

By Anneke Muller

Welcome to the 2024 Calf Link Newsletter. Over the next few weeks we will be issuing a series of newsletter to keep you up to speed on all things calves. If you know of someone who wants a copy sent out to them, let the admin team know at: <u>admin@cluthavets.co.nz</u> and we will get them on our list. If you have specific calf rearing questions give us a ring on 03 418 1280 and a vet will happily have a chat with you or can arrange a visit.

# Colostrum

# 2024

22% = 50 mg/ml

immunoalobulin

# Why is Colostrum so important?

- Calves are born with no immune system as antibodies are **not** spread through the cow's placenta in her blood!
- Calves depend entirely on drinking good colostrum with lots of antibodies for protection against viral and bacterial disease until they develop their own immunity at 3-4 weeks old.
- However, absorption is only possible for a short time. Absorption is greatest within the first 2 hours of life and gradually decreases until ceasing completely by 24 hours when the calves gut wall 'closes'.

# **4 Q's for Gold Colostrum Management**

<u>Quality:</u> Cows should be milked within 12 hours of calving to get the highest antibody levels. You can use a Brix refractometer to assess antibody concentration, the Ideal is >22%. Keep the best for the newest born calves

<u>Quickly:</u> Feed calves as soon as possible after birth. Ideally within 6-12 hours. This means you should be picking calves up at least every 12 hours!

<u>Quantity:</u> 10% of a calves bodyweight needs to be fed within 12 hours, and 15% by 24 hours. For a 40kg calf this means 4L when they are first collected and another 2L by the time they are 24h old.

**<u>sQueaky clean:</u>** Collect colostrum in clean containers that have lids to help reduce bacterial contamination. If there are bugs in the colostrum this will use up the antibodies and leave none for the calf to absorb!

# **Tubing Newborn Calves**

\* <u>When and Why:</u> Ideally calves should drink enough colostrum on their own, however this often doesn't happen!



- Calves can only drink 2L of milk at a time from a bottle so will need 2+ feeds in 12h to reach the 4L goal. OR they can be tube fed.
- \* Calves that are tube fed can be given 4L in one go as the milk goes to a different stomach to milk that is drunk. This only applies for the first feed! As after this the rumen becomes a fermentation chamber and tubing calves milk will cause issues.

"Gold" Colostrum is the first milk of a freshly calved cow. It is full of immunoglobulins (antibodies/proteins that fight infections) and other nutrients essential for a newborn calf.



Test your colostrum with a Brix refractometer: we can show you how!



# We can help with a "Well Calf" checkup!

- Vet visit and blood test 6 calves (1-7 days old)
- Check colostrum quality and management and identify early if improvements are needed
  - Same day results

#### Tips for easy (er) tubing:

**Restraint:** back calves into a corner and straddle them.

**Tube length:** the tube should go from the calves nose to its elbow to ensure good positioning in the stomach.

**Avoid drowning:** make sure your tube is kinked/closed while inserting it.

Don't force it! The calf should swallow the tube– if there is any resistance STOP and try again.



# **Calf-Link**

### **Clutha Vets Newsletter for Calf Rearers**

## Colostrum

2024

# How can we maximise the antibody levels in the GOLD colostrum?

- •<u>Cow health:</u> Sick cows or poorly transitioned cows will not have energy to put into good colostrum. Therefore avoid using colostrum from these cows.
- •<u>Hygiene:</u> Bacteria in colostrum bind to antibodies and interfere with the absorption in the calf's gut. Clean cows teats, use lids on buckets and ensure containers and cleaned with detergent/hot water after every use.
- •Delay in first milking after calving: Quality of colostrum declines rapidly after calving. Milk fresh cows ASAP!
- •Length of dry period: Dry period < 5weeks will decrease colostrum quality.
- •<u>Volume of colostrum at 1st milking</u>: High volumes (>8.5L) can mean lower quality due to dilution. ALWAYS test colostrum
- •<u>Vaccination of dam:</u> Vaccinating cows 3-6 weeks before calving will boost protein levels AND specific antibody levels (rotavec, scourguard etc.)
- •<u>Age of dam:</u> Older cows may have been exposed to more pathogens so could have better antibody levels than younger cows– but this is not exact. Vaccination will affect this hugely. ALWAYS test

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•Breed : Jerseys tend to produce better quality colostrum because they produce lower volumes

Collars/Ear tags and ear

Sick calf kit– electrolytes, anti-inflammatories,

antibiotics, needles

Muesli/meal and trough

Multimin mineral boost

tagger

syringes

☐ Thermometer

Hay rack feeder

□ Water troughs

# Calf shed checklist

□ Calf bedding– No stones! □ Calf milk replacer + whisk

Disinfectant + sprayer
(Vetsan etc.)

- □ Gloves
- Iodine for navels (10% spray)
- Colostrum buckets/ containers with **lids**
- □ Colostrum keeper powder
- Brix Refractometer
- □ Calf milk feeders and teats
- □ Calf tuber
- □ Calf bottle feeder

Treating hypothermic (cold) calves

Hypothermia can not only result in deaths, in the worst case scenario, but it can also cause disease later on due to immune suppression.

- Feed warm colostrum!! Tubing a hypothermic calf with 3-4 L of warm colostrum will go a long way towards warming it up.
- Shelter Bring calves into a draught free shed asap and use straw or similar deep bedding to build up around and insulate the calf.
- Use a heat lamp if you have one
  - Calf covers are also valuable



