

June 29, 2007

OP-ED CONTRIBUTOR

# Don't Cry Over rBST Milk

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MILK occupies a special place in our lives and language. It has been dubbed “nature’s most perfect food,” and we speak sentimentally of the “land of milk and honey” and the “milk of human kindness.”

But things are turning sour for consumers of milk. The average price of a gallon of milk nationwide is up 37 cents since January, to \$3.47. Strong demand and limited ability to increase production quickly are expected to increase prices more, and experts have speculated that the price per gallon could reach a record \$5 by year’s end. High feed costs associated with the ramping up of American corn-based ethanol production are making it difficult to produce more milk.

Worldwide, prices are also at historically high levels. The United Nations Food and Agriculture Organization’s price index of traded dairy products has risen 46 percent since last November.

One way to ease the shortage and lower the prices is to take greater advantage of a proven 13-year-old biological technology that stimulates milk production in dairy cows — a protein called recombinant bovine somatotropin (rBST), or bovine growth hormone. The protein, produced naturally by a cow’s pituitary, is one of the substances that control its milk production. It can be made in large quantities with gene-splicing (recombinant DNA) techniques. The gene-spliced and natural versions are identical.

Bad-faith efforts by biotechnology opponents to portray rBST as untested or harmful, and to discourage its use, keep society from taking

full advantage of a safe and useful product. The opponents' limited success is keeping the price of milk unnecessarily high.

When rBST is injected into cows, their digestive systems become more efficient at converting feed to milk. It induces the average cow, which produces about eight gallons of milk each day, to make nearly a gallon more. More feed, water, barn space and grazing land are devoted to milk production, rather than other aspects of bovine metabolism, so that you get seven cows' worth of milk from six.

This may not seem like a big deal, but when applied widely the effects are profound. For every million cows treated with rBST each year, 6.6 billion gallons of water (enough to supply 26,000 homes) are conserved, according to Monsanto, which makes rBST. With much of the nation enduring a drought and many cities in the West experiencing water shortages, this is a significant benefit.

The amount of animal feed consumed each year by those million rBST-supplemented cows is reduced by more than three billion pounds. This helps to keep the lid on corn prices, even as much of the nation's corn harvest is diverted to producing ethanol for cars. And the amount of land required to raise the cattle and grow their food is reduced by more than 417 square miles.

At the same time, more than 5.5 million gallons of gasoline and diesel fuel (enough to power 8,800 homes) are saved, greenhouse gas emissions are lowered by 30,000 metric tons (because fewer cows means less methane produced by bovine intestinal tracts), and manure production is decreased by about 3.6 million tons, reducing the chances of runoff getting into waterways and groundwater.

Comprehensive studies by academics and government regulatory agencies around the world have found no differences in the composition of milk or meat from rBST-supplemented cows.

And consumers are apparently happy to drink milk from supplemented cows, in spite of efforts by biotechnology opponents to bamboozle milk processors and retailers into believing that consumers don't want it. In various surveys to ascertain the factors that influence consumers' milk

purchasing decisions, the predominant considerations have been: price (80 percent to 99 percent), freshness (60 percent to 97 percent), brand loyalty (30 percent to 60 percent) and a claim of “organic” (1 percent to 4 percent). Only the “organic” claim is even remotely related to rBST supplementation. Unless prompted, the consumers surveyed didn't mention rBST as a concern.

Some milk suppliers and food stores have increased the price of milk labeled “rBST-free,” even though it is indistinguishable from supplemented milk, and offer only this more expensive option, preempting consumers' ability to choose on the basis of price.

Activists' purely speculative concerns about rBST — ranging from the destruction of small family farms to the risk of cancer — have proven baseless. Before approval by the Food and Drug Administration, rBST underwent the longest and most comprehensive regulatory review of any veterinary product in history. Three years before the F.D.A. approved the marketing of milk from supplemented cows, its scientists, in an article published in the journal *Science*, summarized more than 120 studies showing that rBST poses no risk to human health.

Their conclusion was affirmed over the next several years by additional scientific reviews conducted by the National Institutes of Health, the Congressional Office of Technology Assessment and the drug-regulatory agencies of Britain, Canada and the European Union, and by an issues audit done by the Department of Health and Human Services inspector general. These reviews noted that traces of BST are found in milk from all cows, supplemented or not. They also pointed out that, like other proteins, rBST is digested in the human gut. Moreover, even if it is injected into the human bloodstream, it has no biological activity.

Largely as a result of bullying by several members of Congress, the F.D.A.'s review of rBST took nine years, while the evaluation of an almost identical product for injection into growth hormone-deficient children had taken a mere 18 months.

Cynical activists have unfairly stigmatized a scientifically proven product that has consistently delivered economic and environmental

benefits to dairy farmers and consumers. In a more rational world, they would embrace — and enlightened consumers would demand — milk with a label that boasted, “A Proud Product of rBST-Supplemented Cows.”

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