

# Backyard Milk Quality

## FARM ANIMAL FIELD SERVICES

Raising backyard dairy animals can provide families with milk and other dairy products. The quality of the milk and milk products produced and consumed is important in flavor, shelf life, and safety. The following practices can aid in maintaining good milk quality.

- **Practice biosecurity** between other livestock, including new herd additions, to prevent introduction and transmission of infectious diseases.
- **Wear latex or nitrile gloves** when handling the udder or milk products to prevent contamination with bacteria found on human skin.
- **Use sanitary milking techniques**, including hygienic cleaning of milking equipment and milking area, to minimize milk contamination.
- During milking, **visually inspect the udder** for evidence of swelling, irritation, or inflammation (redness). If any of these signs are observed, they may be indicative of an infection in the udder (mastitis).
- **Strip the teat** by squeezing a small amount of milk from each teat. This practice will break the keratin plug and discard debris that is located in the teat canal that has accumulated since the last milking. This practice also can be used to stimulate milk ejection, and allow you to evaluate the milk and its consistency. The milk should be white and smooth (not clumpy or discolored). A California Mastitis Test (CMT) should be performed according to test instructions before each milking to evaluate somatic cell (white blood cell) concentrations within the milk.
- **Treat each teat with a disinfectant** (i.e. betadine based products) for at least 60 seconds prior to milking to kill any organisms that may be present on the teat surface. After 60 seconds, wipe the teat with a clean paper towel or cloth towel.
- Once the milk has been emptied from the udder into a sanitized collection vessel, **apply a post-milking teat dip treatment**. After milking, it is imperative that the animal remain standing at least 1 hour. This allows time for the keratin plug to reform within the teat, thus blocking contaminants such as bacteria from entering the teat canal. Allowing access to pasture, hay, or grain will encourage standing activity after milking.
- **Cool the milk to 45 degrees Fahrenheit** as soon as possible after milking. This will minimize bacterial growth within the milk.
- **Perform at-home pasteurization** by heating the milk to 145 degrees Fahrenheit for 30 minutes or 165 degrees Fahrenheit for 15 seconds, followed by quickly cooling.
- Work with your veterinarian to **develop a fine-tuned milking protocol** for your backyard herd to maximize milk product quality, food safety, and cow health.



The CMT is a great tool for assessing subclinical mastitis which is not evident to the naked eye. If the appearance of the milk is questionable in any way (i.e. color or consistency) or an abrupt increase in CMT score is observed, contact your veterinarian.