

FACT SHEET

Recombinant Bovine Growth Hormone (rBGH or rBST) Its Documented Harm to Cows

Background

The FDA approved the use of recombinant bovine growth hormone (rBGH or rBST) in dairy cows in 1993. This was done over the widespread objections of farmers, public health advocates and animal welfare agencies. This genetically engineered hormone was developed by Monsanto and sold to Elanco, a division of the Eli Lilly drug company, in 2008. Its trade name is Posilac.®

There is overwhelming documented evidence that rBGH increases the rates of physical harm to cows. This paper summarizes the case against the use of rBGH on animal welfare grounds and reinforces the call to disallow it.

FDA Posilac® Package Insert

Although the FDA allowed rBGH to be commercialized, it acknowledged that it increased the rates of 16 harmful physical effects on cows and required an insert, listing the following conditions, be placed in every package sold. These include:

- **Reproductive Effects:** Reduced pregnancy rates, increase in days open, increased incidence of retained placenta, decreased gestation length and birth weight of calves
- **Increased rate of clinical mastitis and Increased rate of subclinical mastitis (somatic cell count)**
- **Increased body temperature unrelated to illness (heat stress)**
- **Increase in digestive disorders, such as indigestion, bloat and diarrhea**
- **Increase in reduced feed intake (off-feed)**
- **Increased numbers of enlarged hocks and lesions and increased numbers of foot disorders**
- **Increased number of injection site reactions – swelling**
- **Reductions in hemoglobin and hematocrit values**

FDA Adverse Drug Reaction Reports

After rBGH was approved, farmers submitted reports to the FDA describing harm the drug had caused to their cows. These included all of the above, plus others, such as **abortions, birth defects, increased twinning rates and lameness.**

These harmful effects are widespread. From 1994 to 2005, the FDA received 2,408 adverse drug reaction reports from farmers that described harmful effects to cows injected with rBGH. (Freedom of Information Act documents received from FDA, Sept. 2010) There are currently about 65,000 dairy farmers in the U.S.

USDA Reports

The USDA periodically issues reports on the state of American agriculture, including dairy. Their Dairy 2002 Report was clear on rBGH:

“Dairy producers have expressed concerns about (r)bST use. These concerns include: animal health . . . and public health concerns . . . Dairy producers that were not currently using bST were asked to describe their reason for not implementing a bST program . . . cost and animal health were major concerns specifically identified in all regions . . .”

Academic Studies

Henry An and Leslie Butler have done several studies on why farmers started and later disadopted use of rBGH. Their 1997-98 study found **“Many (farmers) . . . had problems like mastitis, lameness, loss of**

condition, and lowered immune system functions which they attributed to rbST use.” Their 2008 report on disadoption rates in California found that 15% of farmers cited high veterinary costs as **“very important”** in their decision to stop using rBGH. (Henry An and Leslie Butler, “Update on rBST Use in the California Dairy Industry,” Giannini Foundation of Agricultural Economics – University of California, 2008)

Canada and European Union Bans on rBGH Use

Although scientists in Canada and the European Union expressed human health concerns about rBGH, specifically cancer and antibiotic resistance, the official reason that both banned rBGH was harm to cows.

The Canadian Veterinary Medical Association Expert Panel of rbST determined that **mastitis increased by 25%, infertility by 18%, lameness by 50% and culling (slaughter) by 20-25%.** (Report of Canadian Veterinary Medical Association Expert Panel on rbST. Prepared for Health Canada, November, 1998. At: http://www.hc-sc.gc.ca/dhp-mpps/vet/issues-enjeux/rbst-stbr/rep_cvma-rap_acdv_tc-tm-eng.php). Health Canada announced in January 1999 that **“it had to reject the request for approval to use rbST in Canada, as it presents a sufficient and unacceptable threat to the safety of dairy cows.”** (Institute of Food Science and Technology Information Statement on Bovine Somatotropin. 2004, p. 5 at: www.ifst.org/document.aspx?id=113)

A scientific committee in the EU found rBGH use led to **“painful and debilitating”** conditions in cows and **“Therefore from the point of view of animal welfare, including health, the Scientific /Committee on Animal Health and Animal Welfare is of the opinion that (r)BST should not be used in dairy cows.”** (Report on Animal Welfare Aspects of Use of Recombinant Bovine Somatotropin. Report of the Scientific Committee on Animal Health and Animal Welfare. March 10, 1999. At: http://ec.europa.eu/food/fs/sc/scah/out21_en.pdf)

Organizational Stances

Virtually every major animal welfare organization in the U.S. opposes rBGH. This includes the Humane Society of the U.S. (HSUS), Humane Farming Association and Farm Sanctuary. According to Miyun Park, former Vice President of Farm Animal Welfare of HSUS, **“It’s simply wrong to inject cows with a substance like rBGH that increases painful and debilitating diseases like mastitis and lameness.”** (“Know Your Milk”, Oregon Physicians for Social Responsibility, 2010)

Both the National Family Farm Coalition and Family Farm Defenders oppose rBGH. John Kinsman, president of the Family Farm Defenders, stated **“The FDA’s approval . . . did not even consider the demonstrated health impacts on dairy cows or the potential risks to human consumers.”**

Voices of the Farmers Themselves – A small sample:

Tillamook dairy farmer Dick Heathershaw . . . **“quit using the product (rBGH) after noticing cows were splitting out in the pelvic area, were growing hooves at an accelerated rate and were experiencing unusually high levels of abscesses . . . ‘we thought we were seeing things in our cows health-wise that we didn’t like and that we hadn’t seen before.’”** ([Capital Press](#), Feb. 25, 2005)

“‘It’s like steroids for athletes,’ said Stephen H. Taylor, New Hampshire’s Commissioner of Agriculture, Markets and Food and a dairy farmer himself. He said he had tried the hormone but it put stress on his cows and made them thinner.” ([New York Times](#), Oct. 7, 2006)

“. . . most Country Classic farmers weren’t keen on growth hormone because of the potential harm to their stock. The word among farmers was that growth hormone boosted milk production in the short term but shortened the cow’s productive life.” (Billings, MT [Gazette](#), Sept. 13, 2008)