

Dairy Newsletter April 2022



CVC CLINIC NEWS

Welcome to the April edition of the CVC Dairy newsletter. Autumn calving is well and truly underway and therefore this edition will focus on calf management and nutrition. We would like to remind our clients that cows should be dried off 6 - 8 weeks prior to their expected calving dates. At this time, cows should be given dry cow antibiotics and teat seal depending on mastitis levels in your herd. This is also a great time to give pregnant cows 7 in 1 and scour vaccine boosters to improve antibody quality in colostrum. Don't forget your pregnant heifers will require their first scour vaccine 10 -12 weeks before expected calving dates and a second dose 4 to 6 weeks later.

Camperdown Veterinary Centre

1 Leura Street , Camperdown

Ph: (03) 5593 1077

Hours:

8:00am – 5:30pm (Monday – Friday)

9.00am – 12:00pm (Saturday)

Medication and food collections only on Saturday mornings

24-hour emergency service available by calling 5593 1077 and pressing "1" .

Disbudding

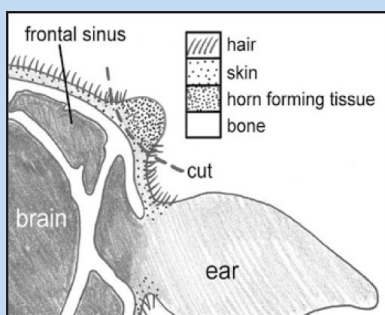
Many Australian dairy calves are born with horns that can damage the carcass of paddock mates or injure handlers. Disbudding removes the horn, stopping further development. It is best performed when the calf is **between two and six weeks old**. At this age, the horn is able to be felt easily through the skin but has not yet attached to the skull making it the ideal time to be removed. Calves are also old enough and robust enough to handle sedation with minimal set back.

Disbudding is performed **under sedation with local nerve blocks** of the horn buds allowing a pain free procedure.

A **gas iron** is then used to remove the bud. The calves receive **long acting pain relief/anti-inflammatory injection** 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.

Give us a ring on **5593 1077** to make an appointment.



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 vaccinating all replacement heifers with Silirum on any property where BJD is a problem. Silirum works by decreasing the amount of bacteria shed in faeces, reducing transmission and therefore the number of cases within a herd.

CVC recommends vaccinating with Silirum at the time of disbudding. Self-injection with Silirum can have huge consequences and therefore it is safest to be administered by a veterinarian. By administering at time of disbudding, risk of self injection can be minimized as calves are sedated and easier to handle.

All Silirum vaccinated animals must have an NLIS tag and be identified with a specific ear notch at time of vaccination.

If you would like to discuss Silirum vaccination of BJD in your herd, don't hesitate to contact the clinic for a chat with one of our vets.



Colostrum Management

Colostrum is the thick yellow milk produced by cows immediately after birth. It contains IgG (antibodies) which provide immunity to calves in their early life. Calves must receive adequate quality and quantity of colostrum within their first 24 hours of life before their gastrointestinal track changes to no longer be able to absorb the IgGs. Failure to absorb enough IgG 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, especially in dairy calves.

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. Brix refractometers 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.



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