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TO: JANE E HENNEY HF-1

FROM: MEREDITH PAIGE KLEIN

SYNOPSIS: SUBMITS PROPOSAL FOR THE MANDATORY LABELING OF PRODUCTS
CONTAINING THE GENETICALLY ENGINEERED RECOMBINANT BOVINE GROWTH
HORMONE

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COORDINATION:

SIGNATURE REQUIRED:

REFERRALS FROM HF-40

ASSIGNED TO	ACTION	DUE DATE
HFA-305 <i>Dockets</i>	NECESSARY ACTION	

km

**Proposal for the Mandatory Labeling of products containing the
genetically engineered
recombinant bovine growth hormone**

for
Jane Henney
Commissioner of the Food and Drug Administration
Rockville, Maryland

by
Meredith Paige Klein
University of Maryland

December 15, 2000

00-7738

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December 15, 2000

Jane Henney, M.D.
Commissioner of The Food and Drug Administration
5600 Fishers Lane
Rockville, MD 20857

Dear Commissioner Henney:

As a Community Health Education major at the University of Maryland, College Park, I believe the health and welfare of every American must be a top priority. Every American has the right to a high standard of health care and should be provided with all the information necessary to make appropriate health choices. In the last year I have eliminated dairy products from my diet. This decision to terminate consumption of dairy products was based in part due to awareness of the health problems resulting from genetically engineered recombinant bovine growth hormone. I am proposing that you make labeling of dairy products containing the genetically engineered hormone rBGH become mandatory.

Scientific research has recently documented substantive evidence of a potential public health hazard to consumers from the consumption of dairy products treated with rBGH. These studies demonstrate an increase in IGF-1 (Insulin Like Growth Factor-1) in the milk of rBGH treated cows. IGF-1 has been implicated as a significant factor responsible for the increased risk of development of breast and prostate cancer. For these reasons I believe that it is critically important that until further studies are done on rBGH, consumers should have the right to choose the dairy products that they wish to purchase.

Polls and surveys have affirmed that consumers favor labeling of genetically engineered foods and I believe that this is a reasonable expectation. There is increasing evidence that research done by Monsanto was flawed and more long-term studies are needed immediately to elucidate potential health risks.

The research and findings that I have presented to you in this proposal will serve as a basis for the contention that dairy products containing rBGH be appropriately labeled as you would any other ingredient.

As a result of your favorable approval of this proposal there will be an incalculable health benefit for future generations of Americans.

Sincerely,

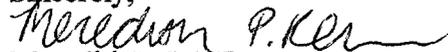

Meredith P. Klein

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ABSTRACT

Bovine Somatotropin is a protein growth hormone produced in the pituitary gland of cattle that plays an important role in the metabolism of carbohydrates, fats and proteins. With the advent of biotechnology, large quantities of rBGH (recombinant bovine growth hormone) can be produced using recombinant DNA technology to raise milk production by 10-15%.

Scientific research has recently documented substantive evidence of a potential public health hazard to consumers from the consumption of dairy products treated with rBGH. These studies demonstrate an increase in IGF-1 (Insulin Like Growth Factor-1) in the milk of rBGH treated cows. IGF-1 has been implicated as a significant factor responsible for the increased risk of development of breast and prostate cancer.

The precedent for the labeling rationale has been set with saccharin, a widespread tabletop sweetener. Based upon a scientific review of the effects of rBGH, the FDA has opposed the mandatory labeling of food products derived from dairy cows treated with rBGH. The FDA maintains that BGH occurs naturally in milk and the epidemiological and laboratory evidence is insufficient to ban the substance or mandate labeling. Based upon the currently available scientific and epidemiological evidence suggesting health risks of rBGH, mandatory labeling is proposed to allow the public to make an informed choice while further research is conducted. The FDA has a regulatory responsibility to protect the public health interest in this regard.

Proposal

I propose that the Food and Drug Administration immediately mandate labeling of products containing the genetically engineered hormone rBGH (recombinant bovine growth hormone) in order to give consumers the right to choose which products they purchase.

What is rBGH and why is it unnecessary?

