

The Humane Farming Association believes all animals, regardless of whether they are considered "cute" or "intelligent" deserve to be treated with compassion and decency. And we believe consumers deserve quality food, free from salmonella, FDA Suppresses Information antibiotics, and pesticides.

If four major pharmaceutical companies have their way, the milk produc tion of dairy cows across the country will be manipulated by injections \_\_\_ of a genetically engineered hormone.

This is the story of BGH - its effect on cows, consumers, and farmers, as well as the efforts of agribusiness drug companies to get genetically engineered hormones into our nation's dairy cows.

What is BGH? Bovine Growth Hormone (BGH), is also known as Bovine Somatotropin (BST), works by interfering with a cow's natural physiology. Lactation is artificially manipulated through hormone injections. Drug manufacturers claim that this will cause an increase of up to 20% in milk production.

BGH is produced by extracting growth hormones from cows, using sophisticated gene-splicing techniques to create synthetic hormones. These hormones are then injected into dairy cows on a regular basis.

Drug companies claim that BGH merely 'enhances' a natural process. Cows do, of course, produce hormones as part of their natural bio-chemical systems. But those natural hormones are produced in the proportion needed to meet the cow's complex physiological needs. BGH manipulates these natural systems and artificially induces the cow to produce more milk than is appropriate for her body. As BGH forces cows to produce more milk than is healthy for their bodies, the cows become more susceptible to infection and disease. This, in turn, creates additional needs for antibiotics and other drugs - which these drug companies are all too happy to provide.

Genetically engineered BGH is a new and inadequately tested hormone. In evaluating the dangers of BGH, we need to recognize the problems already known - and the risks that are not worth taking.

Human Health Hazards

activity.

The FDA has not required adequate tests on the human health effects of BGH because they claim that they already know BGH is inactive in humans. The basis for this position is extremely dubious.

In the 1950's, experiments were conducted on the effects of naturally occurring bovine growth hormones on treating human dwarfism. The more than the fact that it did not cause dwarves to grow.

Indeed, the industry initially claimed that BGH was chemically inactive process his agency was using. Dr. Burroughs reported that: contrary, that claim was retracted. The industry's new claim: BGH causes

effects in a "few" species but has no effect on humans. But even the incomel we experiments run in the 1950's showed that • The FDA did not assign reviewers with the expertise needed to data. some people who ingested BGH absorbed some of it into their blood stream, • Adequate human health studies of the effects of BGH had not been the dairy industry. It is estimated that there are more than 80 different drugs causing elevated levels of nitrogen retention - a sign of growth hormone conducted.

levels of other hormones as well. In fact, hormones have been found in at the FDA. Now we have an approval process. I don't think the FDA is doing Many people have had debilitating allergic reactions to these antibiotics. amounts up to 1,000 times greater than normal levels.

One hormone which was found in significantly higher levels in blood is IGF-I - a hormone that appears to be identical in cattle and in humans. Human Test Tubes Elevated levels of IGF-I in humans can cause acromegaly - a disease which causes enlargement of the hands, feet, nose, and chin, as well as glucose intolerance and hypertension.

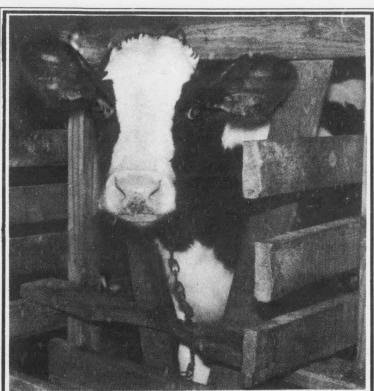
There are additional concerns that its effects could also include premature growth stimulation in infants, breast growth in your children, and



Painful afflictions of the legs and udder associated with intensive dairy production would increase with the use of BGH.

increased risk of breast cancer among women. No one knows what effect this secondary hormone will have upon consumers of BGH treated milk.

The controversy surrounding BGH has renewed public concern about the integrity of the FDA. The very agency which should be protecting the nation's food supply has actively worked with the drug companies to suppress information about BGH that would put the hormone in a negative Animal Suffering



. his anemic calf will never walk or turn around. He will never breathe fresh air, nibble on grass. or feel the sunshine.

Dr Richard Burroughs was a staff veterinarian and senior scientist at the industry's implication that BFG is inactive in human beings is based on little FDA overseeing the analysis of industry-sponsored tests on BGH. He raised Drug Abuse Goes Industry Wide a number of questions about the safety of BGH and about the approval There is another set of human health concerns that arise indirectly from

• Their udders show an increased tendency to become infected.

