

## Food & Marketing



### Generic Dairy Advertising: How Effective?

USDA's Economic Research Service and Agricultural Marketing Service are currently involved in evaluating the effectiveness of two national programs of generic dairy advertising. The evaluation effort addresses three questions. First, has generic advertising been effective in increasing the sales of fluid milk? Second, has generic advertising for cheese increased the sales of natural and processed cheeses? Finally, what is the aggregate return to dairy producers from a dollar of generic advertising?

The Dairy Production Stabilization Act of 1983 (Dairy Act) established the older of the two programs for the dairy industry. This self-help program is funded by a mandatory assessment for promotion, nutrition education, and research of 15 cents per cwt on all milk produced in the contiguous 48 states and marketed commercially by dairy farmers. The Dairy Act allows producers to direct a maximum of 10 cents per cwt of their assessment to qualified local, state, or regional

dairy promotion campaigns. The remaining 5 cents must go to the National Dairy Promotion and Research Board (NDB) for national generic advertising. NDB focuses on generic advertising for fluid milk and cheese.

The Fluid Milk Promotion Act of 1990 (Fluid Milk Act) established a second dairy board, for milk processors. This promotion board finances its activities through an assessment of 20 cents per cwt on fluid milk processed and marketed in the U.S. All processors who market more than 500,000 pounds of fluid milk per month must participate.

The goal of this national campaign is to strengthen the dairy industry in the marketplace, to maintain and expand markets, and to find new ways to utilize fluid milk. Advertising under this program is strictly for fluid milk and concentrates on print media. Current advertisements feature a celebrity sporting a milk moustache and a message informing the public about the nutritional qualities of milk.

USDA examined the effect of generic advertising, including the advertising campaign of the milk processors, 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* is September 1984 through September 1995, beginning with the month when advertising funds were first spent for fluid milk promotion.

Since evaluating the contributions of the milk boards separately is impossible, their advertising expenditures were combined. It was assumed that without the acts, the industry would have maintained advertising levels equivalent to 6.3 cents per cwt of production—the advertising rate found during the year before implementation of the Dairy Act. Together, the Dairy and Fluid Milk Acts accounted for an estimated \$149 million in additional fluid milk advertising expenditures in the 12 regions from September 1984 through September 1995 (\$354 million minus an assumed \$205 million without the acts).

For the most recent 1-year period, from October 1994 to September 1995, fluid milk sales in the 12 regions totaled 23.3 billion pounds, and increased advertising expenditures due to the acts amounted to \$37.9 million. These additional advertising expenditures increased sales by an estimated 1 billion pounds (over 4 percent of total sales).

During the 11-year post-Dairy Act period (September 1984 through September 1995), the additional advertising expenditures have contributed to an estimated 9.7-billion-pound increase (nearly 4 percent of total sales) in the 12 regions' fluid milk sales.

Sales increases due to the Dairy and Fluid Milk Acts stem from increases in advertising dollars and their effectiveness. However, it is possible that factors other than advertising (e.g., increased public concern about calcium intake levels) might have contributed to positive changes in consumer demand for milk during the post-Dairy Act period.

The effects of changes in advertising expenditures on sales of natural and processed cheeses were evaluated separately because of their different product characteristics and consumer purchasing patterns. The analysis focused on sales of cheese for home use, representing about a third of the total market for cheese. The remaining cheese is purchased by consumers for consumption away from home (e.g., at restaurants and schools) or as ingredients in combination foods such as pizza.

From October 1994 to September 1995, generic advertising increased the sale of processed cheese by an estimated 40 million pounds (5 percent of total sales). Over the same period, generic advertising increased the sale of natural cheese by an estimated 6 million pounds (half a percent of total sales). In sum, total cheese sales increased by an estimated 46 million pounds (nearly 3 percent of total sales) during this 1-year period.

## Food &amp; Marketing

During the 11-year post-Dairy Act period, advertising expenditures under the Dairy Act increased total U.S. at-home cheese consumption by an estimated 519 million pounds (about 2 percent) of total cheese sales of 21.8 billion pounds. However, generic advertising had different impacts on the sales of natural and processed cheeses. Natural cheese sales increased by an estimated 67 million pounds (half a percent of total sales), while processed cheese sales increased by 452 million pounds (5 percent of total sales).

### Advertising's Returns To Producers

A critical issue is the impact of the Dairy and Fluid Milk Acts on the returns to a producer's dollar invested in generic dairy advertising. This is a particularly complex task because of the economic linkages between consumers, processors, and producers, and it involves an assumption of how retail prices are transmitted back to wholesale and producer prices. In addition, a myriad of other market factors continues to change and to influence decisions at each market level. Some factors may affect one market level directly, and another level only indirectly.

For example, at the consumer level, advertising effects differ for fluid milk and cheese. While these different effects on products may not be of particular interest to the producer, the combined

effect of raw milk utilization in the individual products does influence production decisions. Thus, in estimating returns to producers from a dollar of generic advertising, it was essential to allow generic advertising to affect the retail, wholesale, and farm levels of the milk market.

It was found that generic advertising under the acts boosted demand for fluid milk and cheese, but that demand for butter and frozen products remained unchanged. Furthermore, farm-level milk prices were higher because of the advertising programs. Farm prices averaged over 3 percent higher than they would have without the programs during the September 1984-September 1995 period.

The estimated average milk prices with and without the acts were \$12.95 and \$12.52 per cwt. The difference between the two prices—43 cents per cwt—is the gross return to producers of increased advertising under the acts. The added cost of advertising under the acts was 8.7 cents per cwt (calculated by subtracting the 6.3 cents per cwt in pre-Dairy Act advertising expenditures from the 15-cent contribution now required from producers).

As a result, the gross rate of return to producers per additional advertising dollar was estimated at \$4.90 (calculating by dividing the added revenue per cwt due to higher farm prices—43 cents—by the added cost per cwt of generic advertising associated with the acts—8.7 cents).

The \$4.90 figure may represent a maximum estimate of the rate of return at the farm level because it assumes that the full retail advertising effect is transmitted back to the farm level. However, other researchers have estimated returns per advertising dollar ranging from \$2.50 to \$7. These results confirm that the estimated return of \$4.90 per dollar of retail advertising is within a plausible range, and suggest that dairy farmers receive beneficial returns from generic advertising.

[Noel Blisard (202) 501-8448; [nblisard@econ.ag.gov](mailto:nblisard@econ.ag.gov)] **AO**

### Upcoming Reports—USDA's Economic Research Service

The following reports will be issued electronically on dates and at times (ET) indicated.

#### February

- 13 *Cotton & Wool Outlook*  
(4 pm)\*\*
- Feed Outlook* (4 pm)\*\*
- Oil Crops Outlook* (4 pm)\*\*
- Rice Outlook* (4 pm)\*\*
- 20 *Agricultural Outlook\**  
*Livestock, Dairy & Poultry*  
(12 noon)
- 21 *Agricultural Income &*  
*Finance\**  
*U.S. Agricultural Trade*  
*Update* (3 pm)
- 24 *Agricultural Exports\**

\*Release of summary, 3 pm.

\*\*Available electronically only.

### February Releases—USDA's Agricultural Statistics Board

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

#### February

- 3 *Catfish Production*  
*Egg Products*  
*Poultry Slaughter*
- 4 *Dairy Products*
- 5 *Broiler Hatchery*
- 12 *Cotton Ginnings* (8:30 am)
- Crop Production* (8:30 am)
- Broiler Hatchery*
- 13 *Potato Stocks*
- 14 *Cattle on Feed*  
*Crop Values*  
*Milk Production*  
*Turkey Hatchery*
- 19 *Broiler Hatchery*
- 20 *Honey*
- 21 *Cold Storage*  
*Cold Storage, Annual*  
*Farm Labor*  
*Livestock Slaughter*
- 24 *Catfish Processing*  
*Chickens & Eggs*
- 26 *Broiler Hatchery*
- 28 *Agricultural Prices*  
*Peanut Stocks & Processing*