



You Are What Your Animals Eat

by Jo Robinson

In my investigation into pasture-based farming, I've stumbled upon an alarming state of affairs: few animal scientists see any link between animal feed and human food. "Feed animals anything you want," say the experts, "and it makes no difference to their meat, milk, or eggs." Because of this mindset, our animals are being fed just about anything that enhances the bottom line, including chicken feathers, sawdust, chicken manure, stale pizza dough, potato chips, and candy bars.

Here's a glaring example. A 1996 study explored the desirability of feeding stale chewing gum to cattle.¹ Amazingly, the gum was still in its aluminum foil wrappers. Wonder of wonders, the experts concluded that bubblegum diet was a net benefit—at least for the producers. I quote: "Results of both experiments suggest that [gum and packaging material] may be fed to safely replace up to 30% of corn-alfalfa hay diets for growing steers with advantages in improving dry matter intake and digestibility." In other words, feed a steer a diet that is 30 percent bubblegum and aluminum foil wrappers, and it will be a more efficient eater. With a nod to public safety, the researchers did check to see how much aluminum was deposited in the various organs of the cattle. Not to worry. The aluminum content was "within normal expected ranges." As always, there was no mention of the nutritional content of the resulting meat.

When I first read the bubblegum studies, I assumed that no one would actually feed bubblegum to their animals, despite the positive outcome of the research. Then a professor of animal science drove me by a Beechnut gum factory in upstate New York where dairy farmers bought truckloads of bubble gum to feed to their cows.

The view from the other side of the fence is just as sobering. Most experts in human nutrition are equally blind to the feed/food connection. To them, beef is beef, eggs are eggs, and milk is milk. Thus, when the USDA says "eat less red meat," the edict applies to all red meat, whether it's a fatty steak from a grain-fed cow, or a lean steak from a grass-fed cow with its invisible bounty of omega-3s, vitamin E, beta-carotene, and CLA.

I've spent the past four years trying to forge the missing link between animal and human nutrition. It's been tough going, especially when it comes to pasture-raised animals because virtually all the studies focus on feedlot animals. To fill in the gap, I've searched through yellowing journals published before the advent of factory farming, pieced together small studies financed by farmers, and combed through the research from Ireland, Australia, and New Zealand—parts of the world where animals are still kept home on the range.

Finding the amount of vitamin E in grass-fed meat has been one of my biggest challenges. I began the search when I learned that grass has 20 times more vitamin E than corn or soy. Given the magnitude of this difference, I reasoned that meat from grass-fed animals must have an extra helping of vitamin E.

At long last, I located one American study that broached the subject. The impetus for the study came from disgruntled Japanese buyers who complained that American beef spoiled more quickly than Australian free-range beef. Knowing that vitamin E helped prolong shelf life, the American researchers investigated the amount of vitamin E in the two types of meat. Lo and behold, they discovered that the meat from grass-fed cattle had three to four times more vitamin E than feedlot beef, thanks to all that vitamin E-rich grass.

Now, what did the researchers do with this finding? True to form, they began studying how much synthetic vitamin E to add to synthetic feedlot diets. I doubt that it even occurred to them to investigate pasture-based ranching.

Why this lack of interest in the natural model? Much of our animal research is funded by commercial interests—specifically the grain, chemical, pharmaceutical, farm equipment, and meat-packing companies. Together, these vertically integrated behemoths have a multi-billion dollar stake in perpetuating factory farming. The USDA, meanwhile, aids and abets the feedlot industry by focusing virtually all of its efforts—and our tax dollars!—on tweaking the system. For example, the USDA Meat and Animal Research Center in Lincoln, Nebraska, is more willing to spend \$100,000 researching how quickly feedlot manure seeps into the water table than to spend a similar amount of money investigating pasture-based ranching, the holistic model that keeps the contamination from happening in the first place.

What will it take to draw more scientific attention to pasture-based ranching? Pressure from an enlightened public. And what will it take to enlighten the public? The national media.

I have a fantasy how this might happen. First, a prominent media source such as "60 minutes" or The New York Times will decide to spotlight pasture-based farming. Building on this ground-breaking work, an award-winning TV producer will create a documentary that deepens the discussion. The program will conclude—as it must—that raising animals on pasture is better for consumers, the animals, the environment, and small farmers. Before long, dozens of news shows, newspapers, and magazines will follow suit.

As the momentum builds, grassfarming will become the talk of the town. Serving organic meat won't win points in Los Angeles anymore unless it's grass-fed as well. Meanwhile, Ted Turner will stop sending all of his bison to feedlots to be fattened like cattle, and by 2005, his "Turner Reserve Grassfed Bison" will be the thing to serve at celebrity gatherings. Propelled by this groundswell of interest, private and government institutions will finally devote more time, money and energy to exploring pasture-based farming.

Will grassfarming ever become the darling of the media? Only time will tell. But even if the media misses the boat, the good news about grassfarming will keep spreading on the grassroots level, one satisfied customer at a time!

¹ Wolf, B. W., L. L. Berger, *et al.* (1996). "Effects of feeding a return chewing gum/packaging material mixture on performance and carcass characteristics of feedlot cattle." *J Anim Sci* 74(11): 2559-65.