How Clean is Your Home Milk Supply - Really?

by Gianaclis Caldwell

Like most people who have a few dairy goats you probably believe the milk you drink and feed to your family (and maybe even sell) is clean and safe. But you might want to think again.

We run a small, licensed cheese dairy in Oregon. We too thought our Grade A milk produced in our inspected, licensed facility was a pure as it could be. After all, the state conducts routine tests on our milk to verify its safety, but when we first got started I didn’t know how to correctly read the results from these tests. I assumed that if the numbers were less than stellar, that someone would tell me, but in reality, only when the bacteria counts reach the official violation level is the dairy owner usually informed.

Without our noticing, the bacteria counts began a slow and steady climb that suddenly shot sky high. While the milk was still technically safe to use for cheese, it was far below the standards that are ideal. This was a pivotal moment for us. It did three things: It caused me to study and learn how to read and interpret milk lab tests, inspired me to pay close attention to the lab results when they arrived, and completely changed our approach to sanitation in our milk processing areas.

After experiencing this from the standpoint of a licensed producer that believes in the right to drink raw milk, I started thinking about the home producer and their milk quality. If a licensed dairy performing rigorous cleaning rituals could find their milk not clean, what about the home producer? Here in Oregon, raw milk can be sold legally direct from the farm, as long as only a specific herd size is not exceeded and other criteria are met. So not only could the home producers be serving tainted milk their families, but they could be selling it to any number of people for whom bacterial contamination might cause health concerns. Even beyond the health issues, there is the flavor concern. A common cause of poor flavor in milk (especially goat milk) is the breakdown of fats by bacterial enzymes. So, for quality milk from all standpoints, cleanliness is paramount.

THE STUDY

I decided to recruit some volunteer farms that would allow me to collect samples of their milk to send to a lab for testing, as well as fill out a questionnaire about their milk sanitation practices. Each producer promised to keep their cleaning and collecting routine the same. The results of the lab tests were amazing; from milk that was extremely clean, to one that was over the usual violation level. The good news was that even the “dirtiest” milk did not have high levels of the most common pathogenic (illness causing) bacteria. The samples were not tested for another bug, listeria.

I collected two milk samples from five farms. One sample was fresh, one just a few days old. Two of the farms hand milked and three used milking machines. The samples were packed on ice and overnight shipped to Agrimark Central Laboratory in Massachusetts. (I chose Agrimark for their easy-to-read and order “raw milk profile”.) Before we go into the results, let’s go over a little background on just what kind of tests can be done on milk and what these tests can tell you.

MILK QUALITY TESTS

Everyone who milks their goats, cows, or sheep hopes that their milk is safe and clean. But what kind of tests are done on milk to make sure it is safe and clean? There are several types of tests that can be done on milk, each testing something different. The most common tests are:

1. Microbiological tests: These tests check for the presence of harmful bacteria in the milk. The results of these tests are usually reported as the number of bacteria per milliliter of milk. If the number of bacteria is too high, the milk is considered to be unsafe.
2.货架期测试：These tests check the shelf life of the milk. The results of these tests are usually reported as the number of days the milk can be stored before it becomes unsafe.
3. 胆汁酸测试：These tests check the amount of bile acids in the milk. The results of these tests are usually reported as the percentage of bile acids in the milk.
4. 蛋白质测试：These tests check the amount of protein in the milk. The results of these tests are usually reported as the percentage of protein in the milk.
5. 脂肪测试：These tests check the amount of fat in the milk. The results of these tests are usually reported as the percentage of fat in the milk.
6. 钙测试：These tests check the amount of calcium in the milk. The results of these tests are usually reported as the percentage of calcium in the milk.

In Mexico they are used to feed chickens, thus the yellowish tint you have noticed to them if you’ve ever been to Mexico. The flowers and plants can also be fed to your goats, which will soothe the cells internally, strength veins, arteries and the heart, and being antiseptic will help reduce bacterial woes. My goats LOVE it when I share some with them! It is also a herb worth having to soothe irritated or damaged skin, reducing the chance of infection taking hold. Though I have not used them for lung conditions, I wouldn’t hesitate to use them as part of a lung recipe, or to feed to goats that are weaker in respiration. The leaves having a high amount of calcium is interesting to note, as well as inulin in the roots, being beneficial to the pancreas. The seeds are high in fat and could be used as a supplement for goats that are underweight or milking hard.

Though I have not used the herb in working with eye conditions, it holds much promise for use that way of made into a tea. The flowers contain lutein, lycopine, celandine, carotenoids (creating their coloring) and as stated before, mucilage. A very nice nutritive and soothing eye combination for failing or injured eyes.

Kat Drovdaahl lives with her husband Jerry in the Siskiyous of southern Oregon and operates Fir Meadow LLC, an herbal products company, as well as managing a show herd of dairy goats and an herbal medicinal garden. She has her masters degree in herbalism and is a holistic iridologist. If you have questions for Kat, address them to her care of United Caprine News, P.O. Box 328, Crowley, Texas 76036 or caprinenews@att.net.