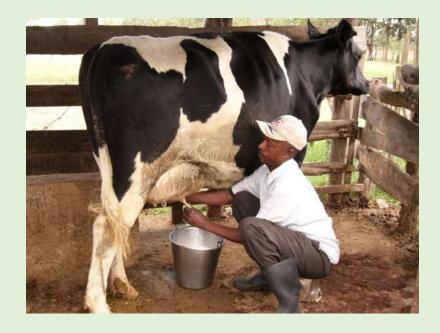
#### Theme 7: Milking & milk Hygiene

# PROBLEMS DURING MILKING (Level 1)

Topic	Milking & milk Hygiene
7.1	Instructions hand milking techno & hygiene
7.2	Instructions machine milking good practice
7.3	Problems during milking
7.4	Scoring of teat condition
7.5	Milk production recording
7.6	Calculation of costs hand vs machine milking
7.7	Which milking parlour to choose
7.8	Testing & maintenance of milking machines
7.9	Milking & cleaning routine in milking parlours
7.10	Storage & cooling of milk on farm



#### 1. You will learn about (learning objectives):

- Manage unpleasant behaviour of cows,
  - ☐ a good relation between cow and milker is crucial,
  - ☐ Anti kick device will help to avoid continuously kicking by the cow (first milking heifer),
- ☐ Recognize poor milk let down,
- Restrain cows while milking,
- Prevent udder health,
- ☐ Recognize mechanical adjustments,
- ☐ Vacuum during (machine) milking.







# 2. Unpleasant behavior of cows

- Not all the cows like to be milked either manually or by machine.
- Here are several reasons;
  - 1. Unpleasant behaviour can mostly caused by stress.
  - 2. Attitude of the milker and Skills of the milker.
  - 3. Sore teats.
  - 4. Heritable (poor)milk let down.
  - 5. Poor machinery adjustments.
    - Vacuum.
    - Pulsations.









# 3. Milking "Time"

- Regularity.
  - Milking always takes place at same time.
  - Cow are being milked by same person.
  - Cows are being milked according to a fixed protocol.
  - Cows are preferably always milked in the same order.
  - Cows like to be milked by the same equipment on the same place.
- Irregularity will/can cause.
  - Poor milk let down, less milk.
  - Blind milking.
  - Mastitis.
  - Unwanted behaviour like kicking and kicking off clusters while milking.





Same; Person. Time. And Place !!!!



#### 4. Unwanted behavior

- In case of machine milking unwanted behaviour might be caused by.
  - No concentrates available while milking.
  - Sore teats because of udder oedema in fresh cows(especially first calvers).
  - Vacuum level during milking.
  - Inadequate pulsation rate/ratio.
  - Presence of leakage current.
  - First calvers' first milking.
  - Wet (using water) preparation of teats/udder.



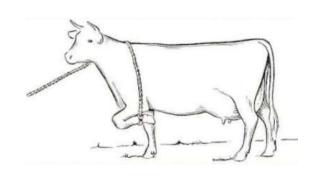
A well adjusted vacuum meter is very important, vacuum need to be checked before every milking

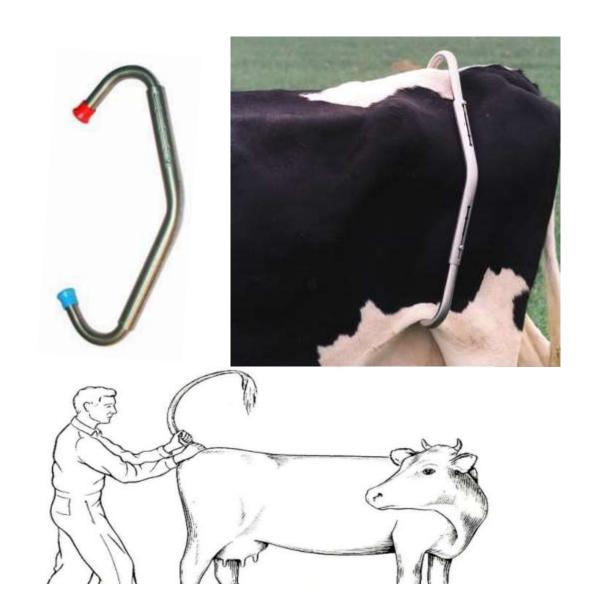
Push your thumb into one of the liners and you will be able to count the number of pulsations/minute. Every cluster must checked once a week.



