



H.J. Heinz Co.: Plastic Bottle Ketchup (A)

In March 1983, Barbara Johnson, product manager on Heinz ketchup, was debating whether or not to launch ketchup in a new plastic bottle and, if so, what level of support to place behind the move. The new product had been in development for three years. Johnson commented: "I have to determine if the plastic bottle is truly a 'big idea' or just another line extension."

Company Background

H.J. Heinz Company was founded in 1869 on a packaging innovation: Henry Heinz packaged horseradish in clear glass jars. In fiscal year (FY) 1983 (ending April 30), the food manufacturer recorded sales of \$3.7 billion and net income of \$214.3 million. During the previous 10 years, sales had grown at an average annual rate of 12.7%, and earnings per share at 14.6%. In the United States, H.J. Heinz Co. consisted of five subsidiaries: Heinz USA, Star Kist Foods, Ore Ida Foods, Hubinger Co., and Weight Watchers International. Star Kist marketed tuna and pet foods (9-Lives), Ore-Ida frozen potato products, and Hubinger industrial corn sweeteners. Weight Watchers International promoted well-known weight-control programs. Heinz USA, the oldest subsidiary, employed 6,000 people and marketed such diverse products as ketchup, pickles, vinegar, baby foods, soups, ALBA dry beverage mixes, and food-service products.

Heinz USA employed a 200-person sales force that covered the northeastern and north central regions. Salespeople were compensated on salary plus a bonus linked to two volume goals: a ketchup goal and a second goal covering all other products. Heinz used brokers in the South and West.

Heinz had been selling ketchup for over a century. By FY 1983, it held a 45.6% share of retail ketchup volume and a 45.0% share of food-service volume, making it the dominant competitor in the ketchup market. Heinz retail ketchup sales were \$215 million and accounted for 30% of Heinz USA sales and 35% of profits; Heinz food-service ketchup sales were \$175 million.

Heinz manufactured ketchup at three plants, one of which had the world's fastest filling line for large-sized ketchup varieties. The company actively pursued technological innovations. In an early application of genetic engineering to a commercial food crop, Heinz researchers created a "super tomato" with a higher solid content and better acid balance specially suited for ketchup production.

This case was written by Research Assistant John L. Teopaco, under the direction of Associate Professor John A. Quelch, as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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Heinz USA's Product Management System

Exhibit 1 shows the organizational structure of Heinz USA's product management system. Prior to 1980, the divisions were aligned with the factories; each division marketed the products made in a single plant. In 1980, the divisions were restructured to provide a greater marketing orientation. The product management organization included 40-50 professionals. Product managers were responsible for individual brands (such as Heinz ketchup), and they reported to group product managers who, in turn, reported to the general managers. Each general manager was in charge of a major product group. The Packaged Goods general managers, for example, managed more cost-sensitive, trade/push-oriented products, so the two general managers in this area were heavily involved in manufacturing cost-control projects. In contrast, the Consumer Products general managers handled more pull-oriented products.

Heinz considered its product management system lean and flexible. The number of management layers above an individual depended upon the person's level of experience. In describing the system, one Heinz manager stated: "We need people who are independent, self-starting, see what needs to get done, ask the right questions, and do not need to have their hand held through the system." Because of the organization's leanness, it was not easy to rotate managers systematically from one type of brand to another. On the other hand, the nature of assignments—particularly the products under each general manager—were often changed according to an individual's experience and development needs.

The ketchup brand group consisted of an assistant product manager, two associate product managers, and a product manager reporting to a group product manager. The group met regularly with representatives of other functions including packaging, product development, purchasing, production planning, engineering, and sales planning.

The Ketchup Market

Category Consumption. In FY 1983, U.S. retail ketchup sales were 33.8 million (equivalent) cases¹ valued at \$434 million in manufacturers' selling prices. Ketchup was the twenty-ninth largest dry grocery food category in the U.S., up from thirty-fifth in 1981. During the previous three years, retail ketchup volume had increased at an average annual rate of 3%. Increasing consumption of ketchup was believed to reflect life-style trends favoring quick, convenient meals, such as hamburgers. In addition, ketchup consumption was thought to be correlated negatively with the price of beef which had fallen during each of the previous three years.

Major Competitors. Heinz, Hunt's, and Del Monte were the three major ketchup brands. Hunt's was owned by Esmark, Inc., and Del Monte by R. J. Reynolds, Inc. Hunt's ketchup sales accounted for 3% of Esmark's U.S. Foods Division sales while Del Monte ketchup sales made up 5% of R. J. Reynolds' Dry Grocery and Beverages Division sales. Hunt's and Del Monte employed their own sales forces to sell their products nationwide.

Heinz's 45.6% retail share of ketchup volume in 1983 compared to Hunt's 14.1% and Del Monte's 11.8%. Private-label, generic, and minor brands made up the remaining 28.5%. Heinz volume was up 23% over the 1979 level; it was the only major brand that had grown over the past four years. **Exhibit 2** shows market shares by region for FY 1979-FY 1983. Heinz had increased its share during the previous five years, but, in FY 1983, Heinz had lost half a share point to Hunt's and private-label brands. Market shares varied by region; Heinz was strongest in the Northeast with a 60.9% market share and weakest in the West and South.

¹ One equivalent case = 24 14-oz. bottles, or 336 ounces.

Package Sizes. In 1983, the major manufacturers sold four sizes of ketchup: 14 oz., 24 oz., 32 oz., and 44 oz. **Exhibit 3** shows industry volume mix by size over the previous 20 years. In 1964, only two sizes had been available, and the 14 oz. size accounted for two-thirds of the volume. By 1983, over 80% of ketchup sales were in sizes that had not existed 20 years earlier.

Exhibit 4 shows the volume mix by size and by region for each major ketchup brand in 1983. For the three major brands, the bulk of their business was accounted for by the 32 oz. size. This size was even more important for Hunt's and Del Monte than for Heinz.

