



rBGH

While the average dairy cow produced almost 5,300 pounds of milk a year in 1950, today, a typical cow produces more than 18,000 pounds.ⁱ Industrial farms have used a number of methods to increase milk production in dairy cows, including selective breeding, feeding grain-based diets (instead of grass), and exposing cows to longer periods of artificial light. Yet, one of the most common and controversial ways to force greater milk production is to inject them with rBGH (recombinant bovine growth hormone), a genetically engineered artificial growth hormone. (rBGH is also referred to as rBST, or recombinant Bovine Somatotropin.)

FDA approval for rBGH came in 1993, in spite of strong opposition from scientists, farmers and consumers. According to detractors, rBGH was never properly tested. The FDA relied solely on a study done by Monsanto in which rBGH was tested for 90 days on 30 rats. The study was never published, and the FDA stated the results showed no significant problems. But a review by the Canadian health agency on rBGH found the 90 day study showed a significant number of issues which should have triggered a full review by the FDA.ⁱⁱ

Dairy cows treated with rBGH experience a range of side effects, including severe mastitis (an udder infection), and after they are taken off the hormone they experience a drastic drop in milk production. Dairy farmers with cows on rBGH have also reported other problems, including hoof diseases, open sores and cows that died from internal bleeding.ⁱⁱⁱ To treat these side effects, the dairy industry has relied on antibiotics, which contributes to the growing problem of antibiotic resistant bacteria and can also result in antibiotic residues in milk^{iv}

Additionally, cows forced to produce unnaturally high quantities of milk will often become malnourished because they lose more nutrients through their milk than they ingest in their feed,^v and are therefore more susceptible to disease.

Milk from rBGH-treated cows contains higher levels of IGF-1 (Insulin Growth Factor-1), which has been linked to colon and breast cancer. Even though no direct connection has been made between elevated IGF-1 levels in milk and cancer in humans, scientists have expressed concern.^{vi}

Faced with mounting evidence to the contrary, the FDA has stubbornly continued to assure consumers that rBGH is safe for cows and humans. In fact, in 1994, the FDA prohibited dairies from claiming there was any difference between milk from rBGH-injected cows and milk produced without the artificial hormone.^{vii}

What You Can Do

- There are many small family farmers who don't use artificial hormones on their animals. By purchasing your milk and meat from local, sustainable farms, you are supporting a system that ensures the health and welfare of the farm animals, and protects you and your family from hormone-related health risks.
- Choose hormone-free beef and rBGH-free dairy products at the supermarket. Foods that carry the "USDA-certified organic" label cannot contain any artificial hormones. When purchasing sustainably raised foods without the "organic" label, be sure to check with the farmer to ensure no additional hormones have been administered.
- Visit the Eat Well Guide for an online listing of stores, restaurants and producers that sell hormone-free meat and dairy products. (www.eatwellguide.org)
- Use Sustainable Table and Food and Water Watch's rBGH-free dairy list to find a rBGH-free brands available in your state.
(http://www.thematrix.com/getinvolved/statepdfs/rbgh_list.html)

ⁱ Hallberg, Milton C. "[Historical Perspective on Adjustment in the Food and Agriculture Sector.](#)" Penn State University, October 2003.

ⁱⁱ Statement of Michael Hansen, Ph.D., Research Associate [Consumer Policy Institute](#), Consumers Union on FDA's Safety Assessment of Recombinant Bovine Growth Hormone, December 15, 1998.

ⁱⁱⁱ Christiansen, Andrew. "[Recombinant Bovine Growth Hormone: Alarming Tests, Unfounded Approval.](#)" *Rural Vermont*, 1995.

^{iv} Hansen, Michael, Jean M. Halloran, Edward Groth III, and Lisa Y. Lefferts, [Potential Public Health Impacts Of The Use Of Recombinant Bovine Somatotropin In Dairy Production: Prepared for a Scientific Review by the Joint Expert Committee on Food Additives](#), September 1997.

^v Harris, Barney. "[Energy Intake and Dairy Cow Fertility.](#)" University of Florida Extension Dairy Production Guide, Fact Sheet DS 45, August 1992.

^{vi} Hansen, Michael, Jean M. Halloran, Edward Groth III, and Lisa Y. Lefferts, [Potential Public Health Impacts Of The Use Of Recombinant Bovine Somatotropin In Dairy Production: Prepared for a Scientific Review by the Joint Expert Committee on Food Additives](#), September 1997.

^{vii} Schneider, Keith, "F.D.A. Warns the Dairy Industry Not to Label Milk Hormone-Free," *New York Times*, February 8, 1994.