Rochester Veterinary Practice March 2019

NEWSLETTER

In this issue:

- Seasonal reminders
- Ee Cheng's new chapter
- Heat stress affects unborn calves
- New vet Nisa
- Managing calves after difficult calvings
- Antibiotic residues in milk

Seasonal reminders:

- Watch out for heat stress in early autumn calving cows. Cows with milk fever are not able to regulate their temperature and will overheat on a hot day. Throw buckets of water on these cows to help them cool down.

- Calves born in hot weather are especially susceptible to dehydration. Sick or scouring calves need extra attention in hot weather.

Ee Cheng's new chapter

Ee Cheng has finished her dairy residency program with Melbourne University and has started a 6-month position at Dairy Australia. Her project while she was in Rochester was to validate the Daughter Fertility ABV.

Ee did such a good job of this that she is currently converting her project into a PhD with the university. This process takes some time, so she is working at Dairy Australia in the meantime.

We would like to thank Ee Cheng for her hard work during the three years she was at Rochester. In that time, she developed into quite a handy clinical vet. We are confident that her time with us in Rochester will give her good grounding wherever she ends up in the future.

Her project has teased apart the daughter fertility ABV and proved that it has a significant effect on fertility in our cows. We will present some of these findings in the next few month's newsletters. We also plan to hold a farmer information night around May to present her findings to anyone that is interested.

Heat stress affects unborn calves

The negative effects of hot weather are well known on milking cows, calving cows and growing calves. New research has shown that even unborn calves suffer heat stress.

Most of us try to avoid calving in January and February because it is difficult to keep cows happy and healthy when they calve in very hot weather.

Researchers in Florida compared calves from cows that were cooled for 6 weeks during the dry period with those that were not cooled. Calves born from hot cows were 5.7kg smaller than calves born from cooled cows. Part of this was due to the hot cows calving 4-5 days earlier and part

of it was due to the hot cows not eating as much.

Calves born out of hot cows also suffered from a higher rate of disease and death. Only 66% of hot calves made it to a first lactation compared with 85% of calves born out of cool cows. Part of this is thought to be explained by heat stress reducing the ability of calves to absorb antibodies from colostrum.

The biggest difference between the hot and cool calves was in milk production in the first lactation. The hot heifers produced an average of 5.1 litres of milk less than the heifers that were cooled. Both groups of heifers calved at the same bodyweight, but it seemed like the hot heifers were programmed to produce less milk when they were subjected to heat stress before being born.

What can we do?

Dry cows deserve just as much attention as milkers to try and keep them cool. The provision of shade and maybe even sprinklers will make a big difference on the very hot days.

New vet Nisa

Nisa (rhymes with Lisa) Moore has joined our vet team. Nisa is from Emerald in Queensland and has a passion for the dairy industry after spending some time in Canada as a student and working on various dairy farms in Queensland.

She is also very interested in all things canine.

Managing calves after difficult calvings

Traditionally after we had pulled a calf, we would hang the calf up by its back legs as it was thought this would help remove fluid from the calf's lungs. We now know that most of the fluid that comes out of the mouth shortly after birth comes from the stomach and does not need to be removed.

If a calf is hung up by its back legs the contents of the abdomen are pressing on the calf's diaphragm making it more difficult to breathe.

So, save your back and do not lift calves up and over the fence railings. Simply sit the calf up on its chest and rub the ribs with a towel or a handful of hay. Sometimes it is useful to clear fluid from the mouth and nose with a towel. A stalk of hay or a small stick up the nostril can also help to stimulate breathing.

Antibiotic residues in milk

We would like to know when antibiotics are detected in milk that is delivered to the factory. Sometimes the cause is obvious – someone has stuffed up and normal procedures were not followed.

For the last several years when bobby calves have tested positive for antibiotics it has been mandatory for the vet that has dispensed the antibiotic to thoroughly investigate the case. We have been able to determine what went wrong and help people put in place protocols that minimise the chance of an antibiotic residue occurring again.

This system has been very successful in reducing the number of antibiotic residues in bobby calves.

It is not mandatory for the dispensing vet to be involved in antibiotic violations involving milk. Processors tell us that they encourage suppliers to contact their vet, but it seems that this only happens some of the time.

A common cause of antibiotic residues in milk is when cows calve earlier than expected. This can be due to natural variation, twins or misleading preg test results.

When cows calve earlier than expected it is important to keep cows out of the vat for the prescribed time. For Cepravin DC the minimum dry period is 49 days and then cows must be kept out of the vat for 4 days after they calve. This means that the total period of time that needs to elapse after Cepravin DC is used is 49 + 4 =53 days.

For Juraclox DC the minimum dry period is 35 days so the total period out of the vat is 35 + 4 = 39 days.

Because Cepravin DC has a longer minimum dry period it is essential that you have accurate calving dates if you plan to use this product.

The best way to get accurate calving dates is to preg test cows with an ultrasound when they are less than 16 weeks pregnant.

There have been occasions when there has been no obvious reason for the antibiotic violation. We are particularly keen to investigate these cases.