Milk from cows injected with BGH has been found to contain higher slowing down the approval process. It used to be that we had a review process and calves.

Due to public exposure of its behavior, the FDA has been forced to slow Health officials also warn that the overuse of antibiotics promotes the In 1986 dairy farmer John Kinsman discovered that the University of safety problems associated with intensive dairy farming Wisconsin was selling milk from genetic engineering experiments to the

sold on campus. In another case, after a California supermarket chain refused to accept milk from BGH-treated cows, the experimental milk was made into cheese giveaway program.

Some dairy processing companies have refused to accept milk containing BGH. According to one major California plant, Alta Dena, "Our positior is firm with reference to {hormone} treated milk. The only one that will gain if BGH is allowed will be the drug manufacturer. The consumer has nothing to gain, and the dairy farmer will lose in the long run.

Family Farms and BGH

Although many feel that they may be forced to use it, most dairy farmers are opposed to BGH.

BGH would undoubtedly benefit a few large-scale dairy factories which, with BGH increasing their yields, could gain an advantage over other farms. But that advantage would only be temporary. In order to compete, other dairies would soon be forced to adopt the same technology. In short, BGH would trigger a pharmaceutical arms race, requiring milk producers to use

more and more hormones, antibiotics, and other drugs.

Many dairy farmers know that administering BGH will actually harm cows and make their work harder. Once BGH is on the market, however, they will be virtually forced to use it. According to Vermont dairy farmer Robert Baird, "None of us are excited about pushing our cows any harder. But if we're forced to, we will use BGH to stay in business."

Though little has been done to measure BGH's effects upon human health, pharmaceutical companies have sponsored tests to measure the impact of hormone injections on cows. Even these tests - clearly biased in favor of BGH - indicate the dangers of its use.

Routine injection of BGH into a cow increases her level of stress. A cow may not metabolize food quickly enough to compensate for the extra milk the hormone forces her to produce. This can throw her into what can be termed low-level shock. The cow remains in this condition for as long as the hormone is administered.

Cows injected with BGH may not be allowed to graze in pastures. Instead, they would be confined in small areas where their diet and movement would be tightly controlled. Rather than grazing on grass, BGH-treated cows must consume a highly-concentrated diet to keep up with increased production. This, in turn, can lead to higher rates of metabolic disease.

Industry tests also indicate that BGH may cause enlargement of internal organs, declines in the rate of pregnancy, increased intolerance to heat, and a dramatic increase in the amount of blood pumped through the animal's

Through reproductive technologies, the quantities of milk produced by cows has already increased dramatically. In extreme cases, cows must wear bra-like harnesses to support their engorged udders.

As a cow is made to produced greater quantities of milk, she in increasingly prone to mastitis - a painful infection of the udder. Tests have shown a dramatic increase in the incidence of mastitis in cows receiving BGH

In 1930 the average cow produced 12 pounds of milk a day. By 1988 the average had risen to 39 pounds. If, as proponents claim, BGH increases production by 20%, that volume could rise to 49 pounds a day per cow. This would lead to a corresponding increase in veterinary problems associated with intensive milk production.

the use of BGH. Because hormone-treated cows are pushed to the limits of in every species except cattle. After being confronted with evidence to the • Cows treated with BGH have higher than normal levels of reproductive endurance, their immune systems are weakened. Producers respond by administering more antibiotics and other drugs to keep the over-stressed

> The FDA has been notoriously lax in dealing with the misuse of drugs in currently used by milk producers. Several of these drugs are passed on to Dr. Burroughs was fired on November 3, 1989. "I was told that I was people through milk, as well as through meat from slaughtered dairy cows

good, honest reviews. They've become an extension of the drug industry." In addition, one of the drugs routinely found in milk is sulfamethazine. Promoted by the drug industry as "safe and effective," sulfamethazine is now known to be carcinogenic.

down its attempts to put BGH on the market. Many people, however, have development of antibiotic resistant strains of bacteria such as salmonella. already unwittingly consumed milk containing genetically engineered BGH. The wide-spread use of BGH would only exacerbate these and other food

school's own dairy plant. There the milk was quietly made into ice cream and Cows Can't Say No - But We Can

Four multi-national drug companies have invested more than half a billion dollars in the development and promotion of BGH.

