

A VEGETARIAN MANIFESTO

Tonight on the evening news I heard a cattle raiser explain the high price of meat as the result of a “protein shortage.” By the same sort of reasoning one might attribute the sinking of the Titanic to a super-abundance of water.

Perhaps, in these times, we ought to expect a certain amount of fuzzy thinking about meat prices, and certainly the spokesmen for agribusiness have good reason to confuse what dollars can command with what bodies need to function. The truth, however, is another matter. America faces no “protein shortage.” On the contrary, we are a nation consuming well beyond our protein needs with a diet geared to a protein source that is the most protein-costly of all to produce—namely beef.

Currently most Americans eat two times their recommended daily protein allowance. In fact, we could *reduce* our livestock population by one-quarter and still provide every single American with one-half pound of meat and poultry every day of the year. This is enough to supply every person’s recommended protein allowance in meat and poultry alone—with no help at all from milk products, eggs, cereal products, nuts and beans, which presently provide more than half of our daily protein. But perhaps most surprisingly, *we could completely eliminate meat, fish, and poultry from our national diet and still ingest our recommended daily protein in all the other high protein foods we eat regularly.*

Heavy meat consumption is presently common to all but the poorest fifth of the American population. On the average, Americans in the lower 50 percent of family levels eat more than a half pound of meat and poultry each day. This is enough protein to supply an adult’s daily allowance entirely by itself. Individuals in families with incomes in the upper 50 percent eat on the average a *whole pound* of meat and poultry daily.

Since protein cannot be stored in the body and since we can only use a limited amount to replace the small amount that is broken down and excreted every day, what happens to all this extra protein? It is, quite simply, wasted. Our bodies cannot use the excess as protein but instead convert it into energy-giving fuel as if it were carbohydrate. For many Americans the last vestige of our Puritan heritage is the belief that throwing away food is a sin; yet few realize that our very consumption pattern means we are “throwing away” that most precious of all human nutrients—protein.

For most of us meat is no longer a luxury but a staple we demand and expect. Steak on a week-day night is part of the American dream. Yet throughout man’s history a

carbohydrate has been the “staff of life” (be it bread or rice) and animal protein (be it fish or meat) has played a purely supplementary role. This is the pattern that correctly reflects the body’s nutritional needs as well as the earth’s capacity to support Man as an ecological dominant.

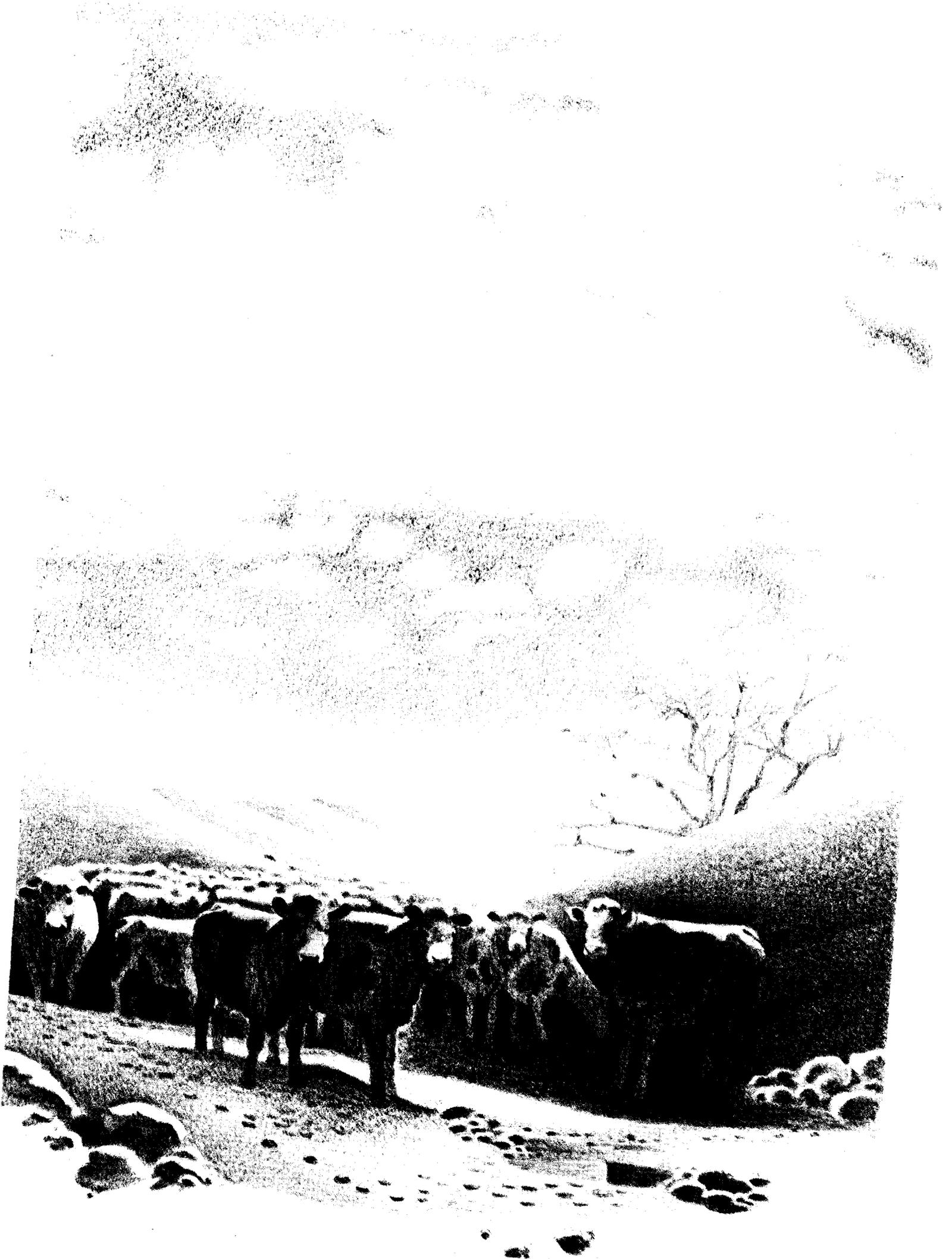
Well over a hundred years ago, the earth’s population increased beyond the point at which it could conceivably be supported by a meat-centered diet. Such a diet requires three and one-half acres of arable land per person. But according to most estimates, the earth now offers only *one* acre of agricultural land per person. One acre per person is not enough for meat in the volume to which we are accustomed, but it is adequate to provide a fully nutritious plant-centered diet—if *the land is shared equally.*

As it happens, however, we Americans do not have to face up to this reality. To us, plant-centered diets are what “yet to be developed” peasants or young “food freaks” deserve to eat. We are permitted this myopia partly because our soils and climate produce an unparalleled agricultural wealth. More important, American economic, military and political power prevents other peoples with real food needs from making effective demands on our protein wealth and at the same time allows us to make demands on *their* resources to inflate our own bloated diet.

This we do, for example, by importing almost 40 percent of all beef in world trade. Although the amount of meat we import seems small (8 pounds per capita annually), this portion would represent a 50 percent increase in present meat consumption in the poor nations of the world. It would, moreover, provide an appreciable portion of the minimum daily protein allowance for many of the world’s hungry.

Ironically, much of the meat we import comes from the poorest countries in Central America, which do, in fact, face a “protein shortage.” The U.S. government, for its part, controls the influx of meat as a safety valve against rising prices. Beyond these tragic absurdities, the trade has a devastating effect on the land economy of food production in the poor nations. Tom Bodenheimer has reported, for example, that Costa Rica once had a “relatively well-developed milk industry with a per capita consumption of 0.85 pounds per day . . . but because of the recent U.S. policy to import beef from Central America, Costa Rican milk farmers are leaving the dairy industry in order to raise more profitable beef cattle. Thus Costa Rica’s milk produc-

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tion is dropping, and the future of the industry is in doubt.”*

The U.S. is also a leading importer of seafood—fully as valuable a source of protein as meat. More than one-quarter of all fresh and frozen fish and about one-third of all shell fish in world trade is directed into the American marketplace. (Recall that we represent only six percent of the world’s population.) Many of these protein riches come from poor countries like India, Panama and Mexico. When it is available, we import enough fishmeal (containing about twice the protein as the same amount of meat) from Chile and Peru to meet the protein requirements of the Peruvian population for an entire year.

While America thus absorbs protein from the underdeveloped countries, it does not return it as protein-rich food. In fact, most of our food exports go to the wealthy areas—Europe, Japan and Canada. We currently ship three times more agricultural products to Europe than to Latin America and Africa *combined*. Of the ten leading U.S. agricultural exports, four—hides, tallow, cotton and tobacco—are not edible at all, and of the remaining six, only two are high in protein—nonfat dry milk and soybeans. Most of the soybeans go to Japan, Western Europe and Canada, where they are fed to livestock. As for the one million tons of protein imported annually by the rich nations from the poor nations, much if not most of it comes from the soil of the underdeveloped world and goes into the mouths of European livestock in the form of high-protein seed meals like that made from African peanuts.

In this regard, Americans benefit from the historical relationships of colonialism, according to which the poor countries become “hooked” economically on growing luxury crops for export to the rich. In many poor countries most of the best land is used to supply us and the rest of the rich world with such items as cocoa, coffee, tea, sugar and bananas, and with industrial goods like rubber and jute.

For the poor countries this pattern means more than economic dependency and usurpation of needed agricultural land. As a West African agronomist put it, “With every ton of cocoa exported, there goes out also a big chunk of African land fertility which must be replaced by chemical or other fertilizer.” Conversely, with every such ton America imports, there comes in a big chunk of land fertility which relieves the pressure on U.S. resources. If it were not for access to the agricultural products from the poor, we would be forced to use our *own* land to produce substitutes and thus have less to devote to our own overconsumption.

Under these circumstances we can afford to make the American Way of Eating the most resource-squandering diet of all, and it is not by coincidence that our diet is centered around beef, the most resource-expensive way to meet man’s need for protein. In fact, over the past ten years we have increased our dependence on beef, so that now we each eat 32 pounds more beef per year than we did a decade ago (on the average, of course). It so happens that for every pound of beef we eat, some steer has been fed over *21 pounds* of protein. (Other livestock, e.g., poultry, are more efficient in converting plant protein into meat protein.)

* Tom Bodenheimer, “Food for Profit,” *NACLA Newsletter*, Vol. 5, No. 3, p. 8.

Given that meat, and particularly beef, is not a luxury but a staple we demand in excess of all need, it should come as no surprise that we are willing to devote most of our agricultural production to its supply. Not only do we use *one-third* to *one-half* of our continental land surface for grazing but we feed 86 percent of all of our corn, barley, oats, and grain sorghum and over 90 percent of our non-exported soybean crop, to livestock. We feed about 42 percent as much wheat to animals in this country as we eat ourselves. And we give livestock the benefit of large quantities of highly nutritious wheat germ and bran which are considered impurities in the milling process.

American generosity, they say, provides hungry children around the world with milk. But the ads neglect to point out that we use twice as much milk to feed animals as we export abroad for *all* purposes including “charity.” Ironically, the protein that is produced in livestock as a result of this feeding is of lower quality than the original milk protein the animals are fed. (That is, one gets about 12 percent *more* if he eats milk protein than if he eats the same amount of beef protein.)

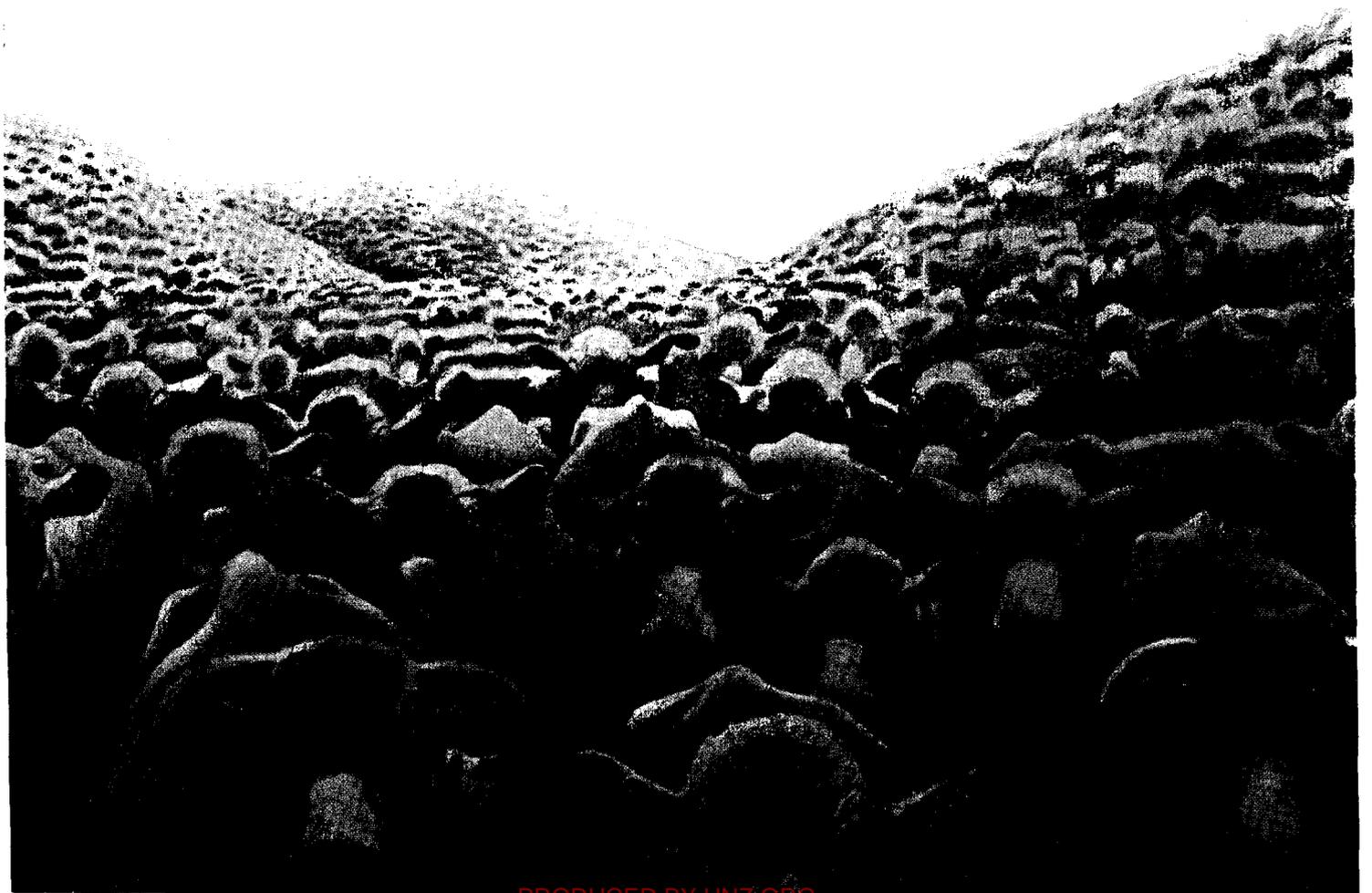
Totalling this up, we can say that of all the crops produced on our agricultural land, *half* is fed to livestock. That amounts to an incredible waste: about 20 million tons of humanly edible and nutritious protein are fed to livestock yearly in America and only about 2 million tons get back to the American people as meat on their plates. The rest, about 90 percent, is irrevocably lost and constitutes almost the entire protein deficit of the world each year!

This really makes no sense at all, and it would not be too outlandish to suppose that our willingness to so concentrate on meat production and pay any price for it suggests something more than a liking for the taste. We seem to have deified meat, and created a theology to go with it. We have become disciples of the Great American Steak Religion, in the words of a European friend of mine. And, as true believers, we hold tenaciously to certain tenets of this religion on faith alone—for example, that there is no substitute for meat, or that meat is essential to good health and strength. Recently a hearty-looking young man said to me, “A vegetable diet might be OK for you because all you do is sit around the house all day” (not true, I thought, but best take one issue at a time!). “But,” he protested, “I couldn’t make out on that stuff. I’m an athlete. I need lots of *meat* protein.” Now, in fact, it is much more useful and accurate to think of *all* food proteins—meat and vegetable—as part of a continuum related to their quantity and usability. Then meaningful comparisons can be made.

• *Quantity*: how much protein by weight the food contains. Most people think that meat is *pure* protein and thus richer in protein than any other food. Actually meat is only about 25 percent protein. Certain non-meat foods have more protein than meat—soy flour and Parmesan cheese, for example. Other non-meat foods such as peanuts and dry beans have about the same amount of protein as meat, while others—grains and milk, for example—have less protein than meat.

• *Usability*: how closely the amino acid pattern of the

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Beefed Up:

DRUGS IN THE MEAT INDUSTRY

The average American consumes about 215 pounds of meat and poultry annually, most of it—at least 85 percent—from animals pumped and primed with any number of 2700 various drug compounds. It wasn't always this way, not even 20 years ago. But now we're told that raising and eating "good, economical meat" is impossible without food additives. If you think there's a drug problem on the city streets, visit your local chicken house or cattle feedlot.

If the wind is right and the sun is out, you can smell a feedlot from about four miles away. That's because thousands, sometimes hundreds of thousands of cattle are packed shank to shank in more than three inches of manure chomping and defecating until the ax falls. A brief life and a long journey. The feedlot is the end of a death odyssey that begins when the cattle turn one year old and weigh about 500 pounds. First, farm hands herd them from the open range into trucks and boxcars for the long haul to a commercial feedlot where, panicky with hunger and stress, the animals are prodded off the vehicles and forced to swim through a tank filled with pesticides to cleanse them of worms and flies.

Then they're packed into a pen, maybe 400 head to an acre. They'll spend the next four months there getting fat. To ward off any ill effects from their harrowing trip, called "shipping fever," the cattle munch high doses of antibiotics for a few days—as much as 1000 mg. per head of streptomycin and penicillin mixed in with the grains. Day in and day out, several times a day, the feed trucks rumble by, relentlessly dumping tons of starchy high protein grains in the long feed bunks. The farmers call it "force feeding" because the cattle have nothing to do but look at the food and eat. The steers consume 30 pounds a day and gain about three pounds of muscle and fat. But just to make them fatter, pellets are shot in their ears filled with diethylstilbestrol, or DES, a female hormone which relaxes their muscles and loads them with moisture and fat. The drug companies claim DES makes cattle 10-15 percent fatter on 10-15 percent less feed.

Female heifers, who account for a third of the cattle in the feedlot, munch the hormone megestrol acetate (MGA) in their food every day. Scientists say MGA "suppresses estrus"—kills their sex drive. "When females are in heat they're continually jumping around and mounting other animals or trying to get others to mount them," explains Robert Gillespie, a veterinarian at FDA. "It keeps a

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turmoil going in the fattening lot, and the animals don't eat as well as they should. With MGA, they'll pay a little more attention to the feed bunk."

There's only one problem with forcing cattle to eat so much, especially concentrated grain which their stomachs aren't accustomed to: they tend to get painful liver abscesses, which slow their weight gain. This, in turn, cuts profits. But these days there's a drug to fill every need. Simply lace the cattle feed once a day with 75 mg. of the popular antibiotic oxytetracycline, and the abscesses cease to be a problem. In fact, daily low-level doses of antibiotics sometimes help the cattle get fatter even faster. No one knows just why. One theory says the drug makes the intestinal walls thinner so food is absorbed more rapidly; others say antibiotics stupefy the cattle so they stand around and eat more. The drugs may also help prevent profit-cutting disease. But, even so, the cattle are always catching diarrhea, foot rot and respiratory ailments. Whenever a few get sick, multiply the antibiotics dose ten times to prevent the bug from spreading.

After four months the cattle weigh nearly 1200 pounds. Now pounds are money and every extra pound counts. So pour in 1000 mg. per head of oxytetracycline or chlorotetracycline for the last three to five days. Finally, the cattle are bulging with twice as much meat and fat as the day they arrived. Herd them into "death row" where they'll go off drugs for a few days to cleanse their systems. One last shot of streptomycin, and the cattle are ready to board the trucks for a healthy ride to the slaughterhouse. They'll suffer only one last indignity 30 minutes before the butcher's axe falls: a carefully measured hypodermic of papaya juice enzyme in their shoulder. Too much juice and the cattle will die in convulsions. Just the right amount will break down the muscle fibers when they react with heat—tenderizing the meat the moment those poor cattle's steaks hit your kitchen fire.

When the Food and Drug Administration "banned" DES in cattle feed early last year (government inspectors kept finding illegal residues in the meat) concerned consumers thought they'd won a victory. As it turns out, celebration

by Daniel Zwerdling