

# Milk Sampling and Weighing Procedures

The purpose of the UK Regulatory Services Milk Program is to ensure raw farm milk produced or marketed in Kentucky is bought and sold using accurate weights and tests. The milk program operates under the authority of the Kentucky Farm Milk Handlers Law. The law requires all milk haulers to maintain a current sampler-weigher license and establishes standard procedures to ensure accurate sampling and weighing of milk for pay purposes. It is critical for sampler-weighers to follow proper procedures when sampling and weighing raw farm milk. For producers with multiple milk tanks, each tank must be sampled and weighed and have a separate record.

## Perform milk quality evaluation:

- **Temperature:** The ideal holding temperature for milk is between 34° and 36°F. Legally acceptable bulk milk may be held in a temperature range of 32° to 45°F. Immediately record the milk temperature on the milk ticket, barn card and sample container. Each month verify the accuracy of the tank's thermometer with your calibrated thermometer and record this verification on the producer's barn card.
- **Odor:** Evaluate the milk for normal odor by smelling the milk through the smallest tank porthole. Normal milk smells "sweet". Check the milk for sour, malty, onion or other "off" odors.
- **Appearance:** Check the milk for normal appearance and color. Milk should be free of abnormalities such as off-color or signs of churning, freezing, excessive foaming or floating debris.

*Notify the producer, hauling company and appropriate field representative of any problems.*

## Milk measurement and weight:

- Measure with agitator off and the milk absolutely motionless.
- Do not measure through foam.
- Read a clean, dry stick at eye level until two readings agree.
- Convert the measurement using the tank chart.
- Immediately, record the measurement and weight on the milk ticket and barn card.

Note for tube gauge tanks: The tube must be clean. Open the valve slowly to minimize foam and obtain the measurement by reading the bottom of the meniscus. Record the measurement and weight as described above.

## Identify sample container with the following:

- Producer ID #.
- Date and pick-up time (including AM/PM or military time).
- Milk temperature.
- Your initials.

Record information with a waterproof pen and do not distort the bar code when "sticker" identifications are used. Use only approved sterile containers. Do not touch or otherwise contaminate the inside of the sample container.

## Sample the milk:

- **Properly agitate the milk.** Tanks with a 1,000-gallon capacity or larger require a minimum agitation time of 10 minutes. Smaller tanks require a 5 minute agitation time. Some tanks may require additional agitation.
- **Use an approved, sanitized stainless steel dipper.** Rinse the dipper with milk twice prior to sampling. Sample well below the milk surface with the agitator running and avoid sampling foamy areas of milk. Never sample from the tank outlet valve.
- **Obtain a representative sample.** Fill the container approximately  $\frac{3}{4}$  full while holding it away from the bulk tank lid opening. Immediately place the sample in the cooler storage rack or floater in an ice and water mixture.

## Milk transfer:

- Do not transfer milk until it has been sampled and weighed.
- Place the milk hose through the milkhouse porthole.
- Rinse and sanitize the milk tank outlet valve prior to connecting the transfer hose.
- Properly secure all equipment and pump the milk from the tank to the truck. After the milk is transferred, unhook the hose, check the tank and note any abnormalities then rinse the tank and the milkhouse floor. Never rinse a tank with the transfer hose still hooked up.
- Complete all paperwork and always leave the milkhouse in good condition.

*This document was prepared under the authority of the Kentucky Farm Milk Handlers Law. Contact UK Regulatory Services for a more detailed description of sampler-weigher requirements at (859) 257-2785 or visit [www.uky.edu](http://www.uky.edu). Kentucky milk haulers are also required to possess permits issued by the Kentucky Milk Safety Branch. This agency may be contacted at (502) 564-3340 to obtain information regarding their requirements.*



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### Sanitation and Bio-security:

Licensed sampler-weighers are required by law to use sanitary, accurate milk hauling procedures. Be aware of and follow each producer's biosecurity policies.

### Vehicle:

- Keep truck clean, including interior and floor mats.
- Restrict on-farm driving to milk pickup areas.
- Secure truck completely when left unattended.

### Hygiene and personal biosecurity:

- Keep a clean, neat appearance. Use sanitary procedures.
- Sanitize footwear, or wear disposable coverings if appropriate.
- Limit foot travel to areas between truck and milkhouse.
- No food or tobacco use in milkhouse.
- Wash hands before proceeding.