# 5. Restraining when ???

- Be aware;
  - Only in some exceptional cases a farmer is allowed/advised to restrain the cow in such a way that the cow feels "comfortable".
- Proposed "friendly" methods.
  - Lift up cow's front leg.
  - Restrain tail.
  - Use of tension bracket.





#### 6. Udder oedema

Udder oedema in milking cows is painful for the cow and quite often it results into mastitis because of incomplete milking due to poor milk let down.



ONLY 6 LITRES BY 2x MILKING

#### 6.1. Udder oedema. Cont'd...

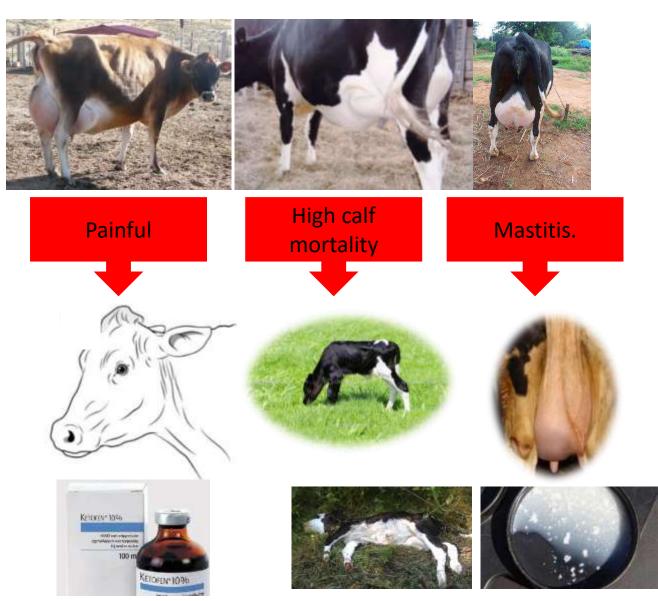


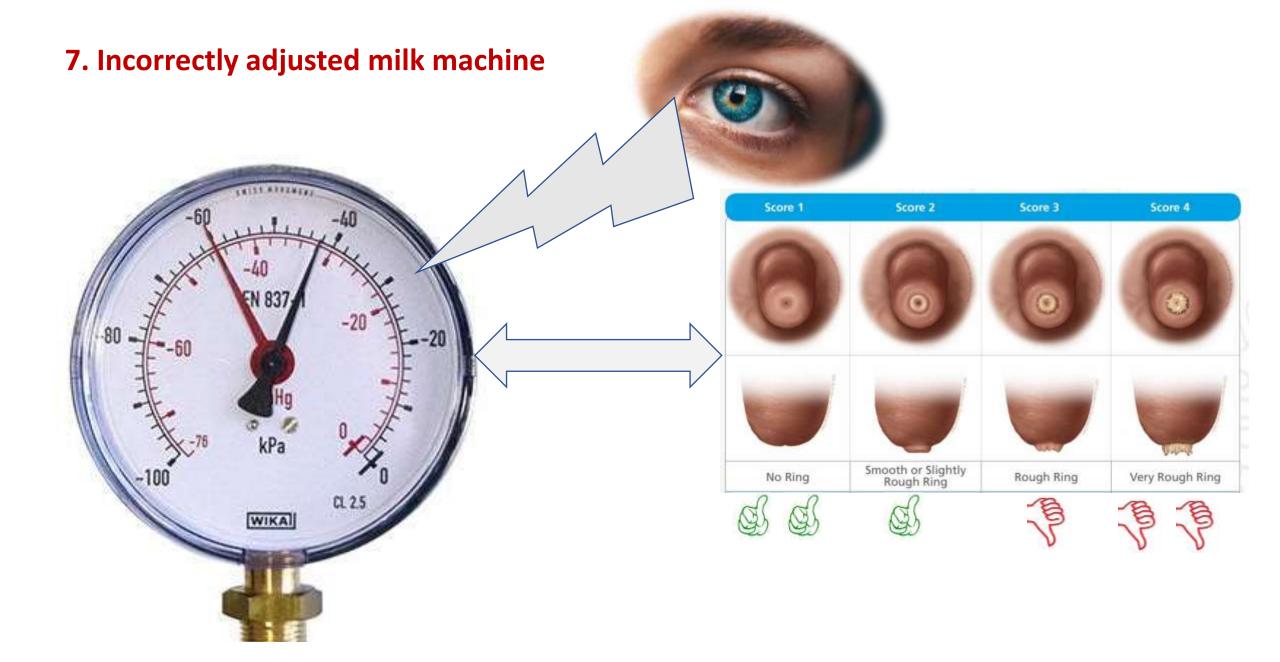


#### 6.2. Udder oedema. Cont'd...





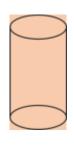




### 8. Teat shape and teat size

In order to be able to milk a cow properly and smoothly, the teat length and teat shape are largely decisive

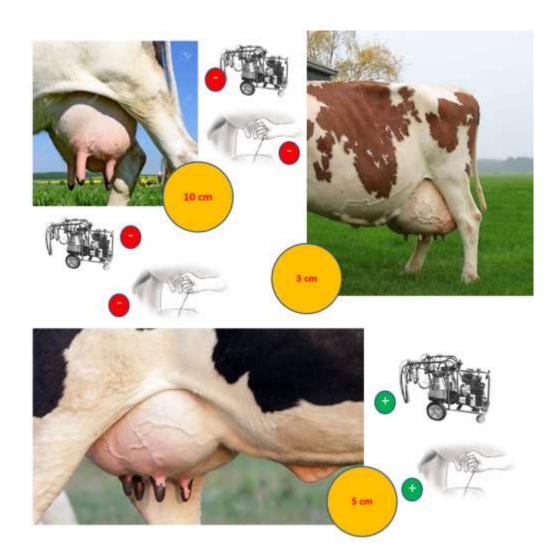
The shape of a cow's teat must be cylindrical always.





The most desirable teat length for hand milking is about 7 cm's.

For machine milking the teat length must be 5 cm's



#### 9. Mastitis

When mastitis/abnormal milk is being recognized during the preparation its "ALARM PHASE 1"

- Abnormal milk.
  - Colour
  - Clothes.

All the hygiene measures now must be observed.

Milk separation!!

Clean and disinfect all the utensils that have had direct contact with the "sick" milk.

Postpone milking till all cows are milked.

After milking decide about the treating protocol.



Gloves ++++
Short sleeves ++++
Strip cup ++++
Clean udder ++++

Clinical Mastitis Clothes.



Discarded milk. Separated.

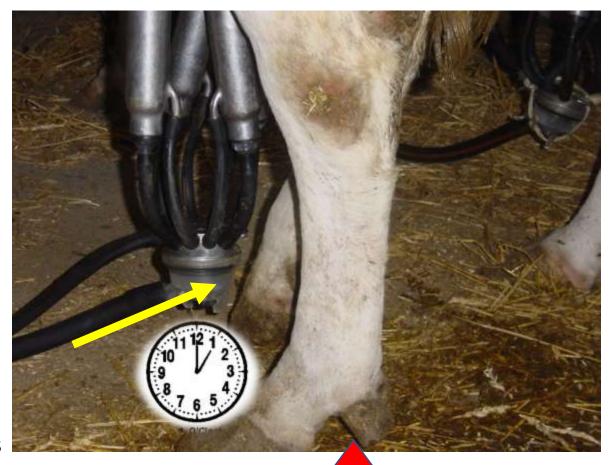
# 10. Blind Milking/Over milking

More than 30 seconds of blind/over milking becomes painful and has negative impact on udder health.

It gives unnecessary damage to teats.

Be aware. In case of machine milking there is always a small amount (0,5 litre) of milk that stays in the udder.

Blind milking also can be observed in fresh heifers (stress), that's why preparation of the udder/teats is very important.



! WARNING

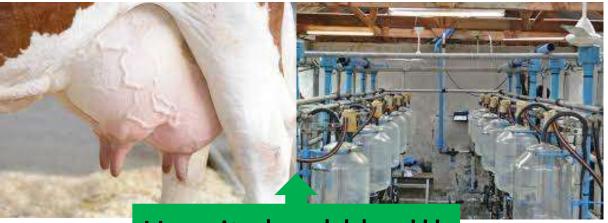
# 11. Hygiene

Milk is a very valuable product, most of the milk produced on a farm goes straight into the food chain.

Its farmers responsibility that the high quality milk stored into cows udder remains the same after milking.

Cow/udder hygiene

Equipment maintenance



How it should be !!!



#### 11.1. Hygiene. Cont'd...

Its not only the cow that has to be clean during milking, we also have to a lot of emphasis on the equipment being used for milking and last but not least the storage equipment's need to be clean and well maintained.

Before, during and after milking a farmer should take all the opportunities to check to road of the milk, from udder to storage tank, till the milk leaves the farm it's the farmers responsibility!!.









This is not what a customer wants to see

# 12. Summary

Problems during milking.

Are being caused by the farmer (people).

Poor skills/bad attitude.

Poor knowledge about equipment's.