Pricing. Heinz was the highest priced ketchup brand on all sizes in all regions (except for the 24 oz. size in the West, where Del Monte was priced higher by 1.7%). **Exhibit 5** shows the major manufacturers' base selling prices and actual retail selling prices by region. Except on the 14 oz. size, Heinz's retail prices were between 1% and 9% higher than Hunt's and Del Monte's. Hunt's and Del Monte's average national retail prices differed by 3% to 6% across the different sizes. As **Exhibit 5** shows, the trade was taking the lowest margin on the 32 oz. size, which accounted for 55% of industry volume. It was believed that the trade treated the dominant 32 oz. size as a "loss leader."

Heinz had taken its last price increase in early 1982, a uniform 5% raise across the entire product line. Hunt's and Del Monte had followed with the same dollar-per-case increase. With a 40% manufacturer's gross margin, Heinz executives were concerned that Heinz might be priced too high. Fearing that competition could cut prices and gain market share from Heinz, Heinz management had resolved to try not to take any more price increases in the near future.

Trade Promotion. Trade deals and allowances played a major role in ketchup marketing. A significant proportion of FY 1983 ketchup industry volume was sold on deal, as shown below:

	14 oz.	24 oz.	32 oz.	44 oz.
Percentage of size volume sold on deal	30%	40%	90%	60%
Deal rates as % of base selling prices	9%	10%	15%	12%

Distribution. Share of market was thought to be partially correlated with level of retail distribution. Heinz, the market leader, was in practically all food stores with at least one size (97% All Commodity Volume),² followed by Hunt's (84% ACV) and Del Monte (72% ACV). **Exhibit 6** shows retail distribution during FY 1983 by brand and by size.

Heinz average sales per linear foot of grocery shelf space, \$1,021 per year, were significantly higher than sales of other ketchup brands (Hunt's—\$539, Del Monte—\$619) as well as other condiments (mustard—\$336, salad dressings—\$372). In spite of this, Heinz's share of shelf space was often less than its share of sales.

Market Development. Ketchup market development varied by region for the category and the individual brands. In terms of category volume, the South was the most important, representing 35% of volume, followed by the northeast and north central regions with 25% each, and the West with 15%. Based on a region's per capita consumption of ketchup relative to the national average, ketchup was underconsumed in the West and moderately overconsumed in the north central and southern regions. **Exhibit 7** shows category (CDI) and brand development indices (BDI) by region. Heinz was highly developed in the northeastern region (124 BDI) and underdeveloped in the West (71 BDI). Hunt's and Del Monte's BDIs were significantly more unbalanced. Hunt's was significantly overconsumed in the South (178 BDI) and underconsumed in the Northeast (47 BDI) and West (55 BDI). Del Monte had only a 26 BDI in the Northeast, but had over 120 in the other regions.

² Stores representing 97% of total U.S. grocery sales stocked at least one size of Heinz ketchup.

Advertising. In FY 1983, ketchup category advertising totaled \$18.6 million, up from \$6.7 million just three years earlier. Heinz accounted for 86% of advertising spending. **Exhibit 8** shows category spending and brand shares for FY 1980–FY 1983. Hunt's stepped up its advertising, moving from virtually no advertising in FY 1981 and FY 1982 to \$2 million in FY 1983. Del Monte did the reverse, going from \$2 million in FY 1981 to zero advertising in FY 1983.

Consumer Behavior. The average U.S. household bought the equivalent of four 32 oz. bottles of ketchup per year. The most popular uses were for hamburgers, french fries, and hot dogs. Heinz market research showed that both incidence and amount of ketchup use increased in 1983: 67% of households (vs. 65% in 1981) purchased ketchup in the previous four weeks, and they used an average of 32.3 ounces per month (vs. 30.8 ounces in 1981). Other key findings from Heinz market research showed that

- 97% of U.S. households used ketchup and 89% of all households used it at least once every week. However, level of use varied widely:

	%	%
	of Users	of Consumption
Heavy users (33 oz./mo. or more) ^a	28%	54%
Medium users (17-32 oz./mo.)	39	34
Light users (16 oz./mo. or less)	33	12

^a Heavy ketchup users consumed, on average, 67 ounces per month.

- Consumers used ketchup all year round. The volume consumed in the highest period, June-July, was only 14% higher than that consumed during the lowest period, October-January.
- Children, who made up 20% of the population, accounted for 30% of ketchup "eating occasions." Their volume per use was also greater partly due to waste in usage.

Exhibit 9 presents key tables from a 1983 national market survey conducted for Heinz by Market Facts. Brand loyalty for Heinz increased significantly between 1975 and 1983. Heinz was not as successful as Hunt's, however, in attracting heavy users. Most major brand purchasers selected the brand first, then the bottle size.

Exhibit 9 also reports ketchup user attitudes. Family acceptance and the "best flavor" were the most important product attributes. Heavy users were more likely to believe that ketchup brands were different, and they also paid closer attention to price.

New Product Introductions

During most of the 1970s, the ketchup industry focused on cost control rather than new product development. The 32 oz. size was the only new product, first introduced by Heinz in 1974. To streamline operations, Heinz closed four of its seven ketchup plants. Heinz enjoyed cost advantages over its competition due to quantity purchasing discounts on raw materials and lower transportation costs. After the 32 oz. introduction in 1974, Heinz new product development during the rest of the decade was focused on gary and Weight Watchers products.

The late 1970s and early 1980s saw two major new product introductions: the 24 oz. and 44 oz. sizes. The 24 oz. size was introduced by Hunt's and Del Monte in October 1978 as a consolidation of the 20 oz. and 26 oz. sizes. Since, by that time, the 32 oz. size accounted for nearly one-half of category volume, three smaller sizes (14 oz., 20 oz. and 26 oz.) seemed excessive. Manufacturers believed that they would be unable to hold distribution for both 20 oz. and 26 oz. sizes. The 14 oz.

bottle, used heavily in restaurants, was considered a "classic," so was left in the line. Therefore, when introducing the 24 oz. size, Hunt's and Del Monte voluntarily deleted the 20 oz. and 26 oz. sizes in all regions. In January 1979, Heinz followed with its 24 oz. introduction in the South and West. Concurrently, the company also introduced a new 44 oz., keg-shaped, glass bottle in the same regions.

The Heinz 32 oz. bottle introduced in 1974 was the first ketchup container with a keg design. Heinz 44 oz. was also a keg. The keg was rounder, squatter, and shaped more like a barrel than the classic cylindrical bottle; it also had a ring or "ear" for gripping. After its simultaneous introduction with the 24 oz. size in January 1979, the 44 oz. was rolled out into the rest of the country by April 1979, taking only four months to reach 70% ACV. In its high BDI northern markets, Heinz temporarily gained distribution for five sizes (the 44 oz. and the existing line). In these well-developed Heinz markets, Heinz was able to retain both the 20 oz. and 26 oz. sizes in distribution for a while. Since it was relatively easy to procure the necessary packaging materials and to adjust production lines, Hunt's and Del Monte followed with their own 44 oz. sizes about eight months later. Hunt's and Del Monte captured only about a quarter of the 44 oz. market, however.

Heinz introduced the 24 oz. size in its low BDI markets first, partly to facilitate the 44 oz. introduction in those areas. In these markets, Heinz managers believed that they had to delete the 20 oz. and 26 oz. items (and replace them with the 24 oz.) in order to make shelf space for the 44 oz. This was not thought to be the case in high BDI markets.

Although Heinz was two to three months behind Hunt's and Del Monte in the 24 oz. introduction in the South and West, Heinz nevertheless came to dominate this size segment. By 1983, Heinz 24 oz. had captured 5.3% of the ketchup market vs. Hunt's 2.0% and Del Monte's 1.2%. **Exhibit 10** shows market shares by size for FY 1979–FY 1983. Heinz 24 oz. distribution built rapidly, growing from 50% ACV in FY 1979 to 80% ACV in FY 1981. Hunt's 24 oz. distribution declined from 55% ACV in FY 1979 to 35% ACV in FY 1983; Del Monte's equivalent distribution levels were 57% and 38%. **Exhibit 11** shows retail distribution by size at the end of fiscal years 1979–1983.

Heinz's introduction of the 24 oz. and 44 oz. sizes was relatively easy to implement. No new capacity was required because the 44 oz. bottle could be run on the 32 oz. line, and the 24 oz. could be run on the old 20 oz. and 26 oz. lines. The sales force had no difficulty selling-in to the trade because they did not have to obtain incremental shelf space: two new items were traded for two existing items. The only additional promotional support was an introductory \$1.00 per case trade allowance and a cents-off coupon promotion for each of the two new sizes in Sunday free-standing inserts (FSIs). There was no incremental advertising spending, and the advertising did not focus on the new packages. They were not considered newsworthy enough.

The 1980s: A Period of Aggressive Marketing

The early 1980s was a period of aggressive marketing by the major brands. During this time, Heinz concentrated its efforts in the South. **Exhibit 12** shows Heinz ketchup marketing spending per case for the total United States and the South for FY 1979–FY 1983. Heinz increased total national spending per case during this period by 92%, and spending in the South by 147%. Aside from increasing advertising spending, Heinz used more competitive, comparison copy. The ads featured side-by-side demonstrations of Heinz and other national brands, pointing out Heinz's thicker consistency. **Exhibit 13** presents a Heinz TV commercial used in this campaign.

In 1982, Hunt's challenged the validity of this commercial in a complaint filed with the National Advertising Division (NAD) of the Council of Better Business Bureaus. Hunt's complained that the demonstrations were not related to normal use, and that the differences did not reflect true thickness. Heinz countered by arguing that resistance to separation was relevant to evaluating

thickness, and they also provided blind, paired comparison test results that showed preference for Heinz over Hunt's and Del Monte. The NAD concluded that the Heinz claims were substantiated.

In 1983, Hunt's and Del Monte reformulated their ketchup to improve taste and consistency. Spices were added to improve the taste, and each company invested about \$1.5 million in homogenization, a process that produced a product almost as thick as Heinz's.³ As a result, Heinz could no longer run its comparison advertising campaign. In addition, homogenization improved Hunt's and Del Monte's variable cost per bottle.

As a result, Heinz lost half a point in national market share, and 1.4 points in the South between FY 1982 and FY 1983. Heinz counterattacked with a new television advertising campaign that stressed Heinz's taste superiority and greater popularity, claiming that it was the consumer's 3 to 1 choice over any other brand. **Exhibit 14** shows a commercial from this campaign. Heinz also added extra trade deals and coupon drops in the South. Overall, however, the counterattack proved to be ineffective in fighting off Hunt's offensive. In addition, Del Monte and private label brands benefited as the two major brands competed head-to-head.

Hunt's aggressiveness, and word from packaging suppliers that plastic technology applicable to ketchup packaging was being developed, stimulated Heinz to pursue aggressively the development of a plastic bottle. Heinz had a tradition of packaging innovation—they had been first to market the 32 oz. size and the 44 oz. keg-design bottle—and wanted to be first with a plastic bottle ketchup.

The Plastic Bottle Development

In describing Heinz's attitude toward new product development, Barbara Johnson noted: "We've found that the best way to be a leader is not to act like a leader, but to be hungry, always looking for new products." Heinz first started investigating plastic packaging 15 years earlier, but not until 1980 did they contact suppliers to begin developmental work. Heinz eventually signed an exclusive agreement with American Can Co. to develop a commercially feasible technology for producing the plastic for bottling ketchup. The plastic had to form a barrier such that the plastic resins could not affect the flavor of the ketchup and oxygen could not penetrate the walls of the bottle. In addition, the plastic had to be resistant to the boiling temperature of the ketchup as it was inserted into the bottles during production.

