

Based on Food System Research Group Working Paper FSWP2003-2, by Tirtha Dhar and Jeremy D. Foltz. "Milk by Any Other Name... Consumer Benefits from Labeled Milk Market Structure and Consumer Valuation in the rBST-free and Organic Milk Markets." Madison: University of Wisconsin. http://www.aae.wisc.edu/fsrg/working_papers.htm.

BUYING BEHAVIOR IN RESPONSE TO MILK LABELING

Dairy producers are getting a clear message from consumers: people read labels and many are willing to pay more for products marketed as organic or all-natural. A new study from the Food System Research Group (FSRG), University of Wisconsin-Madison, helps reveal the extent of the market for these products, how much extra people are willing to pay, and the benefits derived from having specially-labeled products in the marketplace.

By analyzing consumers' actual buying behavior over a 5-year period, the findings also may provide important information for dairy producers and national policymakers. Dairy farms are fighting to survive, and the choices producers make as to the types of milk they market can impact their income levels. In addition, a better understanding of the market and demand for organic food can help inform policy regarding national standards in labeling and the potential cost to consumer welfare if those standards are weak.

Consumer demand

Food choices now available to consumers range across a spectrum from those that are genetically modified to those that are organic. The milk industry was one of the first to see the introduction of genetic modifications and the associated rise of organic products. In 1993, the FDA approved the artificial growth hormone rBST. It was introduced into the milk supply in 1994, and genetically modified foods became an important issue in the U.S. food system. Would consumers put a special value on foods that were not genetically modified? How much value both for consumers and producers is gained by labeling these products?

The new study provides a comprehensive analysis of the U.S. retail fluid milk market by three types: organic, rBST-free, and milk that is not specially labeled. By analyzing milk purchases in 12 key metropolitan markets, the study found that consumers pay up to \$1.50 per gallon more for milk labeled rBST-free and \$3 per gallon more for milk labeled organic.

Willingness to pay higher prices is not necessarily linked to income. Since the introduction of genetically modified foods, a certain segment of the population perceives a risk to these foods and searches for alternatives, such as organic or all-natural. In addition, a small increase in the price of standard brand milk leads to a large switch of buyers to specially-labeled milk, such as organic. It appears that once consumers switch to this higher-priced market, they generally do not switch back even if there is a significant price change. This suggests a consumer perception of a quality difference between labeled and standard brand milk.

Consumer benefits

Competitive effect: In this study, the market competition from the introduction of organic milk or rBST-free milk decreased the price of unlabeled milk by 2¢ per gallon. This represents less than 1% of the average price paid, yet when projected to national sales it represents approximately a \$130 million per year benefit that consumers receive from the existence of labeled/specialty milk in the market, even if they do not purchase it.

Variety effect: From observations of how milk demand changes with changes in prices, researchers estimate that the benefits consumers receive from rBST-free milk to be about equal to the \$1.50 premium they pay per gallon for that milk. In contrast, estimates show the variety effect from organic milk to be 5-10 times the \$3 extra per gallon consumers pay.

Organic milk currently accounts for less than a 1% share of the milk market in the United States, yet it is the fastest-growing segment of the dairy industry. Its dramatic increase in market share is slowing, yet demand remains on the rise. The rBST-free market has been in decline since 1998. Further study is required to find the reasons for this decline, though the researchers suggest several possible factors, from a lowered perception of risk to the use of rBST-free milk as a lower-cost but temporary alternative to organic milk.

The growth hormone is once again in the news. In July 2003, Monsanto, the chemical company that makes rBST, brought suit against a family-owned dairy in Maine regarding the dairy's use of labeling that indicates its farmers do not use artificial growth hormones. However, the UW research study shows that weaker standards in milk labeling would reduce the benefits that all consumers currently enjoy.

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ISSUES: Consumer demand and willingness to pay for different types of milk, including rBST-free and organic. Retail price and market share by type of milk. National labeling policy.

FINDINGS: Consumers pay significantly more for milk marketed as rBST free or organic. Nationally, the availability of labeled milk creates competition that benefits all consumers. Consumers receive a higher benefit from organic milk than from rBST-free milk. Less stringent standards of labeling could lessen the current advantage to consumers.

OTHER MATERIAL:

Foltz, Jeremy D., and Tirtha Dhar. 2003. "The Market for rBST-free and Organic Milk." *Wisconsin Family Farm Facts* 18 (July). Program on Agricultural Technology Studies. Madison: University of Wisconsin and Cooperative Extension. <http://www.wisc.edu/pats/pubfs.htm>.

Foltz, Jeremy D., and Tirtha Dhar. 2003. "How Consumers Value rBST-free and Organic Milk in the Marketplace." *Wisconsin Family Farm Facts* 19 (July). Program on Agricultural Technology Studies. Madison: University of Wisconsin and Cooperative Extension. <http://www.wisc.edu/pats/pubfs.htm>.

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