



### CVC CLINIC NEWS

Welcome to the April edition of the CVC Dairy newsletter. Calving is well underway and as such, we are turning our attention to **calf management and nutrition**. We have been busy this month delivering very large calves and treating metabolic cases (milk fever), so be mindful that the surplus green feed is resulting in both **dystocia** and **hypocalcemia** prior to calving.

We also want to reinforce the importance of adhering to **WHP** on drugs for both milk and slaughter times. This has come to our attention as the new formulation of **Alamycin SA** 250ml / 100ml has a different MILKWHP than previously documented (**NOW 8 MILKINGS** instead of 5).

With dark evenings and temperatures starting to drop, rug up and remember—we are always here when you need us!

### Camperdown Veterinary Centre

1 Leura Street , Camperdown

**Ph: (03) 5593 1077**

Hours:

- 8:00am – 5:30pm (Monday – Friday)
- 8:30am – 12:00pm

### Dairy Drug Orders

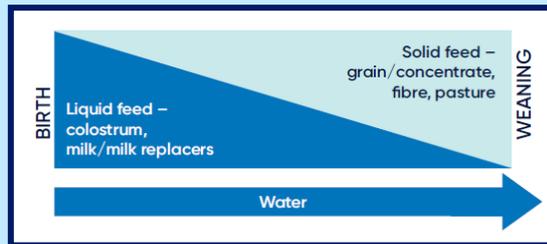
Established dairy clients can request non-urgent drug orders to be delivered on farm any day. We will endeavour to deliver within 24 hours.

**We are available 24-hours for emergencies on 5593 1077. Follow the prompt to speak to the veterinarian on call.**

### Dairy Calf Nutrition

**Well-grown and healthy calves become productive herd replacements.** To achieve good growth rates and excellent rumen development and function, calves need to be fed appropriate amounts of milk or milk replacer and good quality concentrate.

One of the biggest challenges of calf nutrition is helping the calf transition from being a “drinker” to an “eater”. The diagram (right) shows how a calf diet should transition from birth to weaning. For calves to achieve desired growth rates and production targets it is **essential to develop a highly functional rumen** as early as possible.



The images to the right show the importance of calves having access to grain from day 1 as it is crucial for rumen papillae development. **Papillae are small projections from the rumen wall that absorb nutrients.** The early introduction of grain or grain based concentrates stimulates the growth and development of papillae. In addition, extra energy becomes available from the feed to supplement the total energy available to the calf. **Calves with more developed rumens grow better and produce much more milk in the long term.** According to dairy Australia statistics, **heifers that are 50kg heavier at calving can produce at least 1,041 litres more over their first 3 lactations.**

The key components of calf nutrition are:

- **Fed either fresh milk or milk replacer**—calves require a **minimum of 10% of their body weight in milk per day**
- **Provide access to fresh clean water from birth**
- Introducing **small quantities of grain from day 1**
- Feeding good quality **hay from 3 weeks of age**
- There is no difference to the calf whether it is fed warm or cold milk, but they should be consistently fed milk at the same temperature. This means if calves are being fed warm milk, this should continue.

Milk only diet



Milk + hay diet



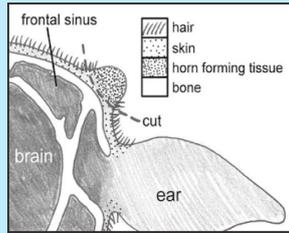
Milk + grain diet



## DAIRY CALF MANAGEMENT

### Disbudding

Most Australian dairy calves are born with horns, which need to be removed to prevent injury to other stock and to stock handlers. Disbudding is best performed when the calf is **between two and six weeks old**. At this age, the calves are robust enough and the horn bud can be easily felt in the skin but the horn has not yet attached to the skull.



Disbudding is performed **under sedation and local nerve blocks** of the horn buds for a pain free procedure. A **gas iron** is then used to remove the bud. The calves receive a **long acting pain relief/anti-inflammatory** that lasts for 3 days and **topical antibiotic/antiseptic spray** on their bud wounds. We can also **remove extra teats** and **assess for umbilical abscesses or hernias**.

Only healthy calves should be disbudded so they can handle the sedation. Calves should have food and milk withheld for **at least 6 hours prior to disbudding** to prevent aspiration under sedation.



### Silirum vaccination

Silirum is the registered vaccination for control of **Bovine Johne's Disease (BJD)**. A single dose of the vaccination **from 3 weeks of age can provide life long cover**. We recommend Silirum vaccination for **replacement heifers** in herds where BJD is a problem. Due to the nature of the vaccine, it must be administered by a veterinarian and the animal identified for life with a specific ear notch. For this reason we usually **perform Silirum vaccination at disbudding**. Silirum works by decreasing the amount of bacteria shed in faeces, this reduces transmission and therefore the number of cases within a herd.



### Sick calf management

Calves should be monitored closely for signs of disease. Any sick animals should be quarantined and treated as soon as possible. Having treatment protocols in place for sick calves is crucial to disease control. Calves are highly susceptible to a number of conditions including diarrhoea (scours), pneumonia, and joint and navel ill. Sick calves can become dehydrated very rapidly if left untreated. Never underestimate the value in electrolyte administration in sick calves.

Dairy calf services available at CVC include:

- Sick calf consultations including intravenous fluid therapy for sick dehydrated calves
- Calf disease outbreak investigations—including calf scour testing, and faecal cultures
- Colostrum management including use of refractometers to assess colostrum quality and antibody testing.
- Calf rearing program analysis including nutrition, housing and antibiotic use
- Post-mortem examinations

If you have any concerns about your calves or would like us to help develop your calf rearing plan please do not hesitate to contact the clinic, we are here to help.



### Colostrum management

Colostrum is the first milk produced by cows after birth and is essential for all calves, including heifer replacements and sale calves. Failure to absorb enough IgG (antibodies) from colostrum in the first 24 hours of a calf's life makes the calf more susceptible to disease and death. This is known as **Failure of Passive Transfer (FPT)** and is relatively common.

Successful transfer of immunity requires strict adherence to the 4 "Q's":

- **Quality**— Colostrum quality should always be tested! A Brix refractometer can be used to assess the antibody concentration in the colostrum before you feed, store or discard it. High quality colostrum has an IgG content **greater than 50 mg of IgG per ml** or **> 22%** on a Brix refractometer. These are relatively inexpensive and can be purchased from the clinic.
- **Quantity**— Use the quality of colostrum to determine the volume administered. If colostrum quality is undetermined a calf should be fed **2 x 3L feeds within the first 12 hours of life**.
- **Quickly**— Feed calves colostrum **as soon as possible, ideally within the first 12 hours of life**. A calf's intestine is capable of absorbing the most immunoglobulins straight after birth. Between 24 to 36 hours after birth no more IgG can be absorbed. Colostrum should be harvested from the dam as soon as possible after calving to ensure colostrum with the highest IgG concentration is collected.
- **sQueaky clean**— good hygiene is necessary to maintain colostrum quality and minimise bacterial growth. Bacteria in collected colostrum may cause disease in the calf or bind to the immunoglobulins, thereby reducing the quality. Colostrum needs to be harvested hygienically into clean collection containers. **Teats should be cleaned, disinfected and dried** prior to collection.

Best practice is to promptly remove calves from their dam and administer 3-4L of high quality colostrum via an oesophageal feeder.

