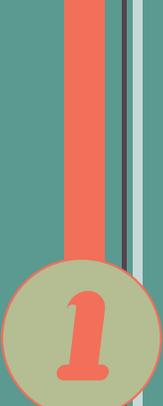


Know Your Milk.
Does It Have
Artificial Hormones?



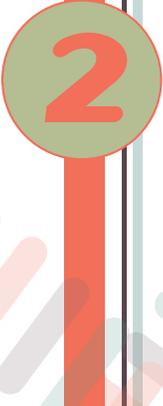
Physicians for Social Responsibility (PSR)
Oregon Chapter

Campaign for Safe Food



1

Oregon PSR recommends buying only from dairies that have policies against the use of recombinant bovine growth hormone (rBGH or rBST).



2

We also support full labeling of all dairy products as to whether or not they come from rBGH-treated cows so that consumers can make informed choices.



What is recombinant bovine growth hormone?

Recombinant bovine growth hormone (also known as rBGH or rBST) is a genetically engineered drug developed by the Monsanto corporation. It was sold in October 2008 to Elanco, a division of the Eli Lilly drug company. It's injected into dairy cows to induce them to increase milk production by 5-15%.

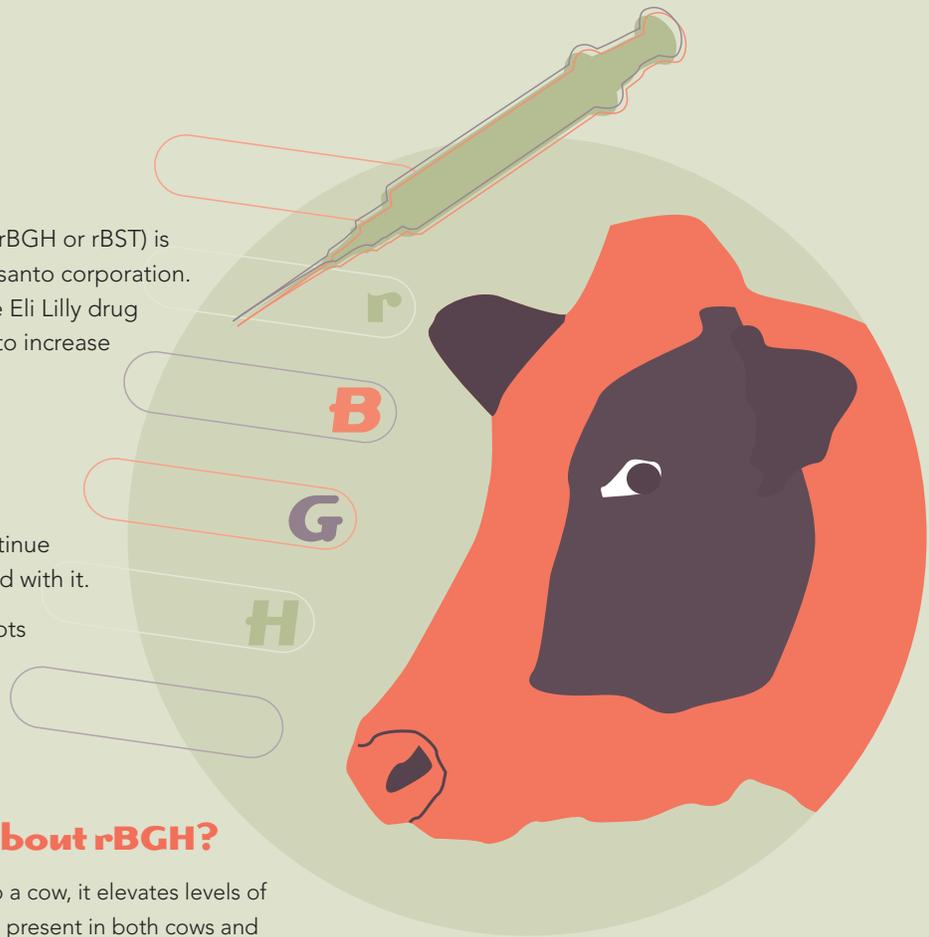
What is Oregon Physicians for Social Responsibility's goal?

