



# Advertising's Influence: The Case of Dairy Products

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In the early 1980's, dairy farmers were producing more milk and dairy products than Americans were consuming. Part of the surplus was due to high Government dairy-support prices which kept milk production high, and part was due to declining consumption of dairy products among consumers. For example, between 1970 and 1983, per capita consumption of fluid milk declined from about 269 pounds per year to about 227 pounds. During the same period, per capita cheese consumption declined from about 5 pounds to 4 pounds. Even per capita consumption of frozen dairy products fell from 28 pounds to 27 pounds per year over the same period. Part of the decline in the consumption of dairy products, particularly milk, was from the intense competition of soft drinks, fruit drinks, and other noncarbonated drinks aimed at adolescents and young adults.

To stem the continuing decline in dairy product consumption, many dairy farmers participated in local advertising campaigns to promote the positive benefits of dairy products. Advertising is directed toward existing and potential consumers of

a product with the objective of increasing sales. Some campaigns were conducted by individual dairies, but more commonly, groups of dairy farmers joined together in generic advertising efforts. Brand advertising promotes the particular characteristics of a given product brand, while generic advertising promotes consumption of the general commodity.

Generic advertising is used by a cooperative, or group of producers, to promote products that are essentially homogenous—one dairy farmer's 2-percent, reduced fat milk differs little from another farmer's. Because a generic message promotes a type of food or commodity, all producers in the industry benefit from the generic campaign, including "free riders" who do not contribute funds for the advertising campaign. A successful generic advertising campaign will generally increase both the quantity sold of the commodity and the price paid by the consumer.

## Two National Dairy Advertising Programs

With the surpluses of the 1980's, dairy farmers and government officials recognized the need for an inclusive and mandatory approach to generic advertising in order to reduce surpluses and increase the consumption of dairy products.

Mandatory programs are often established for fairness reasons, to ensure everyone who benefits shares in the cost.

Congress passed the Dairy Production Stabilization Act of 1983 (known as the Dairy Act), which established a national program to increase consumption of milk and dairy products and reduce milk surpluses. This self-help program is funded by a mandatory 15-cents-per-hundredweight assessment on all milk produced in the contiguous 48 States and marketed commercially by dairy farmers. It is administered by Dairy Management Incorporated (DMI), which is run by a board made up of dairy farmers to oversee the generic advertising campaigns.

Dairy farmers can direct up to 10 cents per hundredweight of the assessment for contributions to qualified regional, State, or local dairy product promotion, research, or nutrition-education programs for milk, cheese, butter, ice cream, and other dairy products. The remaining 5 cents must go to DMI for national generic advertising. DMI concentrates on generic advertising for milk and cheese. In 1996, \$76.5 million was collected under the Dairy Act—a substantial increase over the \$18.5 million spent on generic advertising in the year prior to the Dairy Act.

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Table 1

**Generic Dairy Advertising Boosts Milk and Cheese Sales**

Item	Unit	1995	1996
Total milk advertising expenditures	<i>million dollars</i>	56.4	70.5
Fluid milk sales	<i>billion pounds</i>	23.3	23.5
Sales gain due to Acts	"	1.5	1.4
Gain in sales	<i>percent</i>	6.3	5.9
Total cheese advertising expenditures	<i>million dollars</i>	50.0	30.9
Cheese sales (natural and processed)	<i>million pounds</i>	1,931.2	2,250.8
Sales gain due to Act	"	45.9	62.7
Gain in sales	<i>percent</i>	2.0	2.3

Notes: Data for milk are for 12 U.S. milk marketing orders, while cheese figures are national. 1995 covers the period October 1994 to September 1995. 1996 covers the period October 1995 to September 1996.

The Fluid Milk Promotion Act of 1990 (called the Fluid Milk Act) established a second and separate dairy promotion and education program through an assessment on milk processors of 20 cents per hundredweight for fluid milk processed and marketed in the United States. All milk processors who market more than 500,000 pounds of fluid milk per month must participate. The program is designed to strengthen the position of the dairy industry in the marketplace and to expand the consumption of fluid milk products in the United States. Advertising under this program is strictly for fluid milk and concentrates on print media. Current ads feature a celebrity sporting a milk moustache and a message informing the public about the nutritional qualities of milk. In 1996, approximately \$100 million was collected for the milk moustache campaign.

### Milk Sales 6 Percent Higher With Advertising

USDA's Economic Research Service (ERS) and Agricultural Marketing Service are currently evaluating the effectiveness of two national and associated regional programs of generic dairy advertising. ERS examined the effect of

generic advertising on fluid milk sales in 12 milk marketing regions (representing about 43 percent of the U.S. population) before and after the Dairy Act became law. The pre-Dairy-Act period includes December 1978 through August 1984. The post-Dairy-Act period begins in September 1984 (the month when advertising funds were first spent for fluid milk promotion) and runs through September 1996. Promotion expenditures in 1995 and 1996 also include the revenue collected under the Fluid Milk Act.