If BGH gains acceptance, it will pave the way for the use of genetically and distributed to unsuspecting low-income families through a federal food engineered growth stimulants for pigs, sheep, and other farm animals. BGH itself has already been used in experiments to produce larger, faster growing

> The Humane Farming Association is working to make sure that BGH never becomes an industry standard. Here is what you can do to help:

- Contact your grocery store and dairy product company directly to let them know you will not buy any dairy product derived from BGH treated cows.
- Support HFA. The Humane Farming Association is leading a national campaign to protect consumers from the misuse of agri-chemicals and to protect farm animals from the cruelty inflicted upon them for the sake of agribusiness profit.
- Boycott hormone treated milk. HFA supports the Pure Milk Cam

Q: Why can t this real calf walk?



A: He has only two feet

Actually, less than two feet. Twenty two inches to be exact. His entire life is spent chained in a wooden crate measuring only 22 inches wide and 56 inches long. The crate is so small the calf can't walk or even turn around.

Most people think animal abuse is illegal. It isn't. In veal factories, it's business as usual. "Milk-fed" veal is produced by making a calf anemic. The calf is not fed mother's milk. He's fed an antibiotic-laced formula that leads to diarrhea. He must lie in his own excrement - choking on the ammonia gases. He's chained in a darkened building with hundreds of other baby calves suffering the same fate. They are immobilized, drugged, and anemic.

**Veal Drugs** 

According to the USDA, sulfamethazine (a known carcinogen), oxytetracycline, penicillin, neomycin, streptomycin, and gentamycin have all

Doesn't the USDA prevent tainted veal from being sold? Absolutely not. The USDA itself admits that most veal is never tested for toxic residue. The industry claims that the drugs used in veal have been "approved" by the FDA. But don't buy it. The fact is: The drugs commonly used in veal have not been approved by the FDA or any government agency.

When the HFA began the National Veal Boycott, veal production was the most rapidly expanding segment of the meat industry. At the start of the boycott, there were approximately 45 veal factories in California. Today only three remain.

The HFA is dedicated to stopping the abuse of farm animals and ensuring healthful, drug-free food.

## WAREHOUSE OF HORRORS

Over 98% of the egg market is now under the control of huge agribusiness corporations (eggribusiness). A single company may hold dozen minimum wage attendants.

Contrary to the barnyard roaming "happy hen" image promoted in egg process. advertisements, the life of a factory farmed hen is one of intense suffering. She is confined her entire life in a tiny cage with four, five, or more other hens. There's barely room to stand, let alone walk or stretch her wings. Normal behaviors such as nest building, dust bathing, perching, scratching the ground, and walking are all impossible.

The hen is pressed against the side of the wire cage. Her feathers fall out. Her skin becomes raw, often bloody. Her feet are injured by the sloping wire floor. Propped up beside her is another hen, one which could no longer reach the food when her feet entangled in the wire. So she slowly starved to death.

An extensive investigation of the egg industry by the Humane Farming Association has revealed:

The advertising phrase "No Hormones" is used deceptively by the industry to lead consumers to believe eggs are raised naturally. The industry fails to warn of the enormous amounts of antibiotics, pesticides, and other chemicals used

Up to five hens are crowded for life in a cage with the floor space barely more than the size of a record album cover.

Egg yolks can be chemically dyed to achieve a "natural" yellow look. (Under traditional farm conditions, sunlight helps give yolks their yellow color. In the egg factory, however, there is no sunlight.) Barely able to move, the hens incessantly strike out in frustration -

pecking at the only thing available: each other. To reduce cannibalism, laying hens are "debeaked." Debeaking is a painful procedure whereby the hen's sensitive upper beak is sliced off

with a hot blade. Many die from shock during the process. Male chicks are of no value to the egg industry. They are thrown into plastic garbage bags to suffocate slowly under the weight of chicks

dumped on top. Others are ground into animal feed - while still alive. When egg production declines, the hens are starved and denied water over four million hens. Such an operation will provide jobs for only a few for several days. This "forced molting" shocks the hens into losing their feathers and starting a new laying cycle. Many die during this tortuous

> Veterinary care is non-existent. Individual hens are considered cheap and expendable. Critically ill birds are simply thrown onto "dead piles."

You can help stop factory farm abuses and bring back safer, healthier, more economically sound farming practices.:

Don't buy factory eggs. Those are usually the white-shelled eggs sold in supermarkets and served in restaurants

If you choose to eat eggs, buy only eggs laid by uncaged, undrugged hens. That will help support real farmers - not an abusive factory farm corporation. As a rule of thumb, look in natural food stores for fertile brown eggs that state "no intibiotics" on the carton. Hens allowed a healthful diet, fresh air, and exercise don't need antibiotics to survive.

The Humane Farming Association is dedicated to stopping the abuse

of farm animals and ensuring healthful, drug-free food. FOR MORE INFORMATION, PLEASE CONTACT:



