TEST 1.				
	Plaque Remover	Healthier Gums	Trouble Spots	
Probably Would Buy	69%	68%	66%	
Definitely Would Buy	15%	15%	10%	

CONCEPT TEST 2.				
	35% More Plaque Removal Prevent Gum Disease	35% More Plaque Removal	Prevent Gum Disease	Feel the Difference
Probably Would Buy	80%	71%	74%	68%
Definitely Would Buy	19%	19%	18%	14%

CONCEPT TEST 3.				
	Gum Disease/ Replacement	Gum Disease Only	Replacement Message	Trouble Spots
Probably Would Buy	63%	72%	62%	66%
Definitely Would Buy	13%	16%	11%	14%

CONCEPT TEST 4.		
	No Price Given Prevent Gum Disease	20% Price Premium to Oral-B Prevent Gum Disease
Probably Would Buy	87%	61%
Definitely Would Buy	29%	19%

Source: Company records

Note: "Definitely would buy" is a subset of "probably would buy"