

Dairy Goats: Milking the Sanitary Way

Keep it Simple

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Many small farmers are keeping a small herd of dairy goats to produce milk and/or make cheese. However, it is a fact that not everyone likes to drink goat milk. The most common objection is that it has an unpleasant odor and taste. Many of these complaints can be dealt with by proper milking and milk-handling methods.

One of the chief issues facing goat milk producers is high somatic cell counts. Somatic cells are the main cells that make up an organism. The somatic cell count is a measure of certain cells, such as white blood cells (which can indicate disease), and epithelial cells. Epithelial cells are those that line the mammary gland; they cover body surfaces and also line the cavities. Goats naturally shed white blood cells and epithelial cells.

Some loss of these cells is normal with each milking. If infection occurs or the stress level of the animal rises, more white blood cells are produced. The high cell counts can come from several sources. Genetics play a role; some animals naturally carry a high somatic cell count load.

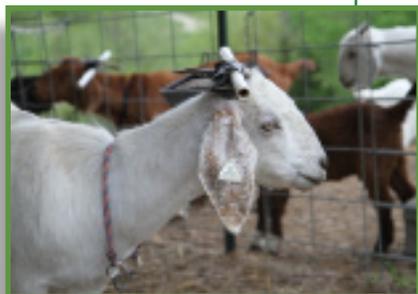
Animals in the later phases of lactation (nursing) are also prone to higher counts. Very hot weather or not enough water can also cause this type of increase. Onset of estrus (the time when conception can occur) can cause an increase. Mastitis (an inflamed udder caused by bacteria, stress or injury) is the major reason for rapid increases. Therefore, prevention of mastitis plays a key role in reducing cell counts and/or keeping the counts at acceptable levels. Mastitis test kits are readily available for home use. The California Mastitis test is widely used; it is available at farm stores and online. Most experts recommend a routine test once per



month. This can detect any subclinical (without a symptom) mastitis; it provides information for early treatment, before the mastitis becomes full blown.

Barn conditions should be one of the first concerns in creating a sanitary environment for milk production. Animals kept in wet and/or soiled bedding will have problems. The teat is an orifice (opening). This opening is a direct link to the milk supply. A goat lying on wet straw will allow bacteria through those openings and through the microscopic pores on the udder. Proper barn upkeep is the first step in producing high quality milk.

The actual milking process is also a critical aspect of maintaining high quality milk. It is important to set up a work routine that is fairly simple to do and is based on common sense. First, conditions in the milk parlor should be sanitary. The laneways to and from the parlor should be kept clean to reduce the introduction of dirt.



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entire teat. The last step is to thoroughly **wipe** the teat to get rid of all of the sanitary cleaning solution. A fresh disposable towel should be used for each animal. Otherwise, there is the risk of pathogens (substances that cause disease) being transmitted from one animal to another. The milker can now milk by hand or machine.

To the extent possible, the animals should be kept stress-free in the milk parlor. Stress can be caused by overcrowding, long waiting periods and physical irritants, such as aggressive handling; all should be avoided. Cooling units, such as misters and fans, should be used during extreme summer conditions. Keeping the animals comfortable will increase the overall milk yield and quality.

During milking, the milker should wear disposable gloves. When the goat is in the stanchion (a support used when milking) or on the milking stand, follow the procedure “strip, dip and wipe.” That is, **strip** the teat and dispose of the first stream of milk. This first milk is likely to be soiled and bacteria-laden. A good practice is to use a strip cup. This cup contains a small screen, and the beginning signs of mastitis will show up as clots on the screen. (If the milk shows signs of infection, discard it. Then, remove the doe from the herd and treat her accordingly.) Next, dip the teat in a sanitary teat dip solution. This is usually iodine packaged and sold solely for use on dairy animals. Completely cover the teat. A common error is to dip only on the side facing the milker; make sure the **dip** encompasses the

If hand milking, do not wring the teats to remove the last drop of milk. This can bruise the udder or cause small vessels to burst. If using a mechanized milking system, check and replace the inflations (components of the machine) according to the manufacturer’s recommendations. Sanitize the system both before and after use.

Goat udders should be shaved or clipped to prevent dry manure or soil from clinging to an udder and falling into the milk pail. Monitor udder health at milking time. Treat any cuts or abrasions after milking. As milking is finished, follow a post-dip procedure using a clean teat cup. Leave this dip on as a finishing step.

Milk should always be collected into a clean pail or milking system. Run the milk through a disposable filter into clean storage canisters. Chill the milk to 38°F within an hour. Depending on the refrigeration temperature, raw milk will stay fresh for 12-14 days.

Missouri State Law 196.935 RSMo permits the sale and/or delivery of raw milk from a producer to an individual for that individual’s use. The Missouri Office of the Attorney General has interpreted the point of origin of the sale of raw milk to be the producer’s farm. Attorney General Opinion 113-73 further interprets 196.935 as saying that dairy farmers cannot sell raw milk off site.

Therefore, Missouri producers can legally sell milk from their farm to the consumer as long as it is allowed by county or city regulations.

Additional information: Langston University offers milk-testing services through Dairy Herd Improvement (DHI). Contact the lab at (405) 466-6207 or email langston_dhi@yahoo.com. You may also contact Heart of America DHIA, Manhattan, KS 66505, at (800) 698-2634 or email Dennis Drudi, manager, at ddrudik@gmail.com for information about testing milk. These tests give a complete profile of each milk sample submitted. ■