Early in the project in 1980, only three departments at Heinz (marketing, packaging, and purchasing) were involved. Heinz did not tell suppliers of the required manufacturing equipment the full nature of the project. Heinz engineers bought parts piecemeal and made some of the equipment themselves. Company management was willing to trade slower progress for maximum secrecy. As the project showed greater viability, more Heinz departments were brought in. The project turned out to be so technically complex that management formed a task force to provide the necessary close working relationship among the various functions of purchasing, packaging, engineering, manufacturing, operations, and marketing.

Heinz's expertise with can and glass production lines was of modest value in developing a plastic line. On a glass line, for example, the weight of the bottles held them in position. Plastic bottles, however, were light and had to be secured. In addition, plastic bottles required different lubricants, a different type of glue for the labels, and special handling as they became pliable with heat. In developing a new production line, including a new bottle-filling process, Heinz borrowed

³ Homogenization processed tomatoes into very small pieces that did not coagulate, thereby producing a higher solid yield. Heinz already used this process.

technology from liquid detergent manufacturers. The company spent over \$2 million in three years to develop its proprietary plastic-packaging process.

Heinz's prototype plastic line was a converted glass line—converted at a \$1 million cost. However, the line was slower than a new line designed specifically for plastic, and higher speeds were necessary to improve profitability.

The prototype plastic bottle offered ketchup users several benefits: it was lightweight, shatterproof, squeezable for better access and portion control, and had a convenient, nonremovable flip-top cap.⁴ Unlike glass bottles, however, the plastic bottle had to be refrigerated after opening.⁵ The plastic flip-top cap allowed greater air inflow than the lug-style metal closure used on the glass bottle which provided a tighter seal. Refrigeration was necessary to retard the ketchup's oxidation, the chemical reaction of the ketchup with oxygen which resulted in the dark residue that formed around the seal. Although shatterproof, the plastic bottle was breakable—another potential drawback since consumers might mistakenly assume that all plastic containers were unbreakable. Refrigeration added to the problem since the plastic (polypropylene) became brittle with cooling.⁶

Heinz managers were confident that the plastic bottle delivered significant consumer benefits, but they were not sure which size(s) was right. Should they start with an existing size or create a new size for plastic? The ketchup brand group planned a consumer-testing program of various package sizes, primarily 64 oz. and 28 oz. Johnson and her group started with the 64 oz. size (5³/₆ " wide x 4" deep x 10³/₄ " tall) because plastic's shatterproof and lightweight attributes would be most beneficial in a large size. The plastic 64 oz. container offered 20 ounces more ketchup than the 44 oz. glass bottle but, when full, both packages weighed the same. In addition, the category trend was toward larger sizes, as evidenced by the success of Heinz 44 oz. ketchup.

As an alternative, the brand group originally considered a 32 oz. plastic bottle. But in order to attain a lower price point, a 28 oz. size (4¹/₈ " wide x 2¹/₈ " deep x 10³/₈ " tall) was pursued instead. The plastic bottle cost significantly more than a glass container of equivalent size. **Exhibit 15** shows a cost comparison of the 28 oz. plastic, 32 oz. glass, and 64 oz. plastic bottles.

Unbranded Home-Use Tests

September 1981: 64 Oz. Plastic and 64 Oz. Glass. The first in a series of product tests of the plastic bottle used a 64 oz. size. Sixty-four-ounce plastic and glass prototypes, with no brand names, were consumer tested in two monadic (separate, single-product exposure as opposed to paired comparison) home-use tests. The samples consisted of regular users of 44 oz. ketchup. Both products scored comparably on ketchup ratings, including overall flavor, spiciness, sweetness, consistency, pourability, and color; at least 80% of respondents said that both products were "about right" on each of these attributes. On overall ketchup evaluation, both products received an 82 rating (on a 100-point scale). This compared with an 83 rating that the existing 44 oz. glass package had received in a previous test.

Exhibit 16 presents results of the package ratings. On overall package evaluation, the plastic bottle received a 78 rating vs. 70 for glass. Plastic's 78 rating, however, was significantly lower than the 84 rating that 44 oz. glass had received in the earlier test.

⁴ The squeezable and flip-top cap features could be applied to smaller bottles, but not to keg-design bottles.

⁵ Over 80% of ketchup-using households kept glass bottles in the refrigerator after opening. The plastic bottle, if introduced, would have to carry a label instruction to refrigerate upon opening.

⁶ One of 10 bottles, if full and dropped from counter height after refrigeration, would break.

On unpriced purchase intent, the 64 oz. plastic product scored higher than its glass counterpart on the "definitely buy" measure. However, compared to the previous test's 49% "definitely buy" score for 44 oz. glass, plastic's 40% purchase score was significantly lower. When the 64 oz. products were priced at \$2.39, both received similar scores, but when both were priced at parity with 44 oz. glass on a per-ounce basis, plastic received a significantly higher purchase-intent score than 64 oz. glass. Respondents who tested the 64 oz. glass were asked their purchase interest in plastic, and the reverse was asked of those who tested plastic. Purchase intent was significantly higher for plastic among glass users (see **Exhibit 17**).

October 1982: 28 Oz. Plastic. Encouraged by consumer testing results of the 64 oz. plastic bottle, the brand group decided to develop and test a squeezable, 28 oz. plastic prototype. (The 64 oz. plastic package was not designed to be squeezable: it was too bulky and did not have a flip-top cap with a narrow nozzle.) In this test, 180-day-old product was used.⁷

The ketchup in the 28 oz. squeezable bottle received an 80.2 rating compared to "Benchmark Ketchup's" 81.5 rating. "Benchmark Ketchup" was a standard formulation that Heinz management used as a control for regular testing of factory production. The 28 oz. product received uniformly high scores on overall flavor, spiciness, sweetness, pourability, and color. At least 80% of respondents rated the ketchup as being "about right" on these attributes.