Our goal is to alert the public about rBGH and discontinue the production of any dairy products from cows treated with it.

To accomplish this goal, we are conducting a grass roots education and citizen action campaign. Oregon PSR wants consumers to be able to make an educated decision about what brands of dairy products to buy, rBGH or rBGH-free.

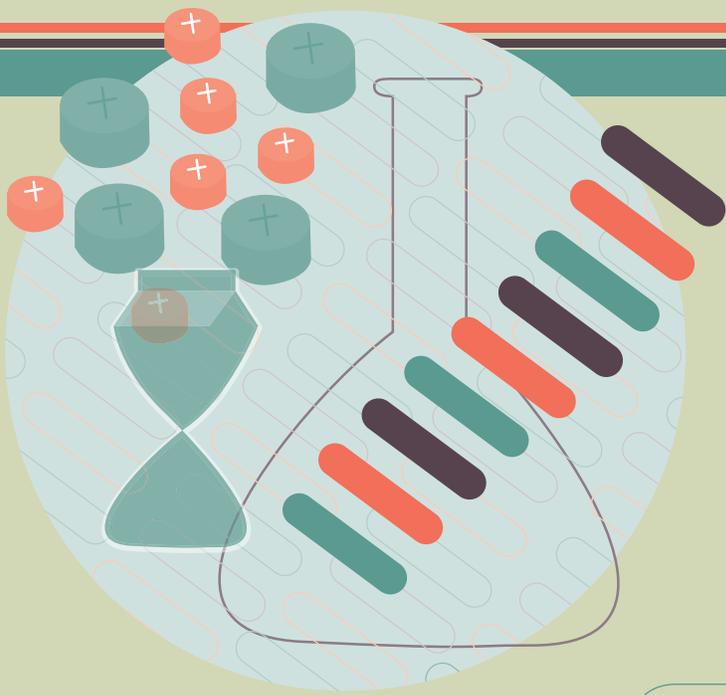
Why should we be concerned about rBGH?

- **Increased cancer risk:** When rBGH is injected into a cow, it elevates levels of another powerful growth hormone, IGF-1, which is present in both cows and humans. IGF-1 is a necessary hormone, but in excessive amounts has been shown in numerous studies to promote breast, prostate, colon, lung and other cancers in humans. Several scientific studies suggest IGF-1 in milk survives human digestion and enters the bloodstream, potentially increasing cancer rates.



"There isn't 100% proof that injecting cows with rBGH is increasing cancer rates in humans. But there is substantial scientific evidence linking rBGH with increased IGF-1, which is known to be associated with higher cancer rates. We feel it's better to be safe than sorry and avoid rBGH dairy products."

– Martin Donohoe, M.D., Oregon PSR



- **Antibiotic resistance:** Cows given rBGH experience statistically higher rates of mastitis, a painful udder infection. It is treated with antibiotics such as penicillin, amoxicillin and erythromycin, which are also used for people. Bacteria resistant to these antibiotics end up in the milk, meat, air, soil and water, resulting in increased antibiotic resistance in humans, a major health problem.
- **Harm to cows:** In addition to mastitis, rBGH has been demonstrated to increase the incidence of 15 different harmful effects to cows' health, including birth disorders, increased pus in milk, hoof problems, heat stress, diarrhea, and other gastrointestinal disturbances.

The Humane Society of the U.S., Humane Farming Association, Farm Sanctuary and Animal Protection Institute have all condemned the use of rBGH and endorsed Oregon PSR's program.

Was there a milk shortage in the U.S. that rBGH was intended to alleviate?

Just the opposite – in the last 20 years, there have been several occasions when hundreds of thousands of dairy cows were slaughtered because there was too much milk on the market.

“It’s simply wrong to inject cows with a substance like rBGH that increases painful and debilitating diseases like mastitis and lameness.”

– Miyun Park, Vice President, Farm Animal Welfare
The Humane Society of the United States

What about the price of rBGH-free milk compared to rBGH milk?

Conventional rBGH-free milk varies from about the same price as rBGH milk to somewhat more. It is less expensive than organic.

Organic milk is rBGH-free by definition. Like most organic products, it will typically cost more than conventional milk, whether the conventional milk has rBGH or not. Of course, there is value added in that there are no antibiotics used and the feed is pesticide-free.

Does rBGH improve nutrition, taste, etc.?

No, rBGH offers no advantages whatsoever to consumers.

With all these problems and no benefits to consumers, why did the FDA approve rBGH?

The FDA's decision to approve rBGH in 1993 was one of the most controversial it has ever made. There was widespread criticism from government leaders, farmers and scientists, including many inside the FDA, who questioned Monsanto's influence and the objectivity and integrity of the review process. There were many good reasons for concern:

- Several individuals who had worked directly for Monsanto or had close ties were hired by the FDA and placed in decision-making positions. One, Michael Taylor, had represented Monsanto as a lawyer at the King and Spalding law firm. The FDA hired him as Deputy Commissioner for Policy from 1991-94, when he oversaw the approval of rBGH and guidelines for labeling. He returned to work for Monsanto in 1998.
- Several scientists who worked in the FDA's Center for Veterinary Medicine reported undue corporate influence that corrupted the science. Alexander Apostolou, director of the Toxicology Division, said "I have witnessed drug manufacturer sponsors improperly influence the agency's scientific analysis, decision-making, and fundamental mission."¹ Richard Burroughs, lead reviewer for rBGH for nearly five years, said officials "suppressed and manipulated data."² For their whistleblowing, Apostolou was forced to leave the FDA and Burroughs was fired.
- Other FDA employees, upset by what was happening, wrote a letter to members of Congress and the General Accounting Office, asking for an investigation. When the GAO looked into the claims, it agreed that human antibiotic resistance risks had not been addressed for rBGH. However, Congress took no further action and the hormone was approved.

1, 2 Craig Canine, "Hear No Evil: In its determination to become a model corporate citizen, is the FDA ignoring potential dangers in the nation's food supply?" *Eating Well*, July/August 1991.

"Work collaboratively... to eliminate purchasing milk and dairy products for use in the health care industry that contain artificial hormones such as recombinant bovine growth hormone (rBGH) . . ."

– From Position Statement opposing rBGH officially adopted by the American Nurses Association, June 2008

"Health Care Without Harm opposes the use of recombinant Bovine Growth Hormone (rBGH or rBST), a synthetic hormone given to dairy cows to increase milk production, due to its adverse impacts on animals and potential harm to humans."

– Health Care Without Harm, www.noharm.org

A coalition of 460 organizations in over 50 countries promoting safe and healthy practices in hospitals.

Oregon PSR believes the FDA has many qualified staff and has done much good work. However, we believe the approval of rBGH was a serious mistake and that the FDA is not adequately protecting public health by allowing it to stay on the market.

“The entire FDA review of rBGH seemingly has been characterized by misinformation and questionable actions on the part of both FDA and the Monsanto Company officials.”

– U.S. Congressmen George Brown, David Obey and Bernard Sanders, Letter to GAO comptroller general Charles Bowsher, April 15, 1994.

Have the American Medical Association (AMA) and World Health Organization (WHO) expressed an opinion on the safety of rBGH?

The AMA does not have an official position on the safety of rBGH. However, in 1991, the AMA's Council on Scientific Affairs said “Further studies will be required to determine whether ingestion of higher than normal concentrations of bovine IGF-1 is safe for children, adolescents, and adults.”¹ Much research has been done since 1991 documenting the risks posed by increased levels of IGF-1 in promoting cancer in humans.

WHO, as a body, has never said rBGH was safe. The Joint Expert Committee on Food Additives (JECFA) is an advisory committee jointly administered by WHO and the UN Food and Agriculture Organization (FAO). Highly influenced by FDA officials, it issued opinions in 1993 and 1998 saying rBGH could be used without appreciable human health risk.

However, JECFA reports to the Codex Alimentarius, the UN's main food safety body. Significantly, Codex considered rBGH twice, in 1997 and 1999. Both times, it concluded there was NO consensus that rBGH was safe for human consumption. It has not been brought up since.

What about other countries?

Canadian, European and other scientists around the world reviewed the scientific data on rBGH and were very concerned by what they saw. In contrast to the U.S., the nations listed to the right have all DISALLOWED use of the drug, based primarily upon concerns about animal welfare and unanswered human health questions.

Canada
Australia
New Zealand
Japan
**All 27 countries of
the European Union**

¹ NIH Technology Assessment Conference Statement on Bovine Somatotropin,” JAMA, v. 265, no 11, March 20, 1991.

How do I know if the dairy products I buy have come from rBGH-treated cows?

Look at the label. Organic is rBGH-free by definition. Also, there are many non-organic dairies that label their products as “rBGH-free,” “rBST-free” or “no artificial hormones.” Typically, dairies that have policies against rBGH WANT their customers to know.

Unfortunately, the FDA ruled that dairies using rBGH do NOT have to inform their customers. No dairy using rBGH milk puts this information on the label. This is why so many people don't know about this hormone.

If there is no rBGH information on the label, the dairy product most likely comes at least partly from rBGH-treated cows.

What can I do?

- Protect yourself and your family by buying rBGH-free dairy products.
- Tell others about rBGH.
- Get a copy of Oregon PSR's Consumer Guide to Dairy Products to learn which products don't have rBGH. It's available on the web site, www.oregonpsr.org, and at the Oregon PSR office in Portland.
- Sign up for the Oregon PSR's Campaign For Safe Food e-mail update list by contacting Rick North, Project Director, at hrnorth@hevanet.com or call 503-968-1520.
- Make a donation! Just go through the web site or send a contribution to Oregon PSR Campaign For Safe Food, 812 SW Washington, Suite 1050, Portland, OR 97205.

The Precautionary Principle

The Precautionary Principle, a fundamental principle of public health, is an elaboration of the old saying, “Better Safe Than Sorry,” or, for physicians, “First Do No Harm.”

Simply put, it says that where an activity raises threats of serious or irreparable harm to human health or the environment, precautionary measures should be taken, even if all cause and effect relationships are not fully established.

The most familiar example is cigarette smoking. The U.S. Surgeon General's 1964 report declared that there was no doubt that smoking contributed to higher rates of cancer, heart disease and emphysema. However, there was substantial evidence in the 1950's that tobacco was harmful to health even if it had not been conclusively proven. Based on this evidence, many physicians advised their patients long before 1964 to avoid smoking, and many people quit or did not start on their own.

Oregon PSR believes the Precautionary Principle is a common sense approach to avoid unnecessary risks to human health. We firmly believe rBGH is an unnecessary risk.



Learn More

Web Sites

Center for Food Safety
www.centerforfoodsafety.org

Family Farm Defenders
www.familyfarmdefenders.org

Food and Water Watch
www.foodandwaterwatch.org

Fox rBGH Lawsuit
www.foxbghsuit.com

Humane Farming Association
www.hfa.org

Organic Consumers Association
www.organicconsumers.org

Books

What's in Your Milk?
Samuel Epstein, M.D.

Seeds of Deception
Jeffrey Smith

Your Right to Know
Andrew Kimbrell

“Additional antibiotic use due to rBGH cannot help but contribute to the overall problem of antibiotic resistance, which is a serious problem for public health today. There are also many unanswered questions about whether increased IGF-1 levels in milk from rBGH-treated cows may increase cancer risks in humans. For those reasons, we believe FDA should reconsider its decision to approve this drug.”

– Michael Hansen, PhD, senior scientist, Consumers Union (publisher of Consumer Reports)

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