

# PADDOCK CARD - NEONATALS



**Colostrum**, or a colostrum-substitute should be ingested within the first 2 to 6 hours for best results (optimal transfer of antibodies in fully mature crias). A colostrum-substitute should only be used if no colostrum, or not sufficient colostrum is available. Make sure to have some available before one needs it! If the colostrum/substitute supply is frozen defrost slowly to prevent denaturation of the proteins in it. Colostrum not only delivers the necessary antibodies, if supplied timely, but also provides a local protective effect on the gut for a couple of days. If bottle feeding is necessary feed a total of about 10% of the cria bodyweight (BW) per day. Administer initially at a volume of 1% BW per feed and gradually, over the next days, increase the dose to 2% BW per feed. The feeding intervals should be at least 2 hours apart. Smaller volumes can be given with increased frequency, keeping the above guidelines in mind.

If the cria needs ongoing bottle feeding replace 2% BW (of the 10% BW total volume) colostrum/substitute with acidophilus yoghurt on day 4. Replace the colostrum with milk replacer from day 5. Keep using the acidophilus yoghurt while starting the cria on the milk replacer for 2-3 days. Aim for a total milk replacer volume of at least 10% BW per day and feed in volumes of 2-4% BW per feed. Adjust for growth of cria! When crias have established grazing habits and are eating feed supplements consistently the amount of milk can be gradually reduced. Check the body condition regularly for feedback. Milk replacement should be able to be stopped around 4 -5 months of age.

## Common complications of bottle feeding

- Constipation – reduce the amount of milk powder recommended to make the replacement milk (dilution) by 50%, and gradually (several days) increase the amount of milk powder again. Give the cria a dose of paraffin oil (approximately 2 ml/kg). May never be able to use recommended amount of milk powder. Can add dextrose (1 teaspoon for every 60-100 ml the alpaca receives) to the diluted milk replacer.
- Diarrhoea in a lively cria – overfeeding can cause diarrhoea! Check how much cria has received. Adjust the volume it receives.
- Diarrhoea in sick cria – infection, check with your vet. Treatment may be indicated. Check your milk preparation/conservation hygiene methods!
- Overfeeding – too much milk per feed can result in discomfort, fermentation of milk in the stomach/gut, gut infection, a sick cria!

## Example of bottle feeding schedule – guideline only

Body weight (kg)	Volume (ml) per feed	Frequency per day	Day 1,2,3,4	Day 5+
4	25-40	8-15	colostrum	milk
8	50-80	8-15	colostrum	replacement

- Can add acidophilus yoghurt from day 4 for a couple of days to help gut. Use 1-2 table spoon per feed mixed in with the colostrum, or milk replacer.
- For the first couple of weeks warm the colostrum/milk slowly to body temperature, shortly before feeding.
- Initially use the smaller volumes per feed and then gradually increase to the larger volumes.

## Premature cria

Crias may or may not be fully mature/developed at birth. Low birth weight and shortened duration of pregnancy (if known) can be first indicators of prematurity. As birth weight and pregnancy duration are variable, it is good to be able to recognise other premature signs. Premature crias need extra care to give them the best chance at survival.

#### Premature signs

- Reduced body weight at birth
- Weak, unable to stand or hold head up
- Extension of the fetlocks/down on pasterns
- Weak sucking reflex
- Floppy ears
- Epidermal membrane difficult to remove
- Teeth not erupted
- Sleeping continuously
- Slow breathing rate
- No regulation of body temperature
- Inadequate physiological stress response
- Inadequate absorption of antibodies
- Increased infection rate and an increased mortality rate

#### Extra care

- May need clamping of umbilical cord. Assist with drying of the cria. Put into sheltered environment with dam.
- May need help with expelling meconium.
- Bottle feed or tube feed if not able to stand, hold up head, have a weak sucking reflex.
- Plasma transfusion – intravenous or intraperitoneal infusion to increase antibody levels and prevent infections
- Provide adequate shelter and warming/cooling as necessary in the following weeks. Use a thermometer regularly and correctly to provide guidance on what to do. Use of heat lamp, warm water bottles, cooling fan. May have to pen the dam and cria. Hypothermia and hyperthermia develop very easily in these cria! Aim for body temperature of 38 – 49 C!
- Provide clean environment and keep clean to reduce infectious challenge of the cria.
- Supplementation with vitamin B (especially B1).
- May need antibiotic treatment quickly if gets sick.
- May need help with constipation – paraffin oil

The longer the cria survives the better its chances. Check with your vet, or a more experienced and knowledgeable alpaca breeder if you are not sure what to do or how to do things with the cria.