Exhibit 18 presents results of the package ratings. On the 100-point overall rating scale, the 28 oz. package received an 84.4 rating. The bottle used in this test had a nonremovable flip-top cap. This prevented consumers from refilling the plastic bottle with ketchup from less expensive glass bottles. Aside from a removable cap's potentially adverse effect on plastic bottle sales, Heinz management was also concerned about the hygiene risk associated with consumers' refilling ketchup bottles. Since the test bottle's flip-top was nonremovable, respondents were questioned on how this feature would affect their purchase behavior. Sixty-three percent said it made no difference, while 20% said that they would be less likely to purchase; 25% said that they tried to remove the cap.

Three purchase-intent scenarios were tested with the following results:

Purchase Intent: 28. Oz. Plastic (N=200)			
	Unpriced	Priced @ \$1.59	If Filled w/Heinz
Definitely buy	31%	20%	37%
Probably buy	52	51	43
Probably not buy	13	18	14
Definitely not buy	3	8	7

When asked to choose between a \$1.59 28 oz. Heinz plastic bottle and a \$1.32 Heinz 32 oz. glass bottle, 55% chose the latter, 40% the former.

Among the 83% of respondents who would definitely or probably buy the 28 oz. plastic bottle (unpriced), 13% said that they would buy the plastic bottle in addition to an existing ketchup size that they currently used, while 83% said that the plastic container would be used as a replacement, primarily for the 32 oz. bottle:

Size Would Replace (Base-Positive Purchase Interest, N=164)				
14 oz.	24 oz.	32 Oz.	44 Oz.	Other/Don't know
11%	10%	43%	7%	37%

⁷ The ketchup had been in the plastic bottles used in the test for 180 days. Once produced, a bottle of Heinz ketchup had a two-year life but would normally be fully consumed six months after it left the plant.

When asked what they liked about the 28 oz. plastic bottle, respondents most frequently mentioned "unbreakable," "squeezable," "easy to handle," and the "flip-top cap." One-third of respondents voiced dislikes about the plastic bottle although there was no one predominant complaint. Some of the more frequently mentioned concerns were "too large to store" and "bottom was too large." At least 85% of respondents stored the plastic bottle in the refrigerator after opening. Nineteen percent agreed strongly with the statement, "plastic squeeze containers are somewhat more expensive, but they're worth it."

"More Expensive, but Worth It " (Base-Total Respondents, N=200)

Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
19%	43%	20%	13%	5%

Conclusion

Barbara Johnson felt positive about the ketchup plastic bottle. The package received good scores in tests, and it would be the first lightweight, shatterproof, and for the 28 oz., squeezable ketchup bottle. Johnson wondered, however, if consumers would perceive it as a major innovation. After all, it was still the same product—ketchup. But in addition to the marketing research results, Johnson also knew that mustard in squeezable plastic containers, which was priced higher per ounce than mustard in glass containers, now accounted for 18% of retail volume.

