## THE LIFE OF A MODERN BEEF COW -

## The Making of a Beefburger

How is a modern, industrial steak or beefburger produced? How is it different from steaks a hundred years ago? Does the difference affect your health? You will be surprised to learn the facts.

We are going to follow in the steps of a cow, from birth to death. If you regularly eat their meat, you owe it to yourself to find out what is in that meat.

There are thousands of "cow-calf" operations in America. These are ranches in the Western states which have Herefords or Angus beef cattle. While the pork and chicken industries have consolidated the entire life cycles of those animals under a single roof, beef cattle are still born on independent ranches.

But this is only done because the cows would not bear enough young if kept in cattle yards. Yet, because of it, the calves live their first few months in a gorgeous field full of various kinds of native grasses. It is too bad they cannot remain there.

Mail-ordered straws of bull semen (at \$15 each) for artificial insemination means there are no grown bulls to be seen on these ranches. The bull was a registered bull, distinguished by the size and marbling of his offsprings' steaks. ("Marbling" means lots of tasty, but dangerous, fat in the meat.)

Calving season begins in late winter and continues on until March. In April comes the first spring roundup to work the newborn calves (branding, vaccination, and castration). Then more roundups in early summer, to inseminate the cows again, and weaning in the fall. If all goes well, a typical ranch herd of 850 cattle increases to 1,600 by the end of the year.

This article contains material not found in the author's book, *International Meat Crisis.* That book is filled with referenced data on mad cow disease; diseases of food animals; the antibiotics, insecticides, and hormones given to food animals; contents of the feed given to livestock; unsanitary conditions at slaughterhouses and processing plants; the deadly "food-borne" bacteria in the meat; and diseases you can contract from eating meat (excessive overweight, cardiovascular disease, cancer, etc.).

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Born in a nearby birthing shed, the 80-pound calf is turned out on pasture with his mother as soon as he stands up and begins nursing.

After a few weeks, the calf is supplementing his mother's milk by nibbling the delicious food provided for it by nature: a variety of native grasses, such as western wheatgrass, little bluestem, and green needlegrass.

The little calf is doing exactly what the Lord designed that it should do: a life on the range, drinking clean water and eating prairie grass.

But leave it to modern man to change all that beauty into a hideous perversion which ruins the animal and can hurt those that later eat it. For, in October, the calf's life will entirely change.

Like sheep and other grazers, cows are ruminants. They have the unique ability to convert grass—which single-stomach creatures like us cannot digest—into high-quality protein. It is the 45-gallon fermentation tank inside them that makes the difference. The bacteria within the tank changes the grass into acids and protein.

But October changes all that. You see, men want the cow to grow larger, faster. Greed for more money and quicker money is the motivation. And no one is particularly concerned if either the cow's body, or yours, is injured in the process.

Cows raised on grass take longer to reach slaughter weight than cows raised on a richer diet. A hundred years ago, it took 4 to 5 years. In the 1950s, it had been shortened to 2 or 3 years. Now it is done in 14 (sometimes 16) months.

Steaks and beefburgers have become "fast foods" in more ways than one. The cow has been industrialized, just like the chicken in your soup; the porker in your bacon; or the feed-fed pond or river fish swimming in the contaminated waste from the feedlots, which you catch on a hook.

Well, you might wonder what it is that gets a beef calf from 80 to 1,200 pounds in 14 months. I will tell you what it is: enormous quantities of corn, "protein supplements" (composed of parts of dead animals and chicken manure), and drugs—including antibiotics and growth hormones.

Although it all comes at quite a price—in problems for the cow and you—the cattle business has been transformed into a high-volume, low-margin industry.

Yet, ironically, in the old days, ranchers made more money on 250 head than they now do on 850. Cattle are produced faster, but everyone makes less money. According to Cattle-Fax, a market-research firm, the return on an animal coming out of a feedlot has averaged just \$3.00 per head over the last 20 years. Someone is reaping immense profits, but it is not the cattlemen.

In October, the calves are weaned—separated from their mothers. The cows bellow and mope for days; and, due to the change in circumstances and diet, the calves tend to get sick.

Most calves are immediately shipped to the feedlot. Loaded into trucks, they are shipped hundreds of miles to a place you would not want to visit.

After many grueling hours, the truck finally pulls in at a gigantic feedlot. Most have 30,000 to 100,000 inhabitants. It is an immense city of square backlot pens, stretching to the horizon and beyond, each one home to 150 animals standing dully or lying around in a grayish mud—that is not mud. The pens line a network of unpaved roads that go around vast lagoons. At the center of this strange city is a tall silver-colored feed mill.

It is not a pleasant city, with its crowded tenants living in filthy, smelly pens with open sewers, unpaved roads, and choking air. The combination is a recipe for disease. It is only the daily dose of drugs that keeps the entire population from dying off before it reaches the slaughterhouse. You have arrived at a modern cow town.

Four giant meatpacking companies (Tyson's subsidiary IBP, Monfort, Excel, and National) now slaughter and market more than 80 percent of the beef cattle born in America.

Arriving at the feedlot, each calf is placed in a holding pen. Immediately, he is given part of his new diet: *Rumensin*, a powerful antibiotic that he will consume with his feed every day for the rest of his life. Cows need no medication when they eat grass; but, in the holding pen, they tend to get sick. The problem is the feed. The changeover to a "hot ration" of grain so disturbs the cow's digestive process, especially its rumen, that it can die if it does not continually receive antibiotics.

Every day between now and the slaughter date, each cow will convert 32 pounds of feed (25 of them corn) into another three and a half pounds of flesh.

If you were to walk around the feedlot, you would find it an interesting place. Grain is constantly trucked in and sewage is constantly pouring down on the ground.

The grain consists of corn. Growing the vast quantities of corn, needed to feed industrialized U.S. livestock, requires immense amounts of chemical fertilizer, which in turn requires vast amounts of oil. It takes 1.2 gallons of petroleum oil to produce a bushel of corn. Out on the range, the cow ate food produced by energy from the sun; now it eats food requiring energy from Near Eastern oil fields.

By the time the feedlot cow reaches a weight of 1,250 pounds and is ready for slaughter, it will have eaten 25 pounds of corn a day. It took 284 gallons of oil to produce that corn. We have industrialized the cow into a fossil-fuel machine.

For a feedlot holding 35,000 cattle, the feed mill at

the center of it must mix a million pounds of feed every day. Every hour, a tractor-trailer pulls up and unloads another 25 tons of corn. It is ground by two immense steel rollers. Steamed corn kernels are crushed into flakes.

On the other side of the mill, tanker trucks back up to silo-shaped tanks and pump thousands of gallons of liquefied fat and protein supplement. That "enriched" supplement includes molasses and urea.

It also contains the powdered remains of dead animals which were too diseased to be brought to the feedlot. Fearing mad cow disease, the FDA banned the feeding of rendered cow parts to cattle in 1997. But as recently as six months ago, the FDA admitted that it is still quietly being done.

The FDA continues to permit blood products, fat, and beef tallow from dead animals to be fed to cattle, swine, and chickens. Also legal are feather meal, pig and fish protein, and chicken manure.

As I show in my two books on mad cow disease (*International Meat Crisis* and *Mad Cow Disease Can Kill You*), the various forms of mad cow disease attack the entire body and are in the blood and other organs, even though it is the brain that succumbs first.

Cattle are vegetarians, yet we are making cannibals of them. Cattle are taken from grasslands, then sickened on a heavy corn diet. With their bodies in a continually weakened condition, they are then fed parts of animals which died of disease. Then we eat the cows.

But there is more to the story.

Nearby are stacked pallets with 50-pound sacks of *Rumensin* and *Tylosin* (another antibiotic).

Along with alfafa hay and corn silage for roughage, all these ingredients are mixed together and then piped into dump trucks—which keep eight and a half miles of feed troughs constantly filled.

Corn is the basic vegetable part of the ration because no other feed is as cheap or plentiful. Your taxes pay for federal subsidies which enable it to be sold for \$2.25 a bushel, 50 cents less than the cost of growing it.

But the result is an 80-million-acre monoculture that consumes more chemical herbicide and fertilizer than any other crop. From that crop flows a nitrogen runoff that goes all the way down the Mississippi into the Gulf of Mexico, where it has produced a 12,000-square-mile "dead zone."

Ever since World War II, the government's policy is to use field corn to fatten animals for market. Corn also has the advantage of being more compact and portable than grass or hay.

We have all heard of "corn-fed beef." But did you ever stop to think that a cow does not have a stomach able to digest corn?

Corn, as a diet, not only works havoc with a cow's digestive system, but it also damages its flesh. Scientists have discovered that the meat of grass-fed livestock has far less fat than grain-fed meat, but the type of fats

found in grass-fed meat is more nutritious.

Unfortunately, the USDA's grading system classifies well-marbled meat as the best. But "well-marbling" is a nice way to describe lots of intermuscular fat. While nutritionists everywhere warn us not to eat much animal fat, the USDA wants us to eat meat filled with it.

If you ask a feedlot manager what is in the protein supplement, he will reply that he really does not know. His supplier only says that it is 40 percent protein, without saying much more. If you phone the supplier, he will tell you the feed supplement has "proprietary ingredients."

There are a number of deep, dark secrets in the meat industry. They have to be kept secret or the customers would empty out of every fast-food meat restaurant in the country.

Compared with dead animals in the rations, corn seems downright wholesome. But the stomachs of cows cannot handle it. At an average feedlot, you will find a college-trained staff veterinarian overseeing eight or ten cowboys who spend their time riding around the holding pens, looking for the sickest cows. Roping them, they bring them to the vet for treatment.

Then there is "feedlot bloat." The rumen normally produces large amounts of methane gas, which is expelled by belching as the grass is chewed. But the corn diet contains so much starch and so little roughage, that rumination essentially stops. A layer of foamy slime forms in the rumen and it traps the gas inside.

The increasing gas causes the rumen to balloon and press against the lungs. Soon the poor creature cannot breathe. The vet's cowboys have to rush to the scene, before the cow suffocates,—and force a hose down its throat, so the gas can get out.

Since that is not done very tenderly, the cow suffers terrible pain in the process, and cuts made in the throat and esophagus can infect.

That cow goes through a lot of suffering, so you can enjoy your beefburgers.

The corn diet gives the cow acidosis. Unlike our stomachs which are highly acidic, the stomach (rumen) of a cow has a neutral pH. The corn gives the poor animal a type of weakening heartburn.

Acidotic cows stop eating their feed, pant and salivate heavily, paw at their bellies, and start eating dirt. Soon they have diarrhea, ulcers, more bloat,—and liver disease. The entire immune system is so weakened that the cow is susceptible to a variety of illnesses, ranging from pneumonia to feedlot polio.

It is an intriguing fact that, like clockwork, the cow is taken from the feedlot and slaughtered—at just that point in its life when it has become so sickened by the corn/animal feed diet, that, if it would stay alive a month or so longer, it would die!

A sustained feedlot diet of corn and dead animals destroys the cow's liver. As the acids eat away at the wall of rumen, bacteria from the digestive tract enter the bloodstream and collect in the liver. A large number of feedlot cattle are found at slaughter to have abscessed livers.

And that brings us to the antibiotics. These trusty aids lengthen the amount of time the cow can survive at the feedlot, so he can gain additional weight. *Rumensin* inhibits gas production in the rumen, and *tylosin* helps control liver infection.

One of the most dangerous aspects of this process is the fact that most of the antibiotics sold in the United States are put into animal feed! This practice, of course, leads to variant strains of bacteria in the meat which you eat!

It is modern cattle, hog, and chicken production methods which, in great measure, are causing the increasing number of maladies immune to medicinal drugs

Every day the cows on the feedlot are fed a dose of antibiotics, whether they are sick or not. This leads to the development of "superbugs." The drugs are given to keep the cows from getting too sick from the food they are fed. But if they were turned loose onto rangeland to eat grass, they would not be sick.

What happens to the massive amounts of storedup antibiotics in the flesh of those cows, when they are slaughtered? You guessed it; you get it all in your next meal of steak, burger, bacon, or fried chicken. Why is everyone so fond of "chicken soup" that they fondly write books about it? Guess what is in the soup.

Oh, yes, we must not forget another dangerous addition to your meat meal: hormones. As soon as new calves arrive at the feedlot, they are immediately run through a shed where each one receives a hormone implant.

The calves are funneled into a chute, herded along by a painful electric prod, then grabbed by a restrainer device that holds them while a slow-release pellet of *Revlar*, a synthetic estrogen, is injected into the back of the ear.

Think not that this is a matter of little importance. Folk in Europe seem to have more sense than their cousins in America. The European Union has banned hormone implants in food animals throughout Europe. They know that humans should not eat meat which, for months, has received a steady buildup of hormones!

But as long as it tastes juicy and fatty, Americans do not seem to care.

Measurable amounts of hormones are in all the commercially produced meat that is eaten in the U.S. This produces a gradual buildup of estrogenic compounds in humans, which produces falling sperm count, premature maturation in girls, and other hormonal and physical problems. If you have hormone problems, your diet may be the cause.

Synthetic growth hormones have been found in feedlot wastes. They flow into waterways and are eaten by fish. Scientists have found fish exhibiting abnormal sex characteristics.

Each implant costs \$1.50 and adds 40 to 50 pounds to the weight of a cow at slaughter, for a return of at

least \$25. For an extra \$25, why worry about the consumer?

If you were to step into a holding pen where the cows are kept for months, rather quickly you would find that you are ankle deep in a mush of manure and urine. In between several pens are these "lagoons." Examining them more closely, you will find they are the runoff from the pens. In some areas, they flow into creeks and rivers; elsewhere, because it is illegal to do so, they just quietly seep into the ground, polluting the water table below.

This urine-manure mixture is full of nitrates, antibiotics, and hormones. It also has *Escherichia-coli* bacteria.

You might wonder why *E. coli* 0157:H7 is so extremely deadly, since E-coli are in everyone's bowel. Yet people in the U.S. are regularly dying from attacks of that bacteria when they eat contaminated meat. The answer is corn-feeding the cows.

Normal cows have an alkaline digestive system; but, in feedlot cattle, it becomes acidic. More than half of feedlot cattle have *E. coli 0157:H7*, and ingesting as few as 10 of these microbes can cause a fatal infection in humans! It was not until the 1980s that *E. coli 0157:H7* was isolated in the laboratory. Prior to the 1950s, when the feedlot craze began, that terrible bacteria hardly existed among cattle.

By the time the average cow is 14 months, he will move stiffly from fat-laden overweight and will weigh over 1,200 pounds. He is then loaded into an arriving cattle truck and hauled off many miles to another "city." This one has a very large central building complex, surrounded by trailers and tiny shanty-like houses, the homes of Mexican and Asian immigrant workers.

Upon his arrival, along with truckloads of others, the cow is placed in a holding pen outside the factory. While there, he is loaded up with more antibiotic, and other, injections. (Not many weeks later you will eat it all.) Shortly afterward, a plant worker opens a gate and begins herding cows into an alley that makes a couple turns—and then narrows down to a single-file chute. It leads to a ramp; and the animals walk up it to a second-story platform.

One by one, the cows are led through a blue door into the "kill room" of the plant. No one from the media is permitted in there, not even the cattlemen.

Just inside the blue door, the chute has high sides so the cow can only see the rump of the cow in front of him. Next, an ingenious set of devices drops the floor from beneath him, placing him on a conveyor belt, with his feet dangling.

Above on a catwalk stands the stunner. That is a nice name for "killer." He fires a pneumatic-powered gun

that shoots a seven-inch steel bolt into the cow's forehead. (Sometimes the animal "wakes up" later while his hide is being removed.)

Every hour, 390 animals are slaughtered on each "assembly line." In my book, *International Meat Crisis*, I go into detail on how, in the early 1990s, the USDA okayed two things the slaughterhouses wanted: permission to greatly speed up their work and do their own plant inspections.

The result is much more danger of manure contaminating the meat and causing sickness and deaths in the eating public.

After the animal is shot, a worker wraps a chain around his foot and hooks it to an overhead trolley. Hanging upside down, his throat is then cut. Stunner guns are kept on hand, here in the bleed area, for those animals which are not dead yet.

Next comes the de-hiding of the animal and evisceration of the bowel. This is done to keep the manure from coming in contact with the meat. But that is not easy to do when 390 animals are eviscerated every hour on each line. (Recognizing this terrible danger of *E. coli* 0157:H7 contamination, European nations mandate much slower lines.)

Because the contaminated and uncontaminated meat is ground together into beefburgers, the pathogens can be spread to millions of burgers.

The meat eventually reaches the grading room, where a USDA inspector glances quickly at a little hole punched in the rib area of a cow; then he stamps "select," "choice," or (rarely) "prime" on the side. The "reject" stamp is hardly ever used.

The carcass next travels to the fabrication room, where the carcasses are broken down into cuts or sent on to the burger room.

Steaks made from corn-fed beef are more tender and "marbled" (filled with fat) than grass-fed beef. This is because the protein in the corn-fed animals has been damaged from what it was fed during its miserable life at the feedlot.

It is difficult to decide what is the most dangerous thing about this meat. It came from an animal kept alive with antibiotics and hormones. It has a high fat content—the kind of fat that is dangerous to your health. It may have been contaminated with *E. coli 0157:H7*. The feed supplement fed to it may have contained mad cow and a variety of other diseases.

In addition, researchers have found that eating meat can lead to high cholesterol, high blood pressure, cardiovascular disease, cancer (especially colon and breast), obesity, diabetes, osteoporosis, gall bladder disease, arthritis, rheumatism, and Crohn's disease. See my book, *International Meat Crisis*, for much more on this.