PA Milk Marketing Board
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Dairy Industry Changes – Part 2

A few months ago, I wrote about changes in the dairy industry mostly focused on the number of farms, cows and total production. Today I am going to talk about some other interesting—and relevant—facts and figures that add a little more depth and clarification to what I previously shared. Sometimes we focus so much on the farms we don't see the drastic changes in other areas of the industry.

A natural partner to the dairy farm is the processing plant. USDA provides data from National Conference on Interstate Milk Shipments and the US Food and Drug Administration on the numbers of plants and volume processed per plant for the period 1960 through 2011. Aggregate volume processed is shown for fluid milk, cream, eggnog and yogurt.

In 1960, there were 5,328 commercial processors with an average volume of 8.8 million pounds of production. By 1970, the number of processors had decreased by over 50 percent to 2,216, with average production volume of 23.6 million pounds.

Each year listed in the dataset shows a decrease in the number of plants and a corresponding increase in the average production volume for the milk, cream, eggnog, and yogurt except for 2009 on when the number of plants increased slightly. As might be expected, the increase in number of plants resulted in a lower average volume processed, but it was very small.

A separate USDA dataset covering 2008 – 2020 provides number of plants and aggregate average processing information on fluid milk beverage only. These data also add beverage milk consumption for each year. I am going to discuss these data in a little more detail since we as an industry have focused a lot on reduced consumption.

Looking at the entire period 2008 – 2020, fluid milk consumption decreased by 16.0 percent while the number of processing plants increased by 11.7 percent. Average product volume per plant decreased by 25.8 percent.

Consumption increased slightly in 2009 by about 300 million pounds but decreased every year after that through 2020. I tried to research why that increase might have occurred in 2009 but could not find anything definitive. I did learn, however, that several advertising campaigns targeting lower income consumers with information about the nutritional value of milk were begun in 2008. Who knows? Right?

The federal government also resume purchase of surplus products in 2009 which could have led to an increase, but I could not find any information that directly related those purchases to increased consumption. It does make sense if consumption figures included food bank distribution and if the purchases included fluid milk; however, available information suggests that they were primarily dry milk and butter. Based on that I am assuming that those purchases had no impacts on fluid consumption.

The real key to understanding lower consumption is in examining trends toward "what is in the consumer's refrigerator, " as well, according to Bank of the West (2022). Even though there has been an increase over the past decade in demand for dairy products as a whole, fluid milk consumption declined by 20 percent in the period 2009-2019.

Interestingly, per capita US dairy consumption was at its highest in 2019—it's not that people don't want dairy, they want it in other forms than traditional fluid milk.

Consider these statistics from USDA. Since 2010, butter consumption has increased by 27 percent. Cheese consumption is up 17 percent. Add to that an increase in cheese exports of 51 percent.

We also know that the market for plant-based dairy alternatives has increased dramatically and now includes yogurt, ice cream, and cheeses. The increased consumption percentages of these products, specifically butter and cheese, parallels the increases for non-fluid dairy products.

The manufacturers of non-dairy products have also changed their marketing strategies. In the past, their products would primarily be marketed to the vegan customer. Now, with technical innovations to simulate the textures and tastes of dairy products, they are targeting traditional meat-eaters and dairy consumers.

One fact to appreciate. Approximately 90 percent of plant-based consumers still buy some traditional dairy products according to Bank of the West. There is little evidence that will change; however, it is important to recognize that the product mix being purchased is different than in the past. These consumers buy dairy butter or yogurt or cheese and leave the fluid milk in the store case, as one example.

Another factor influencing our industry is the consumer that worries about environmental sustainability—a deeply controversial topic when talking about agriculture, and the subject for a separate column. Plant-based manufacturers have capitalized on this worry.

While we do not wish to criticize crop farmers because they are certainly part of agriculture, we do promote any efforts to discuss and develop strategies to help the commonwealth's dairy industry. Part of those efforts involves realistically meeting the challenges of changing consumer preferences. What ideas do you have? We would like to hear them.

PMMB is always available to respond to questions and concerns. I can be reached at 717-210-8244 or by email at chardbarge@pa.gov.