Exhibit 1 Heinz USA Marketing Organization

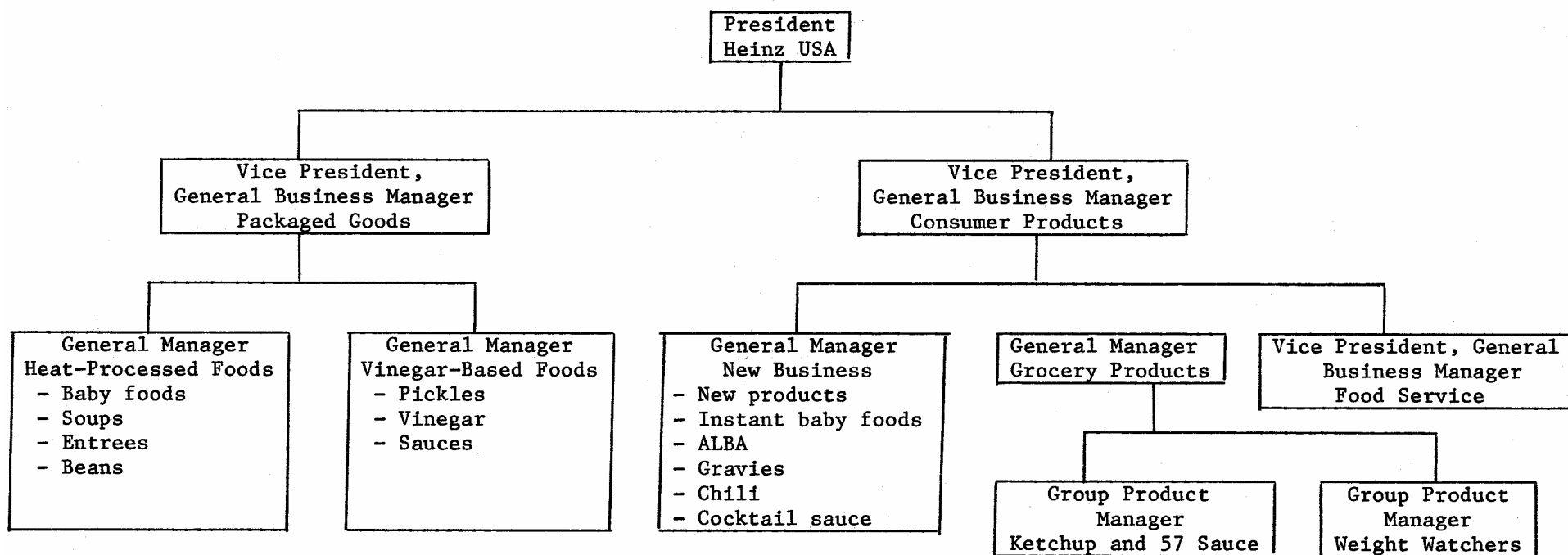


Exhibit 2 Ketchup Brand Shares by Region

		FY79	FY80	FY81	FY82	FY83
Northeast	Heinz	52.9	57.1	59.8	61.4	60.9
	Hunt's	10.1	8.9	8.3	7.8	7.0
	Del Monte	5.0	4.2	2.5	1.7	2.6
North Central	Heinz	44.2	45.6	45.4	46.1	47.6
	Hunt's	10.1	10.4	10.1	10.3	9.6
	Del Monte	16.3	13.9	15.0	13.3	12.9
South	Heinz	29.4	30.9	32.8	38.4	37.0
	Hunt's	27.9	26.0	25.2	21.5	23.6
	Del Monte	18.7	16.4	17.7	15.3	13.2
West	Heinz	33.6	34.9	36.5	37.4	36.8
	Hunt's	12.5	13.7	14.2	12.2	11.2
	Del Monte	25.5	22.4	23.3	23.7	21.7
Total U.S.	Heinz	40.1	42.0	43.4	46.1	45.6
	Hunt's	16.2	15.7	15.5	13.8	14.1
	Del Monte	15.4	13.3	13.9	12.5	11.8

Exhibit 3 Size Mix of Ketchup Category Volume

	1964	1969	1974	1979	1980	1981	1982	1983
14 oz.	68%	48%	33%	23%	22%	20%	19%	17
20 oz.	32	37	24	10	6	1	–	–
24 oz.	–	–	–	5	10	13	13	11
26 oz.	–	15	20	9	3	–	–	–
32 oz.	–	–	23	49	46	50	51	55
44 oz.	–	–	–	4	13	16	17	17
Total	100%	100%	100%	100%	100%	100%	100%	100

Exhibit 4 FY 1983 Volume Mix by Brand, Size, and Region

		14 oz.	24 oz.	32 oz.	44 oz.	Total
Northeast	Heinz	20%	14%	42%	23%	100
	Hunt's	34	14	43	9	100
	Del Monte	19	12	69	—	100
North Central	Heinz	13	12	46	28	100
	Hunt's	10	8	64	18	100
	Del Monte	9	14	60	17	100
South	Heinz	17	9	49	25	100
	Hunt's	13	16	59	12	100
	Del Monte	18	16	56	9	100
West	Heinz	21	10	41	28	100
	Hunt's	18	11	59	12	100
	Del Monte	20	10	56	14	100
Total U.S.	Heinz	18	12	45	25	100
	Hunt's	16	14	57	13	100
	Del Monte	13	11	63	13	100

Exhibit 5 1983 Manufacturer Base^a Selling Prices and Actual Retail Prices (per bottle)

		14 ounces		24 ounces		32 ounces		44 ounces	
		Mfr.	Retail	Mfr.	Retail	Mfr.	Retail	Mfr.	Retail
Northeast	Heinz	\$.64	\$.72	\$1.05	\$1.17	\$1.34	\$1.37	\$1.78	\$1.91
	Hunt's	.61	.69	.99	1.14	1.28	1.31	1.72	1.85
	Del Monte	.62	.72	1.03	1.08	1.29	1.25	N/A	2.10
North Central	Heinz	.64	.73	1.04	1.19	1.32	1.33	1.77	1.84
	Hunt's	.61	.73	1.00	1.17	1.27	1.19	1.68	1.77
	Del Monte	.61	.74	1.01	1.09	1.29	1.26	1.70	1.78
South	Heinz	.64	.76	1.04	1.22	1.32	1.30	1.77	1.89
	Hunt's	.64	.75	1.01	1.16	1.29	1.21	1.72	1.89
	Del Monte	.62	.73	1.01	1.05	1.29	1.24	1.69	1.85
West	Heinz	.63	.79	1.04	1.25	1.32	1.39	1.75	1.96
	Hunt's	.60	.78	1.00	1.17	1.25	1.27	1.69	1.95
	Del Monte	.63	.80	1.06	1.15	1.31	1.35	1.67	1.89

^a Before promotional allowances.

Exhibit 6 FY 1983 Average Retail Distribution (% ACV)

	14 oz.	24 oz.	32 oz.	44 oz.
Heinz	96%	78%	88%	80%
Hunt's	69	35	71	35
Del Monte	52	40	59	27

Exhibit 7 Ketchup Category and Brand Development Indices^a

	National	NE	NC	S	W
Category	100	94	111	109	79
Heinz	100	124	113	89	71
Hunt's	100	47	87	175	55
Del Monte	100	26	126	123	133
Annual per capita consumption of category (oz.)	51 oz.	48 oz.	56 oz.	55 oz.	40 oz.

$$^a \text{ Index} = \frac{\text{Consumption per capita in area}}{\text{Average consumption per capita nationally}}$$

Exhibit 8 Ketchup Category Advertising and Advertising Shares

	FY80	FY81	FY82	FY83
Category (\$MM)	6.7	10.5	14.4	18.6
Heinz share (%)	82	82	97	86
Hunt's share (%)	3	0	1	11
Del Monte share (%)	13	19	2	0
Private label and all other share (%)	2	0	0	3

Exhibit 9 Highlights of 1983 Market Facts Study on Ketchup Usage and Attitudes

1. Ketchup Brand Loyalty

	% Who Purchased Only One Brand in Past 3 Months	Brand Purchased Exclusively			
		Heinz	Hunt's	Del Monte	P/L, Generic, A/O
1975	45%	23%	8%	8%	6%
1983	54	34	7	7	7

	% of Respondents Who Buy This Brand Most Often, Who Bought No Other Brand in Past 3 Months				
	Heinz	Hunt's	Del Monte	Private Label	Generic
1975	55%	34%	41%	42%	NA
1983	60	35	42	40	53%

2. Ketchup Brands Purchased Last by Usage Level

	Heavy Users	Medium Users	Light Users
Heinz	51%	53%	51%
Hunt's	21	18	14
Del Monte	12	14	18
P/L, Generic, A/O	16	15	17

3. Brand vs. Size Decision on Brand Purchased Last

	Heinz	Hunt's	Del Monte	Private Label
Selected brand first, then bottle size	88%	79%	81%	55%
Selected size first, then brand	12	21	19	45

