

Introduction

Milk contains approximately 86% water, 4.7% sugar (lactose), 4.1% fat, 4.2% protein and 1% minerals. It supports the growth of micro-organisms and thus is prone to contamination. Raw milk from a healthy cow contains few bacteria. Being a suitable media for growth of variety of microorganisms, it is therefore highly perishable. Most contaminant of raw milk originate from external environment especially from the *boma*, milker, milking equipment air among others. If hygiene is not observed during and after milk can result into a lot of wastage and sale of poor quality milk.

Requirements for hygienic milking

- Clean we constructed boma
- Well fed and health lactating cow
- Milking bucket (aluminium and steel materials are easier to clean
- Mastitis testing kit (CMT or strip cup)
- Aluminium milk can
- Milking jelly
- Teat Dip reagent
- Cotton clothes (one for each lactating cow)
- Hot water on standby
- Protective clothing/apron

Hygienic milk procedure

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 .



Boil water for use in cleaning milking equipment. If you are using pond water you may add pinch of chloride of lime to the hot water to further disinfect. USE FUELWOOD SAVING JIKO.



Once ready for milking, pour hot water into a clean container and dip cloth into the hot water using easy to carry container.



Let the milker wash his/her hand before cleaning the udder and teats of the cow using lukewarm water. REMEMBER. Each cow to have its own clean sterile cloth



Clean the udder with sterile cloth dipped in luke warm water then. the test for mastitis using recommended method and reagent. (CMT or strip cup) Separate infected cow from healthy ones. Milk clean cows first. Also milk non infected quarters first. Ensure you empty all the quarters. DO NOT MIX milk from infected quarters with uninfected ones



CMT method



Strip cup method

Dry out excess wetness with a tissue paper bought specifically for milking purposes. '**Do not borrow from the toilet**'. Apply milking jelly, then milk your cow using clean and easy to wash bucket Aluminium or stainless steel milking bucket is better. You can use white easy to clean plastic bucket (for example mezzu can)



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



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



Cleaning of utensils used in milk handling

- 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 steelwool)
- 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



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



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HOW TO GET FRESH AND HYGIENIC MILK FROM YOUR COW

