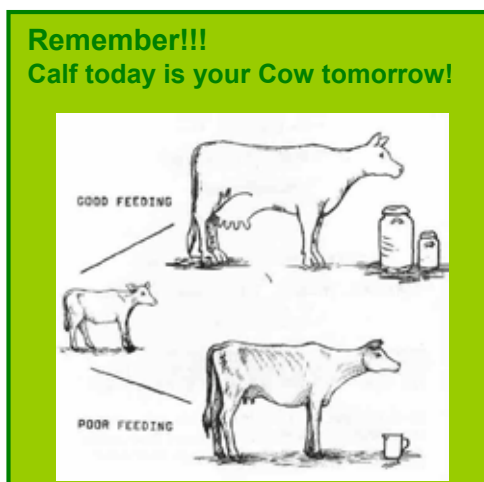




# Management of calves in dairy animals in Pakistan

## Introduction

Good calf-raising practices include proper feeding, bedding, sanitation, ventilation, prevention of health problem and daily observation. This fact sheet presents a list of practices that contribute to raising healthy calves from the day of birth until weaning.



## Within the first hour of birth

Make sure the calf breathes:

Breathing problems are usually associated with difficult calving (dystocia.) If a calf does not breathe immediately after birth, the nose and mouth must first be cleared of mucus. The calf may be laid with its head lower than the rest of the body or may even be lifted upside down for a few seconds to drain out mucus.

Respiration may also be stimulated by tickling the calf's nostrils with a piece of straw or by pouring cold water on the calf's head.

## Disinfect the navel

As soon as the calf is breathing normally, the next step is the dressing of the navel. This is important as it greatly reduces the incidence of a very common disease:

navel/joint ill. It occurs when germs enter the calf's body through the unhealed navel.

Pour a weak (7-10%) iodine solution into a wide-mouth container, then bath the navel and its surrounding area in it.

Repeat this operation at least every other day, until the "navel-string" dries up and falls off. This will be in about 10 days.

Remember...!!!!

This potentially fatal problem can easily be avoided if the cow calves in a clean environment and the navel is disinfected soon after birth.

## How to recognize a sick calf

During your daily routine check for these signs:

- Sick calves often have dry noses and higher than normal body temperatures.
- Listen to their breathing, noting any "rattles" or laboured breathing.
- Lift their tail and note the state of any faecal residues.
- Look at their feet and legs.
- For the first 7-10 days of age, check the navel area for signs of inflammation and swelling.

## Dry the calf

A wet calf in a windy environment is likely to get cold and sick rapidly. Clean straw may be used to rub the calf dry at the time of birth.

## Identify the calf

Newborns should be identified in a permanent fashion and birth data should be recorded in an individual permanent record. Methods of identification include:

- Metal or plastic ear tag;
- Neck strap or chain with a number;
- Freeze brand.

## Feed colostrum

The importance of colostrum feeding must be emphasized; more than 22% of calf mortality could be attributed to a lack of immune resistance.

- More importantly, the amount of colostrum fed and the time of feeding in relation to birth considerably influences calf survival.
- Colostrum is the thick, creamy, yellow secretion collected from the udder after calving.
- In addition to its high nutritive value, colostrum provides antibodies needed to protect newborn calves from many infections that may lead to diarrhea and death.
- Colostrum has a laxative effect and stimulates the normal function of the digestive tract.
- Immediately after birth, the absorption of antibodies is high, and there is a rapid decline in the efficiency of absorption of antibodies within hours after birth.
- At about 24 hours after birth, calves lose the ability to absorb intact antibodies (gut closure).
- Calves not receiving colostrum within 12 hours of birth rarely absorb enough antibodies to provide adequate immunity.

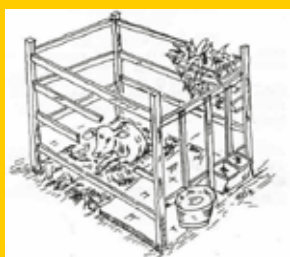
How much colostrum should be fed?

The amount consumed per feeding should not exceed the capacity of the calf's stomach (5% of body weight; for example 2 kg of colostrum for a calf of 40 kg).

When should colostrum be fed?

The first meal should be fed as soon as the calf is breathing normally after delivery and not later than one hour after birth. The second meal should be fed within six to nine hours of birth. No other feed should be given before the colostrum.

Good calf housing with feed and water present at all times is important!



## Do not leave the calf with the cow

Calves should be removed from the cow's calving area promptly after birth. The survival of the calf increases greatly when the calf is placed in a clean, dry environment and fed colostrum immediately after birth.

The cow's udder must be cleaned before allowing the calf to suckle. When bonding occurs between the calf and the cow, absorption of antibodies ingested with the colostrum increases.

### Hints on calf rearing

- Feed colostrum as soon, often and much as possible during the first 4 days.
- When suckling provide the milk of one teat (rotate) during the first month.
- When bucket feeding, feed milk at a rate of 10% of body weight per day (5 to 30 days).
- Introduce daily good quality, leafy roughage and palatable concentrate. High quality roughage will stimulate early and good development of rumen.
- After 30 days reduce milk feeding gradually to 5% body weight per day. OR
- Reduce suckling gradually to only before and after milking.
- Provide daily fresh, clean drinking water and minerals next to concentrates.
- Wean calves at:
  - 2 months  
(When quantity and quality of roughage/ concentrate is good quality)
  - 4 months  
(When quantity and quality of roughage/ concentrate is medium quality)
  - 6 months  
(When quantity and quality of roughage/ concentrate is poor quality)

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It was prepared by M.N.M Ibrahim  
([m.ibrahim@cgiar.org](mailto:m.ibrahim@cgiar.org)).



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ILRI is a member of the CGIAR Consortium

Box 30709, Nairobi 00100, Kenya  
Phone: +254 20 422 3000  
Fax: +254 20 422 3001  
Email: [ILRI-Kenya@cgiar.org](mailto:ILRI-Kenya@cgiar.org)

Box 5689, Addis Ababa, Ethiopia  
Phone: +251 11 617 2000  
Fax: +251 11 617 2001  
Email: [ILRI-Ethiopia@cgiar.org](mailto:ILRI-Ethiopia@cgiar.org)



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