4. Size Usage

	14 Oz.	24 Oz.	32 Oz.	44 Oz.
Purchased Last	15%	13%	53%	12%
Purchased Most Often	15	16	52	12

Exhibit 9 (continued)

5. Promotional Activity on Last Purchase

	Heinz	Hunt's	Del Monte	Private Label
Regular price	44%	46%	42%	62%
"On special," no coupon	23	30	31	28
"On special," with retailer coupon	1	1	2	–
Newspaper manufacturer coupon	22	17	18	5
Magazine/Mail/On-pack coupon	9	5	6	4
On special display	18	19	21	17

6. Importance of Ketchup Attributes

	% of Users Stating Attribute Is "Very Important"			
	Total	Heavy Users	Medium Users	Light Users
Whole family likes it	64%	70%	67%	57%
Best flavor	62	63	65	58
Good value for the money	56	59	58	53
Good to use on food at the table	54	60	56	48
Brand name I trust	50	50	53	47
Thick consistency	40	42	40	37

7. Attitudes Toward Ketchup

	% Stating That They "Definitely/Generally Agree"		
	Heavy Users	Medium Users	Light Users
Brand Differentiation			
Some brands are much thicker than others	74%	66%	59%
There's a lot of difference between ketchup brands	59	57	51
Most brands of ketchup taste the same	15	15	11
Brand Loyalty			
I like to stick to one brand of ketchup	59	62	58
Price/Value			
Some brands of ketchup cost more and are worth it	47	46	46
When buying ketchup, I pay close attention to the price	57	49	45
I usually buy whatever ketchup brand is on sale	22	22	19
Packaging			
Would pay up to 20 cents more for ketchup in a plastic bottle than I would for a glass bottle	10	8	10
I like the idea of packing it in squeeze bottles	37	33	33
The convenience of squeezable packaging for ketchup makes it worth an extra 20 cents per bottle	12	10	11

Exhibit 10 U.S. Ketchup Market Shares by Size

	FY 1979			FY 1980			FY 1981			FY 1982			FY 1983		
	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte
14 oz.	8.2	3.2	2.8	8.2	3.1	3.0	8.8	2.6	2.6	8.6	2.5	2.3	8.0	2.3	1.4
20 oz.	4.3	2.0	1.5	2.6	.5	.2	.1	.1	—	—	—	—	—	—	—
24 oz.	1.7	1.3	1.9	3.7	2.7	2.7	6.7	2.0	2.4	6.2	2.2	1.6	5.3	2.0	1.2
26 oz.	4.0	.8	1.5	1.4	.3	.1	—	—	—	—	—	—	—	—	—
32 oz.	19.5	8.9	6.3	15.8	7.4	6.2	17.4	8.1	6.6	19.3	7.2	6.4	20.5	8.1	6.9
44 oz.	2.4	—	—	10.3	1.7	—	10.5	2.7	1.9	12.0	2.0	1.9	11.7	1.8	1.4

Exhibit 11 Ketchup Retail Distribution (% ACV)—End of Fiscal Year

	FY 1979			FY 1980			FY 1981			FY 1982			FY 1983		
	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte	Heinz	Hunt's	Del Monte
14 oz.	95%	70%	66%	95%	65%	62%	95%	62%	58%	95%	58%	54%	96%	79% ^a	51%
20 oz.	34	24	16	26	3	1	—	—	—	—	—	—	—	—	—
24 oz.	50	55	57	70	52	59	80	42	48	78	36	42	78	35	38
26 oz.	33	13	15	21	3	1	—	—	—	—	—	—	—	—	—
32 oz.	86	68	57	87	71	59	87	71	55	87	69	54	89	69	62
44 oz.	59	—	—	75	45	—	78	40	29	79	37	28	81	32	27

^a Increased distribution of Hunt's 14 oz. in FY 1983 was partly due to its introduction of a no-salt ketchup in that bottle size.

Exhibit 12 Heinz Ketchup Marketing Spending per Equivalent Case

	FY79	FY80	FY81	FY82	FY83
Total U.S.					
Trade Promotion	\$.75	\$1.20	\$1.06	\$1.09	\$1.20
Consumer Promotion	.30	.35	.22	.24	.42
Advertising	<u>.33</u>	<u>.42</u>	<u>.55</u>	<u>.90</u>	<u>1.01</u>
Total	\$1.38	\$1.97	\$1.83	\$2.23	\$2.63
South					
Trade Promotion	\$.83	\$1.25	\$1.14	\$1.21	\$1.43
Consumer Promotion	.38	.55	.53	.57	1.06
Advertising	<u>.37</u>	<u>.49</u>	<u>.76</u>	<u>1.20</u>	<u>1.42</u>
Total	\$1.58	\$2.29	\$2.43	\$2.98	\$3.91

Exhibit 13 1982 Heinz Ketchup TV Commercial



LEO BURNETT COMPANY, INC.

AS FILMED AND RECORDED(8/82)

"New Southern Plate Test/32 Oz." :30

H.J. HEINZ

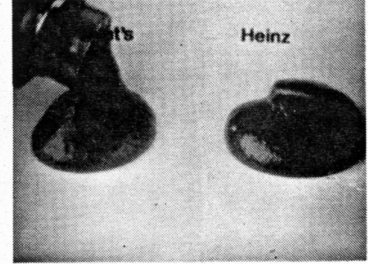
HZHK1330



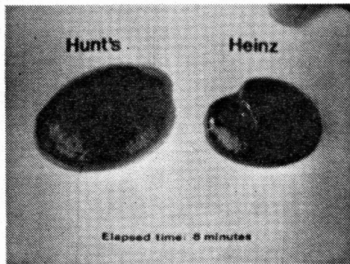
1. PULLUP (Anncr VO): If I take some Heinz Ketchup at the start of your meal...