The analysis assumed that without the Acts, the dairy industry would have maintained advertising at \$18.5 million per year (the expenditure the year before implementation of the Dairy Act). Together, the Dairy and Fluid Milk Acts accounted for an estimated \$179 million in additional fluid milk advertising expenditures in the 12 regions from September 1984 through September 1996. ERS research suggests that during this 12-year period, the additional advertising contributed to an estimated 17-billion-pound increase in fluid milk sales (about 6 percent of total sales) in the 12 regions. (A gal-

lon of milk weighs approximately 8.6 pounds.)

Fluid milk sales in the 12 regions totaled about 24 billion pounds during October 1995 to September 1996, the most recent 12-month period for which data are available. The \$52 million in increased advertising expenditures due to the Acts during October 1995 to September 1996 is estimated to have increased sales by 1.4 billion pounds of milk, or almost 6 percent of total sales. Although the ERS analysis takes into account the effect of changes in prices, income, population, demographics, and advertising, ERS's analysis does not control for changes in consumer preferences, such as increased public concern about osteoporosis and the role calcium intake plays in lessening or preventing this condition. Factors such as this may have also contributed to increased milk sales following the Dairy and Fluid Milk Acts.

### Generic Advertising Spurs Cheese Sales

The effects of generic advertising on the sales of natural and processed cheeses were evaluated separately because of their different product characteristics and consumer purchasing patterns. Data

limitations restricted the analysis to the effects of advertising on national retail sales of cheese (for home use), accounting for about a third of the total market for cheese. The remaining cheese is used in foods away from home, such as cheeseburgers and tacos at restaurants and schools, or as ingredients in processed foods, such as ravioli or frozen pizza.

Generic advertising under the Dairy Act increased total U.S. retail cheese consumption by approximately 562 million pounds, or about 2 percent of total sales, from September 1984 to September 1996. Estimated sales of natural cheeses, like cheddar, increased about 63 million pounds (0.5 percent), while processed cheese (Velveeda-type cheeses) sales increased about 499 million pounds (5.0 percent). Generic advertising appears to be more effective in increasing processed cheese sales, partly because sales of processed cheese remain higher after advertising efforts for a longer period than do natural cheese sales.

Generic advertising under the Dairy Act increased retail cheese sales by about 63 million pounds (2.3 percent of total cheese sales) during the most recent 12-month period, October 1995 to September 1996. Most of the increase was in processed cheese sales. Generic advertising increased retail sales of processed cheese by an estimated 57 million pounds, or 6 percent, and retail sales of natural cheese by an estimated 5 million pounds, or 0.5 percent.

### For More Details...

Call 1-800-999-6779 to order a copy of *Evaluation of Fluid Milk and Cheese Advertising, 1984-96*, TB-1860, by N. Blisard, D. Blayney, R. Chandran, D. Smallwood, and J.R. Blaylock, USDA's Economic Research Service, Oct. 1997.

Successful generic advertising for cheese can either influence consumers who never or rarely consume cheese to purchase some, or it can persuade current consumers of cheese to purchase more. The effects differed between the natural and processed cheese markets. A 10-percent increase in generic advertising increases the proportion of new buyers of natural cheese by a small amount (0.04 percent), but it does not affect the average quantity purchased by households that already consume natural cheese. However, that same increase in advertising increases the proportion of new buyers of processed cheese by about 3 percent, and increases the average quantity purchased by about 2 percent.

### Advertising Yields Positive Returns to Producers

Assessing the returns to dairy farmers after the Dairy and Fluid Milk Acts is complex because of the economic link between consumers, processors, and dairy farmers. Many assumptions must be made about

how retail prices are transmitted back to wholesale and farm prices. In addition, economic conditions, such as retail price changes and input cost increases, continue to change and to influence decisions at the farm, wholesale, and retail market levels.

Under the assumptions of this analysis, generic advertising for fluid milk and cheese has been successful for U.S. dairy farmers. As reported above, generic advertising under the Acts boosted demand for fluid milk by 6 percent during September 1984 to September 1996 and cheese by 2 percent. This higher demand boosted average farm-level milk prices almost 4 percent higher than they would have been without the advertising programs. The estimated average milk prices received by dairy farmers with and without the Acts were \$13.07 and \$12.59 per hundredweight, respectively. The difference between the two prices—48 cents per hundredweight—is the gross return to dairy farmers of increased advertising under the Acts. The increased milk prices compared with the 9-cent increase in the cost of advertising (15-cents-per-hundredweight contribution now required from dairy farmers minus 6 cents per hundredweight that was spent on advertising in pre-Dairy-Act days) means that dairy farmers gained more than five times their increased advertising costs (48 cents in gain versus 9 cents in cost). ■