

Calf feeding

General introduction

- Feeding is essential in ensuring healthy calves that are a source of heifers, which in time turn to productive cows.
- It basically starts from the time the calf is born.
- Calf is born with non-functional rumen, so cannot digest fibrous complex feed.
- Mostly fed on liquid & low fibre solid feed till rumen develops.

Aims of feeding

- Get a strong and healthy calf.
- Reduce mortality rates.
- Maintain a growth rate of 400-500g/day.
- Attain ideal serving weight of 350kgs at 14-16 months.
- Enable it to first calve at 14-16 months.
- Enhance rumen papillae/wall development for fibre digestion.

Feeding from birth to weaning

Colostrum (Day 1-3)

- Calf is born with low immunity thus susceptible to diseases.
- Allow the calf to suckle its mother immediately after birth to obtain colostrum.
- Colostrum contains antibodies that give calves passive immunity.
- A calf needs to consume up to 6 L of colostrum within the first 24 hours after birth. This enhances their survival rate and health condition.
- Colostrum is fed for 3-4 days consecutively.
- In cases where the mother dies during calving or produces limited milk, prepare artificial colostrum, get a foster mother, milk replacer, bucket/bottle feeding.
- Foster mothering is applicable where many cows are calved/lactating at the same time.
- Artificial colostrum is a mixture of an egg, half litre of fresh warm water, half litre whole milk, one teaspoonful of castor oil/cod liver oil.
- The egg is a source of protein, castor oil and cod liver oil are sources of energy and whole milk acts as a source of lactose and milk protein.

Week 1 (from day 4)-week 4

- Give 4-5 litres of milk/milk replacer per day.
- Use warm clean water when mixing the milk replacer to avoid scours.
- Give (Week 1-0.25Kgs/day of calf starter pellets),(Week 2-0.5Kgs),(Week 3-0.75Kgs),(Week 4-1Kg).

- Give fresh quality hay free choice .
- Provide clean fresh water at all times.
- Provide mineral brick.

Week 5-Week 9

- Reduce milk/milk replacer to 3L/day.
- Give calf pellet 1.5kgs/day at week 5 then increase to 2kgs till week 9.
- Its ready for weaning once it consumes 2kgs calf starter pellets so stop milk/milk replacer completely.
- Continue with the mineral brick and water.

Remarks

- **Calf starter**-Is high in fibre content, highly digestible, highly palatable,18%CP,vitamin A,D&E.
- **Hay**-High quality and fine texture. Can give wilted sweet potato vines.
- **Milk**-feed 10% of body weight, reduce when it starts to consume other solid feeds.

VACCINATION SCHEDULE FOR CALVES

Age	Vaccinate against	Application	Remarks
3-8 months for heifers	Brucellosis	S/C - Once in a lifetime	During threats of outbreak the whole breeding herd may be vaccinated. Use vaccine with care. S19 live vaccine can cause brucellosis in humans.
3 months to 3 years	Anthrax and Blackquater	S/C - Yearly or upon warning of impending outbreak	Vaccine is cheap, SO USE IT. Anthrax is deadly for humans and animals.
2 weeks and above	CBPP	Yearly in endemic areas. In other areas only upon warning of impending outbreak. Vaccinated through tail tip.	Consult your veterinary authorities. To be administered by trained veterinarians. Animals can loose their tails from this vaccination.

1 month and above	ECF	S/C under the ear. Vaccine is commercialized in Tanzania and under trial in Kenya	Only to be used by licensed Veterinarians who are trained on Infection and treatment methods.
2 weeks and above	Foot and Mouth disease	S/C - Every 6 months in endemic areas. All of East Africa is endemic in 2010	Different strains exist. Consult your veterinarian on the choice of vaccine.
3 months	Rabies	I/M or S/C - Cattle can be	This is the only vaccine that can protect

and above		vaccinated annually and must be vaccinated when there is an outbreak	already affected herds if it is done within maximum of a week after the outbreak. Report suspected cases immediately
6 months and above	Rift Valley Fever	S/C - Preventive after heavy rains or when there is a risk of outbreak.	Killed vaccine should be used in pregnant animals - they may abort if the vaccine is live. Some vaccines are live vaccines so HANDLE WITH CARE . RVF in humans can be deadly so control is very important
1 month and above	Lumpy skin	S/C - Preventive when there is a risk of outbreak.	If using live vaccine, separate cattle from sheep and goats, as the vaccine is derived from modified sheep poxvirus, which can cause pox in sheep and goats.