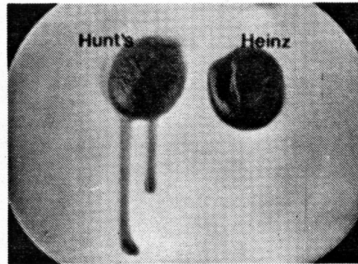
2. and put it right here...



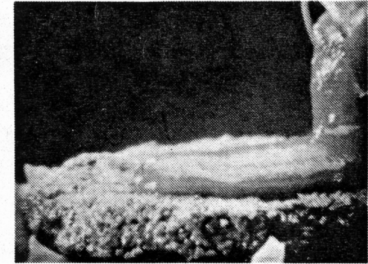
3. and put this Hunt's Ketchup right here...



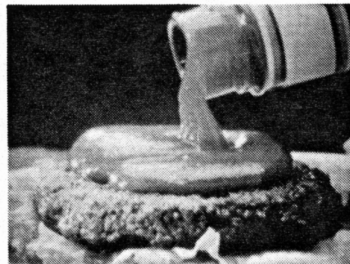
4. something amazing happens before you're half through.



5. See the difference? We challenged the competition and they ran.



6. Heinz ketchup is thicker and Heinz is never thin on flavor.



7. Now which one would you rather have on your hamburger?



8. Heinz.



9. America's thickest, best-tasting ketchup.

Exhibit 14 1983 Heinz Ketchup TV Commercial



LEO BURNETT COMPANY, INC.

AS FILMED AND RECORDED (8/83)

"RETORT II/PARITY :CC"

H.J. HEINZ CO.

HZHK3780



1. WOMAN: I decided to test Heinz ketchup myself.



2. To see why more folks choose it.



3. You know what happened?



4. Heinz didn't run.



5. Then I tasted Heinz. Because, to me, that's proof.



6. One taste and I knew which ketchup I liked best.



7. (Anncr VO): Unbeatably thick, rich Heinz is America's three to one choice over any other single ketchup. Taste it for yourself.



8. WOMAN: No contest!



9. (Anncr VO): Heinz. America's favorite for thick, rich ketchup.

Exhibit 15 Heinz Ketchup Cost Structures (per bottle)

	14 Oz. Glass	24 Oz .Glass	28 Oz. Plastic	32 Oz. Glass	44 Oz. Glass	64 Oz. Plastic
Ingredients	\$.156	\$.267	\$.314	\$.356	\$.496	\$.712
Bottle and Case	.051	.118	.321	.219	.282	.696
Cap	.029	.029	.050	.035	.035	.063
Label	.079	.091	.044	.010	.010	.098
Labor and Overhead	.027	.050	.077	.060	.083	.183
Distribution	<u>.042</u>	<u>.062</u>	<u>.096</u>	<u>.098</u>	<u>.123</u>	<u>.228</u>
Total	\$.384	\$.617	\$.902	\$.778	\$ 1.029	\$ 1.980

Exhibit 16 Results of Monadic Home-Use Tests

	September 1981 ^a		Previous Test ^b
	64 oz. Plastic (N=300)	64 oz. Glass (N=540)	44 oz. Glass (N=394)
Package Rating^c	78	70	84
Visual Appearance	%	%	%
Very attractive	12	14	18
Somewhat attractive	36	41	37
Neither attractive nor unattractive	37	35	41
Somewhat unattractive	14	9	3
Very unattractive	1	1	1
Ease of Handling by Adults (vs. 44 Oz.)			
Much easier	11	5	9
Somewhat easier	18	5	8
About the same	41	38	63
Somewhat harder	25	36	15
Much harder	3	14	3
Ease of Handling by Children (vs. 44 Oz.)^d			
Much easier	10	2	8
Somewhat easier	10	2	5
About the same	20	18	33
Somewhat harder	29	27	26
Much harder	21	37	13

^a The research was designed as two monadic home-use tests—one for the 64 oz. plastic and the other for the 64 oz. glass. Qualified respondents were recruited in shopping malls if they said they bought the 44 oz. ketchup size most often. They were given one 64 oz. bottle (plastic or glass) to use in their home for two weeks. After the usage period, telephone interviews were completed from a central research facility.

^b Qualified respondents in this test bought the 32 oz. size most often.

^c 100 = perfect, 90 = excellent, 80 = like very much. . . 20 = dislike very much, 10 = terrible, 0 = worst possible.

^d Among households with children.

Exhibit 17 Purchase Intent: 64 Oz. Plastic and Glass

	Unpriced		Priced @ \$2.39		Same Price/Oz.As 44 Oz.		For Plastic/ Glass Testers (N=540)	For Glass/ Plastic Testers (N=300)
	Plastic (N=300)	Glass (N=540)	Plastic (N=300)	Glass (N=540)	Plastic (N=300)	Glass (N=540)		
Definitely buy	40%	34%	24%	22%	47%	39%	27%	9%
Probably buy	44	39	53	50	34	31	47	39
Probably not buy	13	18	19	19	13	22	18	36
Definitely not buy	3	9	3	8	5	8	8	16

Exhibit 18 October 1982 Home-Use Test:^a 28 Oz. Plastic

	Package Ratings (N=200)
Average Rating^b—Bottle	84.4
Difficulty with Label Instructions	<u>%</u>
Yes	3
No	97
Trouble with Cap	
Yes, opening	4
Yes, closing	2
Yes, using	3
No trouble with cap	93
Problems with Seal	
Yes	10
No	90
Item Used to Break Seal	
Toothpick	7
Knife	27
Fork	16
Other	33
Try to Remove Cap	
Yes	25
No	74
Effect of Cap on Purchase	
More likely to purchase	17
Less likely to purchase	20
No difference	63

^a Respondents who had purchased ketchup (any size) in the previous 30 days.

^b 100 = perfect, 90 = excellent, 80 like very much . . . 20 dislike very much, 10 = terrible, 0 worst possible.