

Care and Management of Calf

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Entire life of a newly born calf is the most critical period of just after calving.

Remember most important point for newly born calf:

- * For calf breathe better and help in the prevent future breathing problems, clean nostrils, and mouth with the new cotton towel.
- * Kept calf near his dam to wash the body of calf and clean which promotes circulation and prepares the calf to standup and walk.
- *Cut the novel cord at around 2 inches from the base with a clean instrument.
- *Dip the novel in 3.5% tincture of iodine solution secure the minimum contact time of at least 30 seconds.
- *Newly born calf will be given 2litre of colostrum within the first 2 hours of birth and 1-2 liter (based on weight and size) within 12 hours of birth.
- *After 24 hours of birth of feeding colostrum may not help the calf to ward off infections.
- *Adequate amount of colostrum must receive by calf, to protect it from disease for the first three months of life Colostrum is the calf “passport to life.”
- *Hand feeding new born calves are therefore recommended so that the farmer is sure about the amount of colostrum an individual calf receives.
- * At the age of 10-15 days deworming will be done and subsequently monthly up to 6th months of age.
- * At the age of 3 months old, you contact to veterinarian for vaccination.
- *For better growth and early maturity, you given calf starter from 2-8 weeks of age.



For example- calf starter (approx. Percentages)

Maize-52%, Oat-20%, Soyabean meal-20%. Molasses-5%, Salt-0.5%, Minerals-1.5%, Vitamins-1%.

System of Calves Raising-

1. Calf raising with dam-In this system calf is permitted to suckle milk from udder a touch of before and after milking.
2. Calf raising without dam or Weaning System-It regard the removed of calf from dam just after birth and then feeding persist in the hands of dairy owner. Advantages of this system:
 1. The cow creates no problems in giving milk whether the calf is alive or not available.
 2. Any age of calf can be culled easily.
 3. Over and under feeding should be controlled.
 4. Cow embellish regular breeder due to weaned calves have 13 to 14 months calving interval as against 16 to 18 months in un-weaned calves.
 5. According to body weight, calf can be fed easily.

Feeding milk replacer-

It is also provided after 2 weeks of age to restore milk and reared calf cheaply. Milk replacer develops at NDRI Kernal: Wheat 10 kg, Fish meal-12 kg, Linseed meal-40kg, Milk-13 kg, Coconut oil-7 kg, Linseed oil-3kg, Citric acid-1.5 kg, Mollasses-10 kg, Mineral mixture-3 kg, Vitamins- A, B and D-0. O15kg

Grain Mixture-

The grain mixture should be provided after 4 months of age in calf. The amount of grain mixture depends on quality of roughage body size. Grain mixture will be necessary have more than 16% crude protein.

Feeding Hay-

Clean, leafy, and dried legume hay or mixed hay is better for young calves and provided its own choice.

Water-

Water should be required all time to calf. milk is not given satisfaction without water but watering calf just before milk feeding will be avoided.

Marking-

Marking is a most important parameter for identify of the animals and keeping proper record and proper supervision. Tattooing method of marking specially used in calf.

Disbudding/ dehorning-

Best time of dehorning/disbudding in calf at the age of 2 to 3 weeks may be dehorned by rubbing KOH on the horn buds for the safe and easy handling. It prevents injuries to animals and is essential for animals kept in open areas or loose housing system. Disbudding or dehorning also protect horn cancer.

Major Diseases of Calves and Their Control

Pneumonia-

Few weeks of calf's life the pneumonia disease is seen in calf. It is an important disease caused by several organisms such as *Pasteurella* spp. *Actinomyces pyogenes*. In some case it was found to be correlated with the chlamydia or mycoplasma infections. The Pneumonia in calves is characterized by fever. Continuous nasal discharge. Lymph node enlargement, weakness and coughing are found. Affected calves are not properly treated, it may lead to death.

Calf Diphtheria-

Calves are affected at the 4 to 6 weeks of age by diphtheria disease, it is caused by *Bacterium nitrophorin* bacteria. Affected calves are suffered from serious mucus membrane of mouth and throat. If this condition calves are not properly treated, it may lead to Pneumonia. The removal of pseudo membrane leaves the reddened and inflamed mucosa.

Infestation of Round Worm

Round Worm infestation is a major cause of poor growth in young calf, the calf may be even died. These problems specially seen in buffalo calf, due to *Ascaris* spp. This type parasite is transmitted from dam in the uterus itself and parasite taken their food from intestine of the calves. By fecal examination, it can be diagnosed.

Calf Diarrhea:

- * Due to various reasons diarrhea can occur in calf.
- * Loses considerable amounts of water and electrolytes by diarrhea in calf.
- * Diarrhea and rapid loss of fluid and ions can cause to die very quickly.

Management of Calf Diarrhea:

* Replace the lost water and electrolytes at the earliest- 2-4 liters of electrolytes solution every day.

The electrolyte solution given should be over and above the normal feeding.

*Immediate call veterinarian at the quick determine the cause of diarrhea to provide appropriate treatment.

Home- made electrolyte solution formula:

(For- 1litre of warm water)

Sugar- 5 teaspoon

Soda bicarbonate- 1 teaspoon

Table salt- 1 teaspoon

1 teaspoon = 5 gm approx.

Prevention of Calf Diarrhea

* Ensure that adequate quantities of colostrum have been fed to the calf within 6 hours of birth to avoid failure of transfer of immunity.

*Maintained the hygienic and dry environment for calf.

*At the of suckling of calf ensure udder cleanliness.

Vaccination

Vaccination should be necessary to calves at 45 days of age from 180 days of age.

| Age of calves | Vaccine provided |
|---------------|------------------|
| 45 days | FMD-I |
| 80 Days | FMD-II |
| 101 Days | H.S |
| 120 Days | R.P |
| 250 Days | B.Q. |
| 180 Days | FMD-III |

All these vaccines should be given annually in May-June except FMD.

Management of Growing Heifer

The heifer is the future of the herd or 1 year to first calving of age is called heifer. Its future productive and reproductive performance depend upon the proper care and management up to age of breeding. A well develop heifer having good healthy condition will mature at an early age, should be produce and reproduce efficiently and will be act as good replacer of poor performing animals, culled from the herd.

Separation age

According to sex-wise of calves, can be raised together up to 6 months of age and then separated to each other for their proper growth and development after this age.