

Business

Why your 'organic' milk may not be organic

By Peter Whoriskey

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The High Plains dairy complex reflects the new scale of the U.S. organic industry: It is big.

Stretching across miles of pastures and feedlots north of Greeley, Colo., the complex is home to more than 15,000 cows, making it more than 100 times the size of a typical organic herd. It is the main facility of Aurora Organic Dairy, a company that produces enough milk to supply the house brands of Walmart, Costco and other major retailers.

"We take great pride in our commitment to organic, and in our ability to meet the rigorous criteria of the USDA organic regulations," Aurora advertises.

But a closer look at Aurora and other large operations highlights critical weaknesses in the unorthodox inspection system that the Agriculture Department uses to ensure that "organic" food is really organic.

The U.S. organic market now counts more than \$40 billion in annual sales and includes products imported from about 100 countries. To enforce the organic rules across this vast industry, the USDA allows farmers to hire and pay their own inspectors to certify them as "USDA Organic." Industry defenders say enforcement is robust.

But the problems at an entity such as Aurora suggest that even large, prominent players can fall short of standards without detection.

With milk, the critical issue is grazing. Organic dairies are required to allow the cows to graze daily throughout the growing season — that is, the cows are supposed to be grass-fed, not confined to barns and feedlots. This method is considered more natural and alters the constituents of the cows' milk in ways consumers deem beneficial.

But during visits by The Washington Post to Aurora's High Plains complex across eight days last year, signs of grazing were sparse, at best. Aurora said its animals were out on pasture day and night, but during most Post visits the number of cows seen on pasture numbered only in the hundreds. At no point was any more than 10 percent of the herd out. A high-resolution satellite photo taken in mid-July by DigitalGlobe, a space imagery vendor, shows a typical situation only a few hundred on pasture.

In response, Aurora spokeswoman Sonja Tuitele dismissed the Post visits as anomalies and "drive-bys."

"The requirements of the USDA National Organic Program allow for an extremely wide range of grazing practices that comply with the rule," Tuitele said by email.

The milk from Aurora also indicates that its cows may not graze as required by organic rules. Testing conducted for The Post by Virginia Tech scientists shows that on a key indicator of grass-feeding, the Aurora milk matched conventional milk, not organic.

Tuitele dismissed the tests as "isolated."

Finally, The Post contacted the inspectors who visited Aurora's High Plains dairy and certified it as "USDA Organic." Did the inspectors have evidence that the Aurora cows met the grazing requirement?

It turns out that they were poorly positioned to know.

The inspectors conducted the annual audit well after grazing season — in November. That means that during the annual audit, inspectors would not have seen whether the cows were grazing as required, a breach of USDA inspection policy.

"We would expect that inspectors are out there during the grazing season," said Miles McEvoy, chief of the National Organic Program at the USDA. He said that the grazing requirement is "a critical compliance component of an organic livestock operation."

Tuitele said: "We take these assertions very seriously, as we are a 100% certified organic producer, and our organic practices are the cornerstone of our operations."

If organic farms violate organic rules, consumers are being misled and overcharged.

In the case of milk, consumers pay extra — often double — when the carton says "USDA Organic," in the belief they are getting something different. Organic dairy sales amounted to \$6 billion last year in the United States.

The failure to comply with organic standards also harms other farms, many of them small. Following the rules costs extra because grazing requires more land and because cows that dine on grass typically produce less milk.

Whether an organic dairy is grazing its herd is relatively easy to see, especially if roads crisscross its pastures. It is more difficult, however, for outsiders to judge whether a dairy is following other organic rules — such as those regarding hormones and organic feed.

Ten years ago, after a complaint from a consumer group, Aurora faced USDA allegations that it breached organic rules regarding grazing and other issues. The USDA charged that Aurora was in "willful violation" of organic standards, but a settlement agreement allowed it to continue to operate.

There have been no charges since then.

But some small organic dairy farmers say that the new, large organic dairies that have popped up in the West are violating standards.

On visits across several days to seven large organic operations in Texas and New Mexico in 2015, a Post reporter saw similarly empty pastures. It was difficult to determine where their milk winds up on retail shelves, however, so no chemical tests were pursued.

"About half of the organic milk sold in the U.S. is coming from very large factory farms that have no intention of living up to organic principles," said Mark Kastel of the Cornucopia Institute, a Wisconsin-based nonprofit group representing thousands of organic farmers.

"Thousands of small organic farmers across the United States depend on the USDA organic system working. Unfortunately, right now, it's not working for small farmers or for consumers."

The "USDA Organic" seal that appears on food packaging — essentially a USDA guarantee of quality — was created by federal rules in 2000.

Until then, convincing customers that a product was "organic" could be a murky proposition everyone relied on informal definitions of organic and informal measures of trust.

The "USDA Organic" seal changed that, standardizing concepts and setting rules. It has proved a boon: Organic food sales rose from about \$6 billion annually in 2000 to \$40 billion in 2015, according to the Organic Trade Association.

The integrity of the new label, however, rested on an unusual system of inspections.

Under organic rules, the USDA typically does not inspect farms. Instead, farmers hire their own inspectors from lists of private companies and other organizations licensed by the USDA. An inspector makes an annual visit, arranged days or weeks in advance. Only 5 percent of inspections are expected to be done unannounced.

To keep the inspectors honest, the USDA reviews the records of each inspection outfit about every 21/2 years.

This inspection system saves the USDA money because it does not have to hire many inspectors. The compliance and enforcement team at the USDA National Organic Program has nine people — one for every \$4 billion in sales.

McEvoy acknowledged that having farmers choose their inspection companies is "fairly unique" within the USDA, but he noted that rising sales show that consumers "trust the organic label."

Others have doubts. Cornucopia publishes its own scorecard of organic dairies because, its officials say, the USDA has failed to weed out the bad.

"Consumers look at that cartoon label on organic milk with a happy cow on green pasture with a red barn, but that's not always the reality," said Katherine Paul of the Organic Consumers Association. "What we've said all along is that organic milks are not created equal, and your results show that."

Many dairies much smaller than Aurora have come to rely on the "USDA Organic" label, investing in the opportunity it represents.

Several years ago, for example, Bobby Prigel, a fourth-generation dairyman with a 300-acre spread of rolling pastures and white plank fences in northern Maryland, made the switch.

With milk prices declining and feed costs rising, Prigel figured he had to try something different. The herd had been in the barn area for decades, munching feed. One day he shooed them out to pasture.

Here's the funny thing, he said: His cows seemed confused. Though cows are natural grazers like the wild aurochs they descended from — the grazing instincts of his cows had been dulled.

"They didn't really know how to graze at first — they didn't know how to bend down and get grass with their tongues," Prigel said during a break on his farm. Nor were they accustomed to walking much.

Prigel, meanwhile, had to make economic adjustments.

Producing milk according to the "USDA Organic" standard costs more.

To begin with, organic cows cannot be given hormones to stimulate milk production. And any feed or pasture for the cows must be organic — that is, grown without most synthetic pesticides.

Second, to be considered organic, cows must obtain a certain percentage of their diet from grazing. Prigel is a purist and feeds his herd entirely from the pasture, but most organic dairies supplement the pasture with corn, soybeans or other grains, even during the grazing season.

The grazing requirement makes milk more costly to produce because it requires a certain amount of pasture land and because a grazing cow produces less milk than one eating a grain diet optimized for milk production.

With grass-fed cows, "there's just not nearly as much milk," Prigel said.

On the upside, a farmer can sell certified organic milk for almost double the price of conventional, and there are other benefits: The milk is measurably different, and according to the USDA, it improves cow health and reduces the environmental impacts of agriculture. Moreover, because grazing is natural cow behavior, some say it is more humane.

"Cows aren't supposed to stay inside and eat corn," Prigel said.

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The grazing season typically runs from spring until the first frost. To evaluate the Aurora operation, The Post visited the High Plains dairy complex eight days during that period — three in August, three in September and two in October. Roads crisscross the farm, allowing a view of the fields. The Post's visits ranged from about 45 minutes to as long as ten hours. In addition, in July, a satellite for DigitalGlobe snapped a high-resolution photo of the area.

Each of those 10 days, only a very small portion of the 15,000-cow herd was seen on pastures. Many more were seen in feed lots.

In response, Aurora officials said that during the grazing season the cows are on pasture both day and night. Maybe, they said, on those days, the cows were elsewhere, being milked or otherwise tended.

However, The Post visited at different times of the day, sometimes twice in a day. Because the cows are milked in shifts, thousands of them should be out at any given time, other organic farmers said.

Aurora did say that it stopped its grazing season on Sept. 30, so it's not surprising no cows were seen on the two days in October. Aurora officials said they did so after exceeding the minimum of 120 grazing days. But the USDA says organic cows should graze throughout the grazing season, and the first frost was not until Oct. 20 in that area, according to weather records.

To see whether a lack of grazing was apparent in the milk, The Post turned to Virginia Tech dairy science professor Benjamin Corl, who analyzed eight milks, some organic, some not, and all bottled during grazing season. He performed the tests without knowing the brand names of the samples.

Grass-fed cows tend to produce milk with elevated levels of two types of fat. One of the distinguishing fats is conjugated linoleic acid, or CLA, which some regard as the clearest indicator of grass feeding. The other is an Omega-3 fat known as alpha-linolenic acid. Both have been associated with health benefits in humans, although the amounts found in milk are relatively small.

Another type of fat — linoleic acid, an Omega-6 fat — tends to be sparser in milks that are pasture-fed.

The results: Prigel's milk stood out for its grassy origins. It ranked at the top for CLA and was a distant last for linoleic acid.

The milk from Snowville Creamery, another brand that boasts of pasture grazing, ranked second for CLA.

"Those two milks stood out like sore thumbs," Corl said. "You can tell those animals have been on grass."

At the other extreme were the conventional milks — from 365 and Lucerne. They ranked, as expected, at the bottom for the fats associated with grass feeding and at the top for the fat associated with conventional feeding.

Large organic brands — Horizon and Organic Valley — ranked roughly in between the extremes for two of the three measures.

As for Aurora's milk, it was very close to conventional milk. On two of the three measures, CLA and linoleic acid, it was pretty much the same as conventional milk. On the third measure, alpha-linolenic acid, Aurora ranked slightly better than the conventional milks but below the other "USDA Organic" samples.

The milk tested by The Post had been processed at Aurora's Colorado processing plant, according to the number stamped on the bottle. More than 80 percent of the milk that Aurora sells is produced at its own farms; it also purchases milk from other dairies, according to the company.

It was not the first time that Aurora milk has tested poorly for signs of grass feeding. In 2008, the Milkweed, a dairy economics report, compared Aurora's milk to other organic milks. Of 10 organic milks ranked for the fats associated with grass feeding, Aurora's was last.

"There has been an obvious failure by USDA to enforce the organic pasture standard," Pete Hardin, editor and publisher of the Milkweed, said in a recent interview.

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Tuitele, the Aurora spokeswoman, dismissed the milk tests and declined to comment in depth on them, saying that they were "isolated" and that there are "so many variables that are unknown."

She suggested that Aurora milk may have tested differently not because of a lack of grazing but because Colorado pastures may have different plants. But milks from the Rocky Mountain region and those from the Mid-Atlantic vary little, according to a 2013 study of organic milks published in PLOS One.

Aurora's inspectors also stood by Aurora's milk.

While most inspectors are private organizations, Aurora hired staff from the Colorado Department of Agriculture, which it pays about \$13,000 annually.

When asked about the Aurora inspection being done after grazing season, an official with the state agency initially suggested that other audits may have been conducted at High Plains last year. But Tuitele later wrote that the November visit was the only audit of its High Plains complex last year.

Aurora and its inspectors have been under scrutiny before.

About 10 years ago, the USDA launched an investigation into Aurora's organic practices.

In April 2007, the USDA said it had identified "willful violations" of organic rules by the dairy. Aurora had, among other things, for three years "failed to provide a total feed ration that included pasture."

The USDA proposed revoking Aurora's organic status.

It also proposed suspending the Colorado Department of Agriculture from certifying organic livestock "due to the nature and extent of these violations."

Four months later, though, the case was resolved.

Aurora pledged to make improvements and was allowed to continue operating. It issued a news release saying that the USDA had "dismissed the complaints . . . following an extensive review" — a finding contrary to the view at the USDA, which issued a news release saying "the complaint was not dismissed." It noted that the consent agreement called for Aurora to "make major changes."

For its part, the Colorado Department of Agriculture agreed "to make several changes in its operation," including hiring more personnel and adding staff training, according to a USDA news release.

Aurora also settled a related class-action lawsuit for \$7.5 million in 2012 and said it did not admit wrongdoing.

Since then, Aurora, already gargantuan, has continued to grow. In recent months it has been considering an expansion in Columbia, Mo., that may rely on milk from as many as 30,000 cows, according to local media coverage.

The growth of mega-dairies that may fall short of organic standards and produce cheaper milk appears to be crushing many small dairies, some analysts said.

"The mom and pop — the smaller traditional family dairies — who are following the pasture rules are seeing their prices erode," said Hardin, the Milkweed editor. "It is creating a heck of a mess."

Will Costello in Greeley contributed to this report.

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