- Recombinant bovine growth hormone is a genetically engineered hormone that dairy farmers use to increase milk production in their cows. This is sometimes otherwise known as rBST or recombinant bovine Somatotropin.
- Americans consume an average of 586 pounds of milk and dairy products every year (The Light Party, 1996). Robert Cohen believes that the amount of milk needed to manufacture the dairy products that American's actually consumed was far greater than USDA statistics indicated. In his book MILK, The Deadly Poison (1998) Cohen provides a chart describing the relative amounts of dairy products consumed (See Appendix A).
- According to Robert Cohen (1998) in 1995 10 million cows produced 663 million pounds of milk every day to insure that every American "would have a milk mustache." USDA shows that dairy cows produced 152 billion pounds of milk in 1995. That is 416,000,000 pounds per day.
- Based upon the consumption data for 1995 of dairy products published by the USDA, 663 million pounds of milk would have been produced to satisfy consumption. This represents a 247 million pound discrepancy. Where does that 247 million disappear? It is easy to understand that when fat from whole milk is made into butter some may be lost. The USDA has failed to report the source of this contradictory data. (Cohen, 1998)

Insulin Like Growth Factor-1

After genetics, Samuel Epstein believes IGF-1 is the second greatest indicator of breast cancer (Sibbald, 1999). Epstein, as well as scientists from the Physicians Committee for Responsible Medicine have found in their independent studies that high levels of IGF-1 directly correlate with high rates of breast cancer and prostate cancer (Sibbald, 1999). This product, which has been approved as safe for consumers, continues to stimulate growth of breast and prostate cancer right

in front of our very eyes (Ethical Investigating, 1). Something must be done immediately to avert a potential health care crisis.

How IGF-1 works

When dairy farmers inject rBGH into their cows they are also increasing the levels of naturally occurring IGF-1. If IGF-1 is taken orally it is absorbed into the intestine, passes into the bloodstream, circulates to breast tissue, and is cleaved from its binding protein complex manifesting its effect in the gut (Outwater, Nicholson, & Barnard, 1997). FDA scientists maintain that absorption of rBGH does not occur and that levels are within safe limits. This is the evidence that suggests that your argument is flawed:

- According to the Outwater study done in concentrations as low as *1 ng/ml*, IGF-1 has tumor growth promoting effects (Outwater et al., 1997).
- The levels of IGF-1 in cows treated with rBGH have been shown to reach concentrations as high as *10 ng/ml* (Ethical Investigating, 1-2).
- These growth-promoting effects in turn cause proliferation of cancer cells.
- No studies to date have been done showing how IGF-1 is absorbed in the human body (Outwater et al, 1997). These need to be done immediately.
- One of the most important reasons why IGF-1 is *not destroyed* and is absorbed is because of the protective effects of casein.
- Monsanto has stated that there is more IGF-1 in saliva. The problem is that the IGF-1 in saliva is destroyed by digestion because it is not being protected by casein as would be in dairy products.

What is Casein?

It is a milk protein that is digested by stomach enzymes and absorbed in the colon, which has IGF-1 receptor sites (The Light Party, 1996).

IGF-1 levels in cows treated with rBGH

- It has been shown that cows being treated with rBGH dairy products will demonstrate *an increase in the levels of IGF-1 from 70 to 1000% (Ethical Investigating, 1)*.
- Monsanto concedes that IGF-1 levels increase 5 times after rBGH is injected into cows (Mephram, Schofield, Zumkeller, & Cotterill, 1994).

EGF and IGF-1

What is EGF?

- * Epidermal growth factor (EGF) is similar to IGF-1 in that it has been shown to have a similar molecular weight as IGF-1, 3 disulfide bridges, and both are able to form large complexes with binding proteins (Outwater et al., 1997).
- * Studies done on infants have shown that EGF is absorbed in the gastrointestinal tract. Further studies and investigations very likely could show that IGF-1 does the same (Outwater et al., 1997).

The Cancer Connection

Prostate Cancer and IGF-1

- According to research done, men ages 60 and older are eight times more likely to contract prostate cancer with increased levels of IGF-1 (The Light Party, 1996).
- January 1998 SCIENCE
 - * Clinical research identified a four fold increased risk of prostate cancer in a group of 152 men with IGF-1 levels above the mean (The Light Party, 1996).

Breast Cancer and IGF-1

- The Lancet published a study showing a seven fold increased risk of breast cancer in a sample of 397 women who were pre-menopausal (less than age 51) (The Light Party, 1996).
- In addition rBGH has been shown to increase milk fat content, which is associated with elevation of IGF-1 levels, and it has been observed that breast cancer risk is associated with increased fat intake (Outwater et al., 1997).

