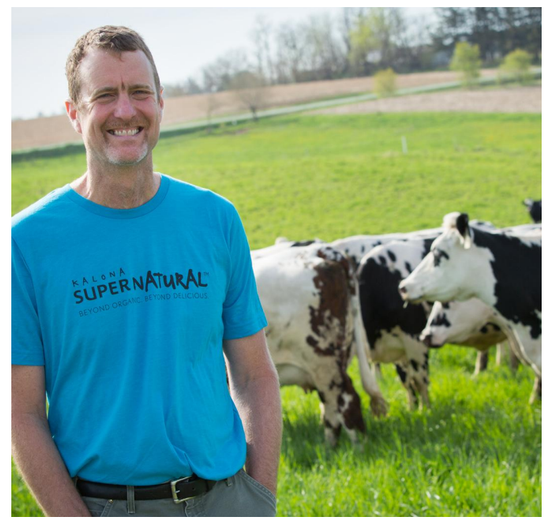
FARMERS CREAMERY

Monthly Newsletter | December 2019

COMPANY UPDATES

Changes to the Farmers Creamery Staff

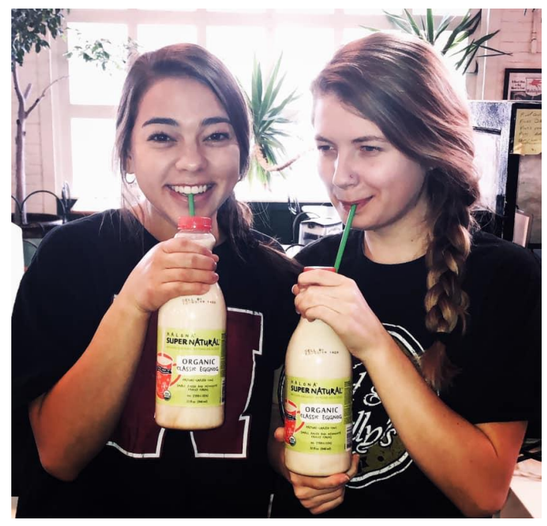


Farmers Creamery is making some changes to our field staff!

- Cody Rasmus will be returning to the Farmers Creamery team as our field man. He will help with all questions regarding company policy, pay plan, etc.
    - Cody's phone number is 515-231-0285.
- Marilyn Steffens from the National Farmers Organization (NFO) will act as our "on-the-ground" field person. She will help with quality, preparing for surveys, responding to regulatory requests, and other regular fieldwork.
    - Marilyn's phone number is 320-760-2471.
- Scotty Redig will be joining the Farmers Creamery maintenance team

Thank you for making Marilyn feel welcome. ~Phil Forbes

2019 Eggnog Season Comes to an End



Kalona SuperNatural Organic Classic Eggnog had yet another successful holiday season. December 17 was our last day of production for eggnog, but consumers will be able to find it through Christmas.

This year we shipped eggnog to distribution centers in CA, CO, TX, MN, IA, IL, IN, WI, and GA who delivered our product across the US.

Happy Holidays from the Farmers Creamery/Kalona Organics team! Thank you for all you do.

Photo Courtesy of Ted & Wally's Ice Cream Parlor in Omaha, NE.

Winter Forage Tour

Join Prairie Creek Seed for meetings featuring specifics about perennial grasses as well as alfalfa, summer annuals and cover crops as forages! This meeting will be held at the Kalona Chamber of Commerce office (514 B Ave, Kalona, Iowa) on January 2, 9am-12pm

---

COMMODITY PRICES

Grower FOB Farm Gate Organic Grain				
Commodity	Price Range	Average	Change	Prior Year
Yellow Corn	7.60 - 8.00	7.79	-0.38	9.32
Soybeans	17.80 - 19.25	18.66	0.11	17.87
Grower Delivered Elevator/Warehouse Organic				
Commodity	Price Range	Average	Change	Prior Year
Yellow Corn	8.00 - 9.70	8.57	-0.29	9.43
Soybeans	18.50 - 19.50	19.18	-0.07	18.63

FARMERS CREAMERY

Monthly Newsletter | December 2019

Study Finds Residue of Pesticides, Antibiotics, and Growth Hormones in Non-Organic Milk

BY Rebekah Tuchscherer (USA Today)

Results from a recent study examining what's in organic versus conventional milk show that the majority of samples of conventional, non-organic milk tested positive for certain low, chronic levels of pesticides, illegal antibiotics and growth hormones. The organic samples tested at either much lower or non-existent rates in comparison.

“To our knowledge, the present study is the first study to compare levels of pesticide in the U.S. milk supply by production method (conventional vs. organic)," the researchers noted. "It is also the first in a decade to measure antibiotic and hormone levels and compare them by milk production type.”

However, an expert reviewing the study at USA TODAY's request expressed caution at overinterpreting the results.

The study, conducted by Emory University in Atlanta was funded by Washington, D.C.-based nonprofit research organization The Organic Center and looked at a total of 69 samples of conventional and organic milks pulled from retail stores around the U.S., which were then shipped overnight to Georgia to be analyzed. The results have been published online June 26 by peer-reviewed journal Public Health Nutrition.

According to the study, antibiotic residue was detected in 60% of conventional milk samples but not in the organic samples. Among the antibiotics detected in the conventional milk samples were sulfamethazine and sulfathiazole, according to the study. Both have been outlawed for use in milk-producing cattle.

One conventional sample also contained levels of amoxicillin that were slightly higher than the FDA tolerance levels.

Bovine growth hormones, or bGH, residue levels were found in the conventional samples at an average of 9.8 ng/mL, or 20 times more than in the organic.

Pesticide residues were found in up to 60% of conventional samples and none of the organic samples. Those included atrazine (26%), chlorpyrifos (59%), cypermethrin (49%), diazinon (60%), and permethrin (46%).

"To what impact these chemicals that we’re seeing in the supply are having, we don’t know," said Jean Welsh, a nutritional epidemiologist who proposed the Emory study, noting that, "this study wasn’t designed to look at that."

Jessica Shade, director of science programs for The Organic Center said, "This study finds that the presence of antibiotics and pesticides in conventional milk is much more prevalent and pervasive than previously thought."

The Organic Center operates with oversight from the Organic Trade Association, an organization focused on promoting the organic business community. OTA members include a range of businesses from small organic farmers and mom-and-pop operations to brands like Pure Organics, Moodbeli and Horizon Organic and retailers such as Whole Foods.

USA TODAY has reached out to the FDA for comment.

The samples were collected in August 2015 from nine regions: California, Great Lakes, Midwest, New England, New York, Northwest, Rocky Mountain, Southeast and Southwest. Eight half-gallon milk cartons were purchased from retail stores in each region, including six of 2% milk – what most American children drink – three labeled USDA-certified organic brands and three labeled as different conventional brands. Two samples of whole milk – one certified organic and one conventional – were also used. The study excluded flavored and specialty milks.

"We didn't do a random sample of the U.S. milk supply, which would be the best design," Welsh said. "But, we tried to collect samples from across the country in a way that's representative of what people drink."

To be certified with the white and green “USDA Organic” label, farmers must comply with strict USDA standards. These regulations include managing their herds as organic for at least one year prior to organic milk production, feeding their cows completely organic feed and not using any growth hormones or antibiotics during production.

Samples were "blindly tested," meaning they weren’t specified as organic or non-organic until test results were finalized, Welsh said.

So, what did the study find?

For context, conventional milk cows can be treated with a variety of antibiotics during production when necessary. Cows producing organic milk would lose their "organic" status as soon as an antibiotic is applied, though dairy farmers can't deny the animals treatment when they are sick just to maintain the status, according to USDA regulations.

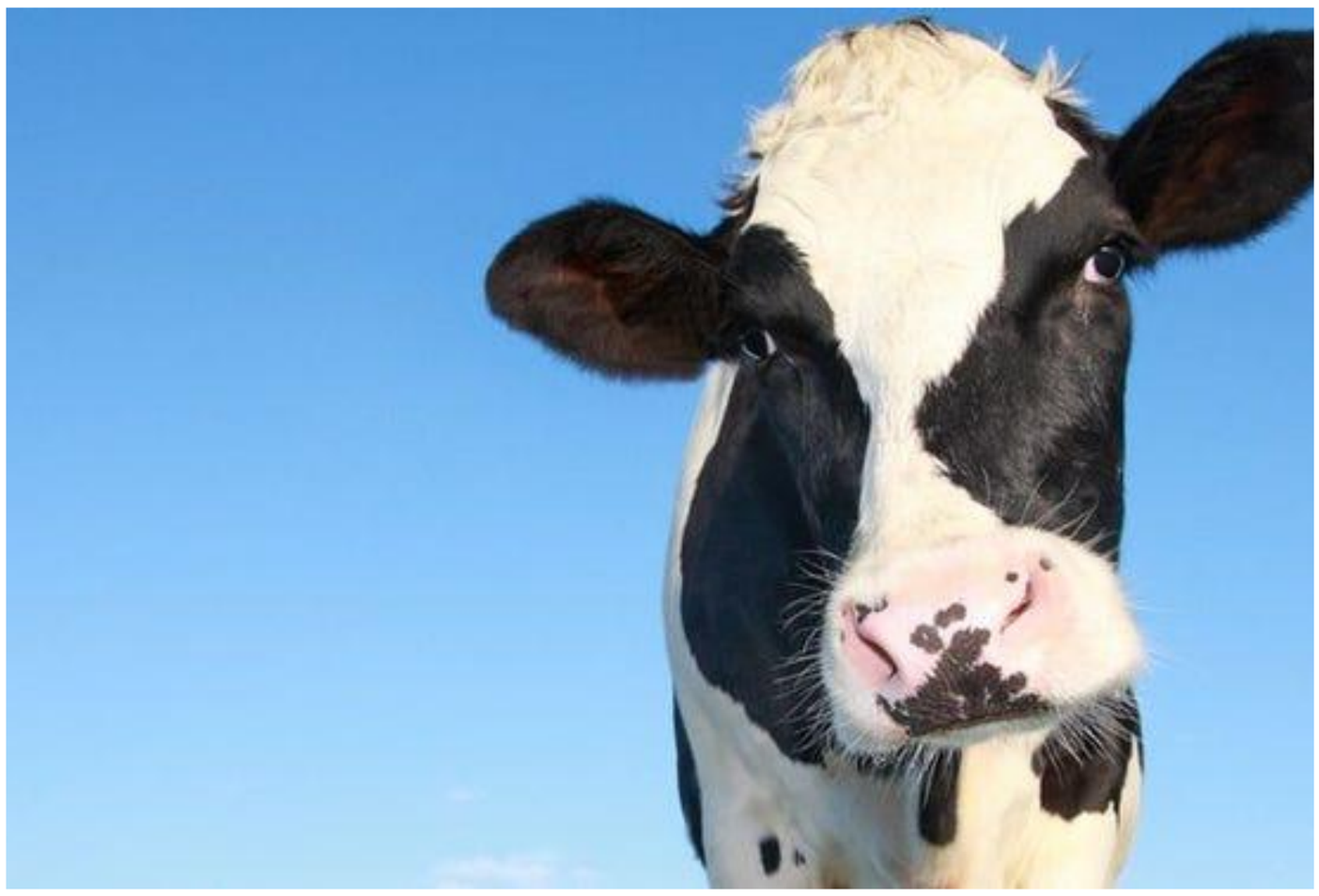
So it's no surprise that antibiotics were not found in the organic samples. They shouldn't be there, and most of the antibiotics in the conventional samples were within FDA tolerance levels, Welsh said. (Cont. on p. 3)

FARMERS CREAMERY

Monthly Newsletter | December 2019

Study Finds Residue of Pesticides, Antibiotics, and Growth Hormones in Non-Organic Milk (Cont. from p. 2)

BY Rebekah Tuchscherer (USA Today)



The presence of these antibiotics in conventional milk, however, isn't necessarily a sign of illegal antibiotic use. They're illegal only for use in cows producing milk, meaning calves can be administered doses of sulfonamide drugs to treat bacterial diseases, as long as they're under 20 months old, says Jamie Jonker, a vice president for the National Milk Producers Federation.

Any positive test results for sulfonamides could be the result of leftover antibiotics from that time or intentional misuse, Jonker said. When it comes to the question of hormones in milk, cow-derived hormones were found in both conventional and organic samples. The difference was in how much.

The study said the dramatic difference suggests "the use of synthetic growth hormones," but Welsh said that there currently isn't a research method to differentiate which hormones are naturally or synthetically produced.

Synthetically produced bGH has not been shown to have adverse health effects on either humans or cows, according to a 2014 study published in the Journal of Animal Science by Cornell University's Dale Bauman and the University of Arizona's Robert Collier. Cows supplemented with bGH have been shown to produce nutrients and milk more efficiently.

One pesticide on the list, chlorpyrifos, has recently been in California's crosshairs, with plans to ban it announced in May. It's used on row crops such as corn, soybeans, fruit and nut trees, Brussels sprouts, cranberries, broccoli, and cauliflower, as well as on non-agricultural spaces such as golf courses, according to the Environmental Protection Agency.

Again, the use of hormones and pesticides is off limits for organic farmers. That said, some banned legacy pesticides were found in nearly all samples of both organic and conventional milk, the study showed, as they remain "persistent, at very low background levels in the environment." Levels in the conventional milk again surpassed what was found in the organic samples.

“Traces of these legacy pesticides persistently show up in any test for residues, so we were not surprised that they were detectable in both organic and conventional milk,” Shade said.

Reason for skepticism

Ron Erskine, a professor at Michigan State University who’s spent his career studying antibiotics in dairy cattle and milk, says he’s wary of the study’s results because the method wasn’t FDA approved and the results lacked a normal distribution curve, which is important in providing a good average. Before a milk tanker is unloaded for processing, an FDA-approved inhibition test analyzes a sample of the milk, Erskine said. If the sample tests positive for antibiotic levels over the FDA limit, the tanker is immediately dumped.

However, the Emory study used high-performance liquid chromatography, or HPLC, instead of the FDA-approved inhibition test. Erskine said the proteins and fats in milk make it very difficult for HPLC to provide accurate results when testing for chemicals at such low levels. Additionally, many of the samples tested below the level of detection for HPLC, the Emory study says. For the samples that tested below 1 ng/mL, a value of 0.5 ng/mL was assigned, or half the detection level.

Erskine said this can skew results, as the chemical levels could have been much lower or higher than the halfway point. For example, the median level of amoxicillin recorded was less than 1 part per billion – or less than 10% of the FDA tolerance level.

“Limits of detection exist for any kind of analysis,” Erskin said. “Once you get below that, the reliability of that test really starts to decline.”

Stacking up relatable studies

From October 2016 through September 2017, the Food and Drug Administration collected about 3.8 million samples from milk trucks. Of these, about 0.02% tested positive for drug residues, according to a 2018 report.

Jonker said the milk from these trucks would be discarded and the producer potentially fined based on the number of positive tests. If the farmer's milk products continually test positive, their license to sell milk could be revoked.

The FDA conducted a similar study in 2015, in which they collected samples from about 1900 dairy farms and tested them for 31 different drugs. Fifteen of the milk samples, or less than 1%, contained drug residues.

The Organic Center's Shade and Emory's Welsh said there needs to be further research to see how chronic, low levels of antibiotics, pesticides and hormones impact health in the long term.

"It's not like we see people that drink conventional milk having a lot of health problems," Welsh said. "People drinking milk – period – are healthier. We see some differences, but they're minimal."