METHODS OF MILKING IN ANIMALS
INTRODUCTION

Milk:
 White liquid produced by the mammary glands of mammals.

 It is the primary source of nutrition for infant mammals.

 It contains many nutrients: protein and lactose.

 Early-lactation milk contains colostrum, which carries the mother's antibodies to its young and can reduce the risk of many diseases.
OUTLINE

- Milking
- Preparation of animal
- Methods of milking
- Advantages and Disadvantages
- Conclusion
Methods of milking influence the quality and quantity of milk produced at the dairy farm.

Proper method of milking results in the removal of entire milk present in the udder.

Avoiding injuries to the teat and udder and improving the udder health.
PREPARATION

- Cows are milked from left side.

- Teats may be milked diagonally or forequarters together and then hind quarters together.

- The milk must be squeezed and not dragged out of teats.

- The first few strips of milk from each teat are let out.

Disturbances like noises, movement of personnel during milking etc are to be avoided.
Methods of milking

- Manual / Hand milking
- Machine milking
HAND MILKING

1. Stripping method
2. Full hand method
3. Knuckling method
4. Machine milking
FULL HAND METHOD

- It is the best method as it causes minimum injuries to the teats.

- Teat is circled with index finger and thumb at the junction of teat and udder,

- The other portion of teat is closed with remaining fingers and pressed on all sides against the palm.
Full hand milking
Advantages:

- Full hand milking stimulates natural suckling of a calf.
- Removes milk quicker than stripping because of no loss of time in changing the position of the hand.
- Even by efficient method of milking only 85% of milk comes out from udder and 15% still remains in udder which is called residual milk.
STRIPPING METHOD

- Stripping consists of firmly seizing the teat at its base between the thumb and forefinger and drawing them down.
- The entire length of the teat is pressed simultaneously to cause milk ejection and to flow down in streams.
- The process is repeated in succession.
Stripping
CONTD.,

- Generally stripping method is adopted in small cows with narrow teats.

- To draw the last strips of milk containing more fat.

- A combination of initial full hand milking method followed by stripping at the end is a good method of milking.
KNUCKLING METHOD

- It is pressing the thumb against the teats while the teats are in between thumb and fingers.

- It may cause injury to the teat.

- This method is not advisable and is least recommended of all milking methods.
Knuckling:

Wrong hand milking (fisting)
MACHINE MILKING

- For herds with large number of cows and with high yielders.

- Apply milking machine gently within 30 to 60 seconds of washing of udder.

- Remove milking machine promptly as soon as milk flow stops by breaking vacuum first.

- Disinfect the teat ends by dipping them in antiseptic solution. Milk utensils and teat cups are immediately washed with warm water.
HAND MILKING MACHINE
Advantages:
- reduced labour cost,
- short time for milking,
- less injury to teats,
- hygienic method of milk production etc.

Disadvantages
- Transmission of diseases
- Cost of equipment
Conclusion
THANK YOU