

HOW TO GET FRESH AND HYGIENIC MILK FROM YOUR COW

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Introduction

Milk contains approximately 86% water, 4.7% sugar (lactose), 4.1% fat, 4.2% protein and 1% minerals. This form a good media media for growth of a variety of microbes, and it is therefore highly perishable. Most contaminants of raw milk originate from external environment especially from the *boma*, milker, equipment and air among others. If hygiene is not observed during and after milking, this can result to spoilage, wastage and sale of poor quality milk.

Requirements for hygienic milking

- Well-constructed shed (*boma*)
- Healthy cow
- Clean milking bucket (aluminium and steel materials are easy to clean)
- Mastitis testing kit (CMT or strip cup)
- Milking jelly
- Teat dip reagent
- Cotton clothes (one for each cow)
- Hot water on standby
- Protective clothing/apron
- Food grade soap

Steps in hygienic milking

1. Keep a good dairy cow from known breed type. Ensure the animal is properly fed with the right feed material at the right time and stays in a clean and comfortable house or grazing.



2. Use boiled water to clean milking equipment. Add a pinch of chloride of lime to the hot water to further disinfect it. **Use fuel wood saving jiko.** Pour the hot water into a clean easy to carry container and dip the clean udder cloth into the hot. **Remember.** Each cow should have its own clean sterile cloth.



4. Let the milker wash his/her hands before cleaning the udder and teats of the cow using lukewarm water.



5. Clean the udder with the luke-warm sterile cloth that was previously dipped in hot water. Wring the cloth and dry out excess wetness. Apply milking jelly. Then test for mastitis using recommended method and reagent. (CMT or strip cup). Separate infected cow from healthy ones. Milk non-infected cows first. Also milk non infected quarters first.



Strip cup method



CMT method



6. Use a clean and easy to wash bucket (aluminium or stainless steel) not plastic. You can however use the special white easy to clean plastic bucket (for example Mezzy can). Ensure you empty all the quarters. **Do not mix** or pool together milk from infected cows/udder quarters with non-infected ones



7. After completely emptying all the quarters, apply teat dip to disinfect the teats. Follow the manufacturer's instructions on application



8. Sieve milk using sterile sieve into clean sterile aluminium milk cans ready for transportation to the Dairy/Market.



Steps in cleaning equipment after milking

- Pre-rinse the container soon after use
- Thoroughly scrub the container with warm water and detergent or soap (using a stiff bristled hand brush or scouring pad. **Avoid** steel wool)
- Rinse the container in clean running water
- Dip-rinse the container in boiling water for at least one minute to kill germs
- Rinse the container by pouring hot water into it
- Air-dry the container in inverted position on a clean rack in the open
- Soak udder clothes, in clean cold water.
- Pour dirty water into a soak pit
- Wash the clothes in fresh water mixed with food grade soap then rinse in hot water
- Sun dry in dust free environment.

Scrub container with soap and warm water →



Deep rinse in boiling water →



Important point to observe

Always maintain a clean *boma*

- Use of containers previously used in storing substances such as chemicals, paraffin among others with strong smell can impart same flavour in milk
- Do not give milking cow feeds with strong flavour few hours to milking
- Store milk in cool place if possible a chilling facility
- Ensure your milk reaches the market in less than 3 hours after milking



Poor



Clean

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