Cancer Treatment and IGF-1

- One of the goals in breast cancer treatment is to lower the IGF-1 levels or to block the binding of IGF-1 cells (Outwater et al., 1997). Doesn't this tell us anything about safety of rBGH and IGF-1 levels?

Consumers have the right to know

The fundamental principle behind labeling products containing this hormone is to afford consumers with the information requisite to make a sensible choice among those products they wish to purchase and consume. It has been shown in many polls that consumers want to know what they are purchasing and, given a choice, they prefer not to consume genetically engineered foods such as milk containing rBGH. Here are some polls that show this:

- A study done by the University of Wisconsin in January 1996 found that 94% of consumers advocate labeling while 74% are moderately to very concerned about health risks of rBGH.
- A survey performed on the safe-food web site found that 93% of those polled felt genetically engineered products should be labeled and 73% felt very strongly about this issue (Safe-food, 2000).
- A Biotech and Novartis poll done in February 1997 found that 54% of consumers prefer to see genetically engineered foods move towards an organic form.
- Time Magazine wrote in January 1999 that 81% of the population agreed that genetically engineered foods should be labeled. (Safe-food, 2000)

- In January 1996 the USDA funded a poll on rBGH revealing that 94% of consumers want labeling and that 74% felt that most new biotech drugs were unsafe (Safe-food, 2000).
- *Hillary Wright, RD Med* is a nutritionist for Harvard Vanguard Medical Associations in Boston. She states that the same cancer prevention books say that rBGH in cows can increase cancer risk so many oncologists recommend cessation of dairy consumption. In addition she emphasizes that her patients **MUST** carefully consider their **OPTIONS** regarding dietary intake (Peck, 2000).

In the June 2000 Natural Healing magazine people are quoted as to why they oppose genetically modified foods and why they insist on labeling. Here's what they have to say:

"My children are highly allergic to many foods, so I've learned to carefully read ingredient labels. It's a matter of life or death for me to know if something has been genetically modified." -Nancy Sotomayor-Gonzalez, Howell, New Jersey

"If these products were actually providing health and nutritional benefits to the consumer, as so many like to claim, then I would think that these companies would proudly and happily label their products with stars and banners." -Joni L. Pennington, Traverse City, Michigan

"....Genetically Modified Organisms are not natural, and no long term studies have been done regarding safety for the consumer or environment." -Kathleen Charette, Holland Landing, Ontario

Instead of offering consumers little or no information to examine, the public deserves all relevant information regarding the quality and safety of those products they are considering. According to Ron Epstein (1996), failure to label genetically engineered food blatantly disregards consumer's rights in a democratic society. Robert Cohen is astounded that the FDA would approve a drug that increases the risk of disease in cattle, has no therapeutic uses, and then deny consumers the opportunity to make an informed choice by prohibiting labeling (The Light Party, 1996).

Labeling of Saccharin

Nearly 60% of sugar intake comes from corn sweeteners such as saccharin. This FDA approved sugar substitute has been the subject of an ongoing controversy for more than twenty years now. There are still questions today about whether or not saccharin causes cancer in humans and therefore it continues to carry a warning label of its risks (Henkel, 1999).

History of Saccharin

1879- Saccharin was discovered and used to sweeten foods for the forces during World Wars I and II.

1911-Federal scientists call it "an adulterant" and attempt to ban it.

1958- Congress passes the Food Additives Amendment to the Food, Drug, and Cosmetics Act requiring pre-market approval from FDA for food additives developed after 1958. It did not apply to those products that were GRAS (*generally* recognized as safe) at the time because of their widespread use.

1972-73- Studies done on laboratory rats found that saccharin was associated with an increased risk of bladder cancer.

1977- Canadian study showed that saccharin was responsible for causing bladder cancer in rats. Soon after the FDA proposed a ban on saccharin for all usage except for over-the counter use as a tabletop sweetener.

Until 2002- Congress passed the Saccharin Study and Labeling Act that approved a two-year moratorium banning saccharin while studies were being conducted. They also required that all food containing saccharin must have a label stating, "Use of this product may be hazardous to your health. This product contains saccharin which has been determined to cause cancer in laboratory animals." (Henkel, 1999).

The labeling of saccharin is a perfect example of labeling that the FDA has approved in the health interest of consumers. If a page can be taken from the book on saccharin, we should recognize that products containing rBGH should be labeled as potentially unsafe while further studies are being conducted. Consumers have the right to choose between saccharin, aspartame and sugar. The very least that we can do is to give consumers the right to choose to consume rBGH or organically derived dairy products.

Problems with FDA and Monsanto claims

1. Safety Levels of Insulin Like Growth Factor 1 (IGF-1)

- Multiple studies have proven that the administration of recombinant bovine growth hormone (rBGH) to cows increases IGF-1 to dangerous levels. You have acknowledged that there is a "modest increase" (<http://www.fda.gov/cvm.fda/infores/other/RBRPTFNL.htm>). Modest increase? The Heany study has proven that it is in fact a 10% increase sufficient to adversely affect health status (Cohen, <http://www.hungerstrike.com/4613rbut.html>).
- Monsanto maintains that milk in rBGH-treated cows is identical to the amount found in breast milk (Cohen, 1998). This is misleading because humans over age two do not consume breast milk and IGF-1 in the human body is destroyed or binds to IGF-1 receptors. In organic milk IGF-1 cannot be destroyed because of the protective effects of casein.
- Monsanto also claims that there are higher levels of IGF-1 found in saliva but they fail to recognize that IGF-1 is destroyed by digestion in saliva in a process similar to that in mammary tissue. The reason that it is destroyed by digestion unlike cow's milk is because it does not contain casein (Ethical Investigating, 2).
- In addition the authors of the article in Science (Juskevich and Guyer) claim that differences exist between organic and rBGH-treated milk and they confirm that rBGH treatment causes an increase in IGF-1 concentrations in cow's milk (Cohen, 1998).

2. The "Freak Amino Acid"

- Yes! rBGH is indeed a "freak amino acid" and not a product of a naturally occurring process. This "freak amino acid" was created through a modification of the N-terminal amino acid of rBGH with a methionine

moiety. The FDA's former employee Bernard Violand used this term in Protein Science when he explained the error in the amino acid sequence that was made during the bioengineering process (Cohen, <http://www.hungerstrike.com/4613rbut.html>)

- According to the Outwater study done, rBGH differs by 1-9 amino acids and this imparts profound effects on biologic function (Outwater et al., 1997).
- This amino acid variation resulted in the formation of a different compound than the naturally occurring bovine growth hormone prototype (The Light Party, 3). Although the work of Jerome Moore established this fact, it may not pose a threat that other human diseases could occur if there was a mistake in the middle of the protein chain (Cohen, <http://www.hungerstrike.com/4613rbut.html>).
- FDA states that you were aware of this structural disparity since 1987. These errors were not made available to the scientific community until the FDA's review in 1990. If they had been released sooner, then Juskevich and Guyer would have reported them in their SCIENCE paper.
- This "freak amino acid" error did not occur in a small fraction of rBGH as the FDA has stated, but an excess of 40% of the protein included one or more of these "freak amino acids" (Cohen, <http://www.hungerstrike.com/4613rbut.html>).
- Finally, according to Samuel Epstein (1990), the FDA has acknowledged a 3% structural difference between rBGH and BGH. This would support Jerome Moore's argument that there are many diseases that could potentially occur if an amino acid differed in the middle of a protein chain (Cohen, <http://www.hungerstrike.com/4613rbut.html>).

3. Pasteurization destroys IGF-1

- Pasteurization does not destroy IGF-1. In fact it increases it. The FDA states that 90% of rBGH is destroyed by pasteurization (Cohen, <http://www.notmilk.com/fdatestim.html>). Research studies performed by the FDA in 1990 reported a significant increase in rBGH levels in milk following pasteurization (The Light Party, 1996).
- According to the Outwater study (1997), 80.95% of the hormone still remains in contrast with the 90% that you claim is destroyed.

- The FDA distorts the truth when by claiming that most of the hormone is destroyed while it has been proven that only 19% was actually destroyed. The commissioner even went as far as to say to Congress that further research would be unnecessary because heat treatment destroyed the rBGH in milk (Cohen, <http://www.hungerstrike.com/4613rbut.html>).
- Normal pasteurization requires heating to 161 degrees for 15 seconds according to the Code of Federal Regulations (21 CFR 1240.61) In the FDA experiments the milk was heated for 30 minutes at the temperature it was designed to be heated for 15 seconds (Cohen, <http://www.hungerstrike.com/4613.html>).

4. Health Canada Study

- This study recognized many biological effects from rBGH oral ingestion including concerns regarding tumor growth and safety of the product. These observations made Health Canada decide not to accept genetically engineered bovine growth hormone.
- Secretary of Health and Human Services, Donna Shalala said that the Canadian scientists misinterpreted the data and that there should be no health concerns regarding safety. Shalala was incorrect because the FDA sponsored research establishing that oral ingestion of rBGH significantly increases plasma antibody concentration resulting in safety concerns. (Cohen, <http://www.hungerstrike.com/4613rbut.html>).
- Canadian scientists found that 20-30% of rats had primary antibody responses to rBGH after oral administration supporting the fact that rBGH was absorbed and expressed antigenic properties.

5. Safety of rBGH treatment for cows

- The FDA claims that rBGH is safe for cows.
- Dick Teske who works at the FDA has stated that there was a 46% increase in spleen size in the cows treated with rBGH and this is not statistically significant (Cohen, <http://www.notmilk.com/fdatestim.html>). Splenomegaly reflects the removal of large numbers of defective red blood cells in association with disorders of immune function and inflammatory disease.

- In addition the cows on average lost 100 pounds during lactation and their body organs were under continued physiologic stress. (Cohen, <http://www.hungerstrike.com/4613rbut.html>) The implication of this continued stress on organ function must be studied in further detail.

Why is more testing needed?

- The FDA is able to say that rBGH is safe for human consumption based upon short-term studies done with laboratory rats done by Monsanto scientists. According to Dr. William Von Meyer, a well-known biochemist, rats developed liver enlargement and significant bone growth (Cohen, 1998). Liver enlargement reflects associated with a disruption of carbohydrate, protein and fat metabolism as well as inhibition of the synthesis of blood-clotting factors and vitamins.
- Surprisingly enough the only human studies done were conducted with dwarfs fifty years ago. The dwarfs were given the hormone to see if there the agent would enhance bone growth and there was no effect at all on linear growth potential (Cohen, 1998). No other human clinical studies have been performed to date.
- According to Samuel Epstein (1990) Monsanto failed to employ the proper scientific procedures and techniques to arrive at a satisfactory conclusion. In addition the sample size was too small to establish any statistical trend. It also has been revealed that an eminent Monsanto scientist was fired after posing safety questions regarding rBGH.
- Finally Robert Cohen believes that the data recorded in the journal Science was inaccurately reported with lack of supporting references, leading to erroneous conclusions.

Final Analysis

The bottom line in this controversy is that consumers deserve and should demand the right to know the truth about rBGH. How can they make a choice without sufficient scientific knowledge of the health risks of rBGH? As in the case of saccharin, there should be a label for products treated with rBGH declaring that the hormone has been used in the manufacturing process allowing the consumer to make a reasonable, informed decision. In the interim further long-term studies must be conducted in order to examine the risk potential for cumulative adverse health effects of rBGH.

Appendix A

1995 Per Capita Dairy Consumption In Pounds

Food Item	Pounds Eaten	Conversion Factor	Milk Consumption*
Butter	4.5	21.2	95.4
Whole Milk	72	1	72.1
2% Milk	69.1	1	69.1
1% Milk	22	1	22
Skim Milk	33.7	1	33.7
Flavored Milk	10.4	1	10.4
Cream	8.7	1	8.7
Cheese	27.7	10	277
Cottage Cheese	2.6	4	10.4
Ice Cream	15.9	12	190.8
Ice Milk	7.6	6	45.6
Sherbert	1.3	4.5	5.85
Other Frozen Prodt	4.8	1	4.8
Condensed Milk	6.4	2.1	13.44
Dry Whole Milk	0.4	7.4	2.96
Nonfat Dry Milk	3.8	11	41.8

Reference: Milk, the Deadly Poison written by Robert Cohen

*Milk consumption after conversion

Annual Total Dairy (consumption).....932.05 lbs.

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Education

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Relevant Coursework

- Controlling Stress and Tension
- Educational Statistics
- Introduction to Community Health
- Contemporary Moral Issues
- Technical Writing
- Principals of Biology I
- Minority Health
- Anatomy and Physiology I and II

Work Experience

- **Center for Health and Well-Being, College Park, MD Fall 2000**
Volunteer
Assist in the coordination and implementation of health education programs.
Provide information to students and staff regarding the health and wellness services available.
- **Nordstrom's, Paramus, NJ Summer 1998**
Sales associate
Top seller in department, handled large cash sales, responsible for customer follow-up, and highest level of customer satisfaction.
- **Preakness Hills Country Club, Wayne, NJ Summer 1997**
Waitress
Attended to the wishes of the club members by serving guests and creating a warm atmosphere for dining.
- **YM-YWHA of North Jersey Summer 1996**
Counselor
Supervised pre-school children while maintaining a high degree of safety. Also planned and guided daily recreational activities.

College Activities

- Member, Eta Sigma Gamma, national health education society
- Member, National Wellness Association (NWA)
- Member, Society for Public Health Education (SOPHE)
- Member, American Alliance for Health, Physical Education, Recreation and Dance (AAPHERD)
- Member, Hillel, University of Maryland, College Park
- Service Learning Program, Controlling Stress and Tension

References

- Brody, J. E. (2000, Sept 26). Debate over milk: time to look at the facts. The New York Times, p. D8 (N) F8 (L) col 1 (35 col in).
- California right to know genetically engineered food labeling ballot initiative. 13 Myths About Genetic Engineering. Available: <http://www.calrighttoknow.org/thirteenmyths.html> [2000, October 24]
- Cancer Prevention Coalition. (Mar 15) Researcher warns of cancer risk from rBGH (non-organic) dairy foods. Available: <http://www.holisticmed.com/bgh/prostate.html> [2000, October 23]
- Centner TJ & Lathrop KW. (1997, Jan) Legislative and legal restrictions on labeling information regarding the use recombinant bovine somatotropin. Journal of Dairy Science, 80(1), 215-9
- Cohen, R. FDA denies petition, hunger strike continues. Available: <http://www.hungerstrike.com/4613rbut.html> [2000 November 13]
- Cohen, R. (1999, Jan 3). The Dairy Education Board. Available: <http://www.notmilk.com/deb/010399.html> [2000 November 25]
- Cohen, R. (1999, Nov 11). FDA Testimony. HUNGERSTRIKE. Available: <http://www.notmilk.com/fdatestim.html> [2000, October 19]
- Cohen, R. (1999, Sept 5) Milk and Heart Disease. Dairy Education Board. Available: <http://www.notmilk.com/deb/090599.html> [2000, September 17]
- Cohen, R. (1998). MILK, The Deadly Poison. Englewood Cliffs, NJ: Argus Publishing, Inc.
- CVM-1. Report on the Food and Drug Administration's review of the safety of recombinant bovine somatotropin. Available: <http://www.fda.gov/cvm/fda/infores/other/RBRPTFNL.htm> [2000, October 19]
- Davidson, T. (1997 May 3) rbst state labeling laws. Available: <http://www.ibiblio.org/london/permaculture/m.... /msg00220.htm> [2000 November 16]
- Epstein, R. (1996, July 9) Why genetically engineered food should be labeled. Available: <http://www.calrighttoknow.org/whylabelgefoods.html> [2000, October 24]
- Epstein, SS. (1990) Questions and answers of synthetic bovine growth hormone. International Journal of Health Services, 20(4), 573-8

- Etherton TD, Kris-Etherton PM, & Mills EW. (1993) Recombinant bovine and porcine somatotropin: safety and benefits of these biotechnologies. Journal of American Dietetic Association, 2, 177-180.
- Ethical Investigating. rBGH (Posilac)—Breast Cancer and Prostate Cancer. Available: <http://www.ethicalinvestigating.com/monsanto/bgh.shtml> [2000, October 23]
- FDA, Center for Veterinary Medicine, Office of Management and Communications, HFV-12. FDA responds to citizen petition on BST. Available: <http://www.fda.gov/cvm/fda/infores/updates/cpetup.htm> [2000, October 19]
- Gershon D. FDA panel sees problems with labeling of milk hormone. (1993, May 13). Nature, 363, 6425:107.
- Gillette, B. Doin a Body Good? E Magazine.com Available: http://www.emagazine.com/september-oct.../0998.gl_health.htm [2000, October 24]
- Harris, W. Breast Cancer Statistics. Veg Source. Available: http://www.vegsource.com/harris/b_cancer.htm [2000, October 3]
- Henkel, J. (1999) Sugar Substitutes: Americans Opt for Sweetness and Lite. U.S. Food and Drug Administration. Available: <http://vm.cfsan.fda.gov/~dms/fdsugar.html> [2000, November 16]
- Juskevich JC & Guyer CG. (1990, Aug 24) Bovine growth hormone: human food safety evaluation. Science, 249, 4971: 875-84
- Knekt P, Jarvinen R, Seppanen R, Pukkala E, & Aromaa A. (1996 Mar). Intake of dairy products and the risk of breast cancer. Breast Cancer Journal, 5, 687-91
- Kradjian, R. M. THE MILK LETTER: A MESSAGE TO MY PATIENTS. Available: <http://www.afpafitness.com/milkdoc.htm> [2000, September 20]
- Mepham TB, Schofield PN, Zumkeller W, & Cotterill AM. (1994, Jul 16) Safety of cows treated with bovine somatotropin. Lancet, 344, 8916:197-8, 1445-6.
- National Press Club Washington D.C. (1996 Jan 23). New study warns of breast and colon cancer risks from rBGH milk advocacy groups escalate efforts against rBGH. Available: <http://www.preventcancer.com/PC/Newstudy.html> [2000 October 24]
- Larsen, Hans R. Milk and the Cancer Connection. Available: <http://www.notmilk.com/deb/larsen.html> [2000, October 3]
- O'Connor, A. (1996 Mar) BGH linked to cancer in humans. Vegetarian Times. p.18
(1)

- Organic Consumers Association. 49 members of the US Congress send letter to FDA demanding mandatory labeling of genetically engineered foods. Available: <http://www.purefood.org/ge/con491label.cfm> [2000, October 24]
- Organic Consumers Association. Monsanto's genetically modified milk ruled unsafe by the United Nations. Available: <http://www.purefood.org/rBGH/unsaferbgh.cfm> [2000, October 22]
- Outwater J.L, Nicholson A, & Barnard N. (1997) Dairy products and breast cancer: the IGF-1, estrogen, and bGH hypothesis. Medical Hypotheses, 48, 453-61.
- Peck, P. (2000, April 4) Dairy products linked to increased risk of prostate cancer. WebMD medical News. Available: <http://my.webmd.com/content.article/1728.56237> [2000, October 22]
- Peck, P. (2000, Oct 13) Milk: It Does a Body Good—or Does It? WebMD Medical News. Available: <http://my.webmd.com/content.article/1728.62269> [2000, October 22]
- People for the Ethical Treatment of Animals. Milk Sucks. Available: <http://www.milksucks.com/breast.html> [2000 November 19]
- People for the Ethical Treatment of Animals. What's wrong with dairy?
- Ruan Weifeng, Powell-Braxton Lynn, Kopchick John J., & Kleinberg David L. (1999) Evidence that insulin-like growth factor I and growth hormone are required for prostate gland development. Endocrinology Journal, 140(5), 1984-9
- Safe Food-Campaign 2000. What do people want? Polls on genetically engineered foods. Available: <http://www.safe-food.org/-issue/polls.html> [2000, October 24]
- Scared of Milk. (1994, Feb 17). Nature, 367, 6464:582.
- Scott, D. L. (1995, June 9). Cornell University-BST Fact Sheet. U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, FDA Prime Connection. [2000 October 22]
- Seely S. (2000, May). Possible connection between milk and coronary heart disease: the calcium hypothesis. Medical Hypotheses, 5, 701-3
- Schwartz, R. Protein and Calcium Myths. Not Milk. Available: <http://www.notmilk.com/deb/schwartz.html> [2000, October 3]
- Sibbald, B. (1999, Sept 21). European ban on bovine growth hormones should continue: expert. Canadian Medical Association Journal, 161 (6), 677

The Campaign. (1999, May 26) Congressional Record. Available:
<http://www.thecampaign.org/kucinkick52699.htm> [2000, October 24]

The Light Party. (1996) The Tainted Milk Mustache, How Monsanto and the FDA Spoiled a Staple Food. Available: <http://www.lightparty.com/Health/Monsanto.html>
[2000, October 23]