



For raw milk fans, it's pasture versus Pasteur

by Liz Pacheco & Kristen Mosbrucker • photos by Albert Yee

■ EQUILA, COCO AND JELLYBEAN may not seem like children's names, but to Mark Lopez, they might as well be. "These cows are like family to me," he says, standing in the pasture of his 100-acre Wholesome Dairy Farms in Douglasville, Pa. One of 163 raw milk dairies in Pennsylvania, the farm has seen many changes since Lopez's grandfather began raising cows there in the 1930s. ¶ "Back in the '40s and '30s and such, rotational grazing was most of the way it was done." In rotational grazing, the cows are regularly moved from pasture-to-pasture, giving the grass time to re-grow. Lopez has returned to that same system, dividing his land into a circuit of paddocks, or enclosed sections of pasture, that takes the cows two weeks to complete. With grants from the Natural Resources Conservation Services, he has also added a solar-powered watering system and a walkway and stream crossing for the cows to reduce erosion and habitat loss.

But the 100-acres weren't always dedicated to grass-fed, sustainable dairy production. Before Lopez, a bovine veterinarian by trade, took over the family farm and opened Wholesome Dairy in 2008, his uncle was running a "heavy metal" dairy operation. "That's where you have sick cows, and dead cows," Lopez says. "Cows in

a commercial dairy must be milked as hard as possible because the profit margin is so low." Farmers will sell their milk to one manufacturer, where it's mixed together before being separated into various components and processed into dairy products like milk, cheese and yogurt. In these operations, cows are also commonly fed grain, not grass, so they produce more milk. A grass-fed cow - like those at Wholesome Dairy - will produce half as much milk compared with a corn- or soy-fed cow, says Lopez, but the product will taste much better.

Having grown up drinking raw, unpasteurized milk from his grandfather's grass-fed cows, the return to this practice seemed natural for Lopez, who says he made the change because he wanted the best for his animals. While developing a raw milk dairy hasn't been easy (five years later the business is finally stabilizing), Lopez recognizes the value in his product - one produced on a small scale that has traceability and the unique identity of coming from his farm. Today, as federal agencies continue to discourage raw milk consumption, even in states like Pennsylvania where the practice is legal, that identity is increasingly relevant. Whether consumers are looking for raw or pasteurized products, local food advocates argue that it is understanding where one's milk comes from that is most important to ensuring the product's safety.

# 66 Food safety is an issue whenever people eat anything. It's not just a milk issue."



## WHAT'S IN YOUR GLASS?

Most milk available for sale in Pennsylvania is pasteurized — heated to 161° F for at least 15 seconds to destroy potentially disease-causing bacteria. Many raw milk-drinkers say the unpasteurized product is fresher and full of enzymes and nutrients that are destroyed when heated. The Center for Disease Control counters that the nutritional impact of pasteurization is limited to slight decreases in levels of thiamine, vitamin B12 and vitamin C. But as the pasteurization process continues to evolve, higher temperatures are being used to increase shelf life and the greater impact on nutrient content is unknown.

While more than half of all states permit some kind of raw milk sale, Pennsylvania is one of only eight states where the sale is legal everywhere. Regulations in other states can include place of sale and quantity limitations, as well as a variety of other restrictions. Some even require that customers have a doctor's note. In Pennsylvania, the state Department of Agriculture requires regular testing of raw milk, just as it does of the pasteurized product. Raw milk farmers self-test through state-approved labs for a variety of pathogens. Coliform bacteria found in animal feces — is tested for twice a month, and the state requires testing for salmonella, E. coli and other diseases every six months. Results are sent to the Food Safety Division. "We have a lot of dedicated staff who go out every single day," says Lydia Johnson, director of the Bureau of Food Safety and Laboratory Services in Pennsylvania. "We are tasked with a very important job to keep Pennsylvania safe."

Johnson stresses that the department fully supports local farmers, although she is hesitant to call raw milk products safe. "Pasteurization is the kill step, so raw milk is definitely a product that we try our best to regulate," she says. "However, it's a snapshot, so one day the milk can be fine and the next there could be contamination."

Lopez can attest to the state's attentiveness

and says that surprise visits are common. But in addition to the tests required by the state. Lopez does his own each week to monitor his product. Even with these extra precautions, he knows there is always risk for contamination. "[The customer has] to have a lot of trust when they're drinking raw milk. Because they don't

really know what's happening on the farm. They hope that things are being held up to the standard that they're supposed to, but [contamination] could happen anywhere."

The ongoing relationship between farm and consumer is critical in building and maintaining that trust. For Lopez, this means keeping an open door policy and inviting anyone to visit his farm and see the dairy operations. Despite this openness, Lopez is surprised at the questions customers ask. "I get 'Are you organic?" 'Do you feed [genetically modified organisms]?' 'Do you use pesticides?' 'Are there antibiotics in the milk?' 'What do you do when the cows get old, do you kill them?' It's always sort of like hot-button issues." Instead, Lopez advises customers to ask questions about the milk's cleanliness. "Never once have I gotten, 'What are your bacteria counts?' 'What's your somatic cell count [how much inflammation a cow's udder has]?' And I think I would ask that. 'Have you ever had any kind of issues with contamination?" To date, Lopez has had no contamination problems.

# A DAIRY DILEMMA

In addition to raw milk, Pennsylvania has also legalized the sale of raw milk cheese aged at least 60 days. Kristian Holbrok, a former chef who now manages Doe Run Dairy in Chester County, explains that the difference between the cheeses is in the bacteria. The raw milk already has the bacteria necessary to make

Mark Lopez (left), farmer at Wholesome Dairy Farms, with kitchen and farm manager Rebecca Seidel, who is responsible for everything from milking to making the cheese and





Above:

Wholesome

Dairy sells

raw milk in addition to

yogurt, kefir,

and ricotta

cheese.

cheese whereas the pasteurized milk needs bacteria added. But the 60-day aging requirement means any raw milk soft cheeses are illegal.

"If we could make raw milk soft cheeses there is much

more of a flavor difference," he says. "It's just not the same." Holbrok still makes raw milk soft cheeses for his own enjoyment, specifically varieties that were once imported to the U.S. from around the world, before the Food and Drug Administration (FDA) banned interstate trade two decades ago. His favorite is Reblochon, a French cheese which literally translated means "to pinch a cow's udder again."

Further regulation of products like raw

milk cheese, may be on the horizon, a development that Holbrok says will be difficult for small farmers to accommodate. "We just don't have the money left over like that," he says, explaining his concern about the FDA's new Food Safety Modernization Act. Passed by President Obama in January 2011, the act is expected to affect all farms selling food

directly to the public, not just raw milk farms. and could include additional fees and regulations for food production. Currently under public review, the act's final implications are still to be determined.

Holbrok isn't the only cheese farmer feeling pressure from the FDA. Emily Bryant Montgomery, cheesemaker at Calkins Creamery in Honesdale, Pa., originally made her Brie-style Noble Road cheese with raw milk. Despite the cheese's popularity, Montgomery couldn't shake the fear of FDA regulations. Recently, she started using pasteurized milk instead.

### A RELATIONSHIP OF TRUST

Lopez is very open about the risk of producing and selling raw milk. "To address the raw milk cleanliness issue - that's real ... People can get sick if the milk gets contaminated. People can get sick if the spinach gets contaminated, or the peanuts, or the hamburger, or any food. It's a real issue. Food safety is an issue whenever people eat anything. It's not just a milk issue." Despite this, raw milk dairy farmers tend to face a higher level of scrutiny at the federal level than other food producers.

When Lopez started Wholesome Dairy in April 2008, he knew his cows were healthy, producing a clean, delicious product. The challenge was not to convince consumers of his milk's safety, but simply to tell them his products were available. After two years — and almost shutting down the farm — Lopez was finally able to tap into the raw milk demand. "I almost feel like a celebrity sometimes. It's really gratifying to show up with my trailer and some milk and the response is like, 'Yeah, Mark's here!'" Today, Wholesome Dairy products can be found at 15 stores and markets throughout the region.

"I can't tell you how many times people have said, 'I've had different kinds of raw milk and your milk is the best I've ever had," Lopez says. "That makes me really proud to hear that, but that's not an accident, you know?" Choosing to grass-feed his Ayrshire cows makes the difference, he says. "That to me is what really separates us, not from the commercial milk that's in the grocery store, but from